

Testing the Effectiveness of Consumer Financial Disclosure: Experimental Evidence From Savings Accounts

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Disclaimer (disclosure!)

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Motivation behind financial disclosure

- Invisible hand under imperfect information is imperfect
- Goods, services, investments are complex, costly and imprecise to evaluate

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- Doesn't take a stand on the "right" choice, just inexpensively provides information
- Classical view: with ample options + info, market discipline sufficient
- substandard product? people will simply switch providers/products

Limits to Disclosure

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- Consumer inertia can inhibit market discipline, make choices sticky
- Understand disclosure's effectiveness \Rightarrow optimize design, reliance

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- Understand disclosure's effectiveness \Rightarrow optimize design, reliance
- Different causes of switching costs \Rightarrow different policy prescriptions

Uninformed

\rightarrow Highlight benefits

Inattentive

\rightarrow Increase salience

Inert

\rightarrow Simplify action

What we ask in this study

- ① How much does design of consumer financial disclosure matter?
- ② What limits disclosure's effectiveness?
- ③ Why are deposits sticky?

Disclosure Design

- Some acknowledgement that disclosure design matters...
...but mandated disclosers still have many degrees of freedom
- Many ways to obfuscate: placement, font size, wording, disclose more...
- Motivates standardization: SEC filings, HUD settlement forms, CARD Act, etc.
- Other settings rely on courts to catch bad-faith disclosers

Our context: testing prospective regulation

- Proposal in parliament to mandate disclosure of best available interest rate
- Goal: address % savings accounts earning below-market rates
- FCA was allowed to test effectiveness with randomized-controlled trials
- Put out a call for banks to partner with FCA to test disclosure effectiveness

Randomized Controlled Trials with 5 UK banks

	Sample	Treatment versions	
1 Better rates (letter front page)	63,000	4	+ survey
2 Better rates (letter reverse page)	13,000	4	+ survey
3 Better rates (letter front) + return form	4,000	1	
4 Rate drop reminder (email or SMS)	24,000	2	
5 Rate drop reminder (SMS)	30,000	4	

>124,000 customers in total

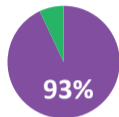
Average gain £123/year (~\$190)

Why a field experiment?

- Identification: Disclosure law changes concurrent with other changes
- Lab experiments can overstate disclosure effectiveness
participants not representative of overloaded consumer
- For policy we need to know *real-world* effectiveness:
in the context policy would actually find itself, competing with other priorities
- Solution: large-scale field experiment with real stakes

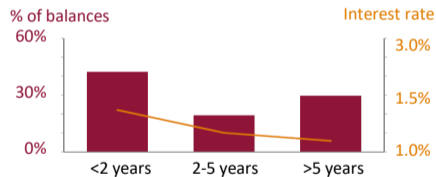
UK Savings Market Background

Large &
important market



Same products
sold for different
prices

80%
not switched in
last three years



Simple
environment

Δ%
clear
benefits



low
switching
cost



Joint-Hypothesis Problem

Problem judging disclosure effectiveness: need to define “right” decision.

- Complex in the real world, where, e.g., high-cost debt could be optimal (Medina, 2017)
- Optimal refinancing decision complex function of private information + beliefs

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Savings accounts are a promising simple setting

- Optimality of savings account choice easier to segment from other considerations
- One dimensional differentiation: interest rate, can personalize to £s
- UK savings account market large ($> \$1\text{tn}$), many customers on below-market interest rates
- Limitations: branch network, app quality, bank reputation, synergies across accounts
- Solution: “internal switching” option holds everything fixed except r

Context in Literature(s)

- Rich disclosure literature in accounting, marketing, psychology
- Consumer fin. disclosure effectiveness: lab experiments or joint-hypothesis problem
- Many obstacles to disclosure
 - Inattention, financial literacy, switching costs, procrastination, choice overload, ostrich effect, endogenous complexification response by firms
 - Choice is sticky literature: retirement plan defaults, health insurance plans, cell phone plans, gym memberships, electricity providers
- Sticky deposits
- Consumer financial mistakes

→ *First to test design of consumer-facing disclosure where optimality easier to define.*

Outline

- ① Motivation and Background
- ② **RCT Design and Data**
- ③ Treatment Effects
- ④ Survey Evidence on Mechanisms
- ⑤ Conclusion and Policy Implications

Trial 1 design: Better rates on front page

Important information for you

Check your account is still right for you.

You've had your <account> for a little while now, and we know how important it is to make the most of your savings. So now might be a good time to consider if it's still the best option, or whether there's another savings account out there that could pay more interest, or suit you better.

Your <account> currently offers

- An interest rate of <rate> variable
- <conditions in relation to minimum deposit, withdrawals, and frequency of interest payments>

How this account compares,

As of 10th August the savings account with the most similar features that we can offer is our <account> with an interest rate of <rate>, but there may be other suitable accounts within our range.

Taking a look at the wider savings market, the three highest-paying easy access accounts across the market on 10th August offered an average rate of 1.08% variable. You can find out more about these options at www.moneysupermarket.com

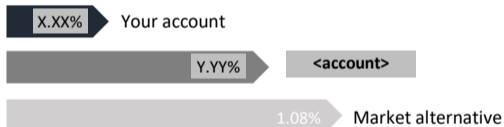


Interest you could earn this year on every £10,000 of savings

<current savings account>	£X.XX
<alternative internal savings account>	£X.XX(£A.AA more)
Highest paying accounts on the market*	£108.00(£83.00more)

Let us know,

Making the move to another savings account is simple – sign in at <weblink> and select 'renewal options', call us on <phone> or pop in branch. If you'd prefer to carry on saving in your <account> you don't need to do anything.



Interest you could earn this year on every £10,000 of savings

<current savings account>	£X.XX
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Highest paying accounts on the market*	£108.00(£83.00more)

Trial 2 design: Better rates on reverse page


COULD YOU GET A BETTER RETURN ON YOUR <firm name> SAVINGS?

Your account: <A/C name>

Your balance: <£5,432> as at 30 April 2015

Your new interest rate: <X.XX%> AER/gross

Account type: <A/C name> - you can withdraw money without charge



How does my savings account compare?

As at 26 May 2015, the highest interest rate available from <firm name> account is <B.BB%> AER/gross on your <A/C name> inclusive of <length> introductory bonus of <C.CC%> AER/gross. The <A/C name> is an easy access account that can only be managed online using internet Banking – you cannot access the account in branch or over the phone.

Three of the highest paying easy access account offered by other banks and building societies offer an average rate of <A.AA%> AER/gross. Price comparison websites can provide information on rates offered by other providers.

How much more could I earn in interest?

A balance of <£5,432> in a <firm and A/C name> would earn <£X.XX> this year.

Best comparable <alternative with firm> <EY.YY> in total (or <EA.AA> more) a year.

Average of three of the highest paying accounts on the market: <£xx.xx> in total (or <£0.00> more) a year.

Moving your money is easy.

To move your money to <alternative with firm> simply call us on <phone> visit <web link> or visit us in branch to find out more. To move your money to an account offered by an alternative provider, open a new account with them and transfer your funds.

Average of 3 of the highest paying accounts currently on offer on the market at 26 May 2015 using moneyfacts.co.uk. Some restrictions may apply. Calculations based on interest rates at 26 May 2015 and show interest earned prior to appropriate tax deductions dependent on your individual circumstances and your current tax status. Rates are variable and subject to change. To open an <A/C name> account you must be 16 or over, and have a current account with us.

Trial 2 design: Better rates on reverse page

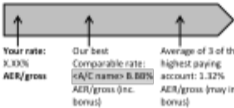
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Trial 3 design: Better rates + return switching form

Dear <salutation>

Get a better rate of interest on your savings.

We are writing to let you know that you can get a better rate of interest on your savings.

Your savings are currently in a <account name>, which pays an interest rate of <KAR%> Gross PA/NET and provides easy access, meaning you can withdraw money without charge. By moving to another of our savings accounts you can earn a better rate of interest and make your savings work harder for you.

How does my savings account compare?

As at <date> 2013, the highest interest rate available from <firm name> on a comparable account is <YPR%> Gross PA/NET on our <account name>

Three of the highest paying easy access accounts offered by other banks and building societies offer an average rate of <R%> Gross PA/NET. Price comparison websites can provide information on rates offered by other providers.

How much more could I earn in interest?

To make it easier to compare the accounts, the following examples all use an account balance of £1,000 based on a <Gross interest rate>.

- > £1,000 balance in your existing account earns <XX%> per year
- > £1,000 balance in our <account name> earns <Y%> per year
- > £1,000 balance in one of the average 3 highest paying accounts on the market earns <R%> per year



What to do next

If you would like to open an <account name> please contact us. If you have a passbook remember to send us a set with.

If you would prefer to keep your savings where they are that's fine too. Let us know what you need to do.

<authorisation details>

I would like to switch my savings to the <account name> account

<Deposit account> <Account number>

<title><initial><surname><and><title><initial><surname>

<title><initial><surname><and><title><initial><surname>

How much would you like to transfer?

Either choose "Transfer all" or fill in the amount you want to transfer from your <deposit account>.

Transfer all Transfer part of my savings £

How would you like your interest paid? Annually Monthly

Interest will be paid to the same account as the interest from your <deposit account>. If you would like to change this please tell us in writing.

<declaration details>

<authorisation details>

I would like to switch my savings to the <account name> account

<Deposit account> <Account number>

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Signature(s)

Date

Trials 4 & 5 design: Rate drop reminders

Your savings account interest rate is reducing

Dr Tester

The interest rate on your <account> was for <length> hs and will end soon. From <closing-date>%, your account will change to an <account> account and the interest rate will reduce, as shown below.

Current balance tiers	Current interest rate Gross / AER (variable)	New account name	New balance tiers	New interest rate Gross / AER (variable)
<dx>	<xx%>	<account>	<dx,xx>	<yyyy>

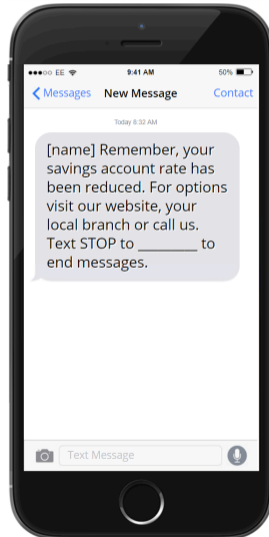
The interest rate on the <account> is a variable rate, which can be increased or reduced at any time.

You can change to a different savings account at any time.

Although you can carry on using your account as you do now, you may prefer to open another <account> or <other options>

Account name	Interest rate Gross / AER (variable) for <length> on balances <dx>	<condition for interest rate tier>	<condition for interest rate tier>
<account>	<xx%>	A.AA%	B.BB%

The interest rates in the table above are correct as at 10 August 2015. This product can be withdrawn from sale at any time.



RCT Design

	Trial	Treatment details	Rate change	Customer tenure
1	Front-page switching box	Comparison with market rates on front page of annual statement	None	Long
2	Reverse-page switching box	Comparison with market rates on back of rate-change notification letter	Yes, 60 days after treatment to all customers	Mixed
3	Return switching form	Tear-off form pre-filled to switch to higher rate-paying account with same provider	None	Long
4	Digital reminder	Rate decrease reminder via email or SMS	Yes, end of individual bonus period seven weeks before to eight weeks after treatment	Short
5	SMS reminder	Rate decrease reminder via SMS	Yes, one week before to one week after treatment to all customers	Mixed

Administrative Data on Consumers

Trial	Front page	Reverse page	Return form	Digital reminder	SMS reminder
Age	59.2 (16.58)	53.2 (17.23)	64.4 (15.92)	52.9 (16.15)	42.4 (13.92)
Male	0.42 (0.49)	0.41 (0.49)	0.45 (0.50)	0.48 (0.50)	0.52 (0.50)
Checking Account	0.25 (0.43)	0.80 (0.40)	0.06 (0.24)	0.77 (0.42)	0.98 (0.16)
Account Balance (£)	8,436 (20,788)	7,407 (22,862)	6,812 (18,156)	37,939 (88,633)	24,162 (78,574)
Potential Gain (£)	70.02 (172.54)	82.96 (256.05)	76.29 (203.35)	230.56 (538.50)	198.13 (644.31)
Account Age (years)	13.7 (10.86)	6.7 (1.25)	16.1 (3.99)	1.0 (0.09)	4.7 (2.45)
# products with provider	1.6 (0.88)	4.6 (1.88)	1.6 (1.28)	4.6 (2.55)	5.4 (2.86)
Online Banking	0.09 (0.28)	0.58 (0.49)	- (-)	0.84 (0.37)	0.90 (0.29)
Mobile Banking	0.09 (0.29)	0.29 (0.45)	- (-)	0.22 (0.42)	0.30 (0.46)
Observations	61,879	13,261	4,003	15,487	30,202

(Dis)Advantages of multiple banks

- Only one bank: less external validity, still don't know about other contexts
- Practicality: hard to implement significantly different designs @ same bank
- Also hard to implement same design @ different banks

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- Experiment provides internally valid causal estimates.
- Comparison across settings and customer mixes checks context importance

Randomization Balanced

	Observations	Age	Balance	Male	Checking	Acct age	Joint test
<i>I. Front-Page Switching Box</i>							
Control	12,723	59.33	8,685	0.42	0.25	13.76	
Treatment	49,156	59.20	8,371	0.42	0.24	13.71	
Equality p-value		[0.45]	[0.13]	[0.89]	[0.12]	[0.66]	[0.20]
<i>II. Reverse-Page Switching Box</i>							
Control	2,659	53.93	7,359	0.41	0.80	6.74	
Treatment	10,602	53.01	7,419	0.41	0.80	6.71	
Equality p-value		[0.01]	[0.90]	[0.94]	[0.99]	[0.31]	[0.11]
<i>III. Switching Form</i>							
Control	1,999	64.65	6,749	0.44	0.06	16.00	
Treatment	2,004	64.22	6,874	0.46	0.06	16.12	
Equality p-value		[0.40]	[0.83]	[0.22]	[0.80]	[0.35]	[0.72]
<i>IV. Digital Reminder</i>							
Control	5,180	51.86	37,957	0.48	0.79	0.96	
Treatment	10,307	52.02	36,801	0.48	0.78	0.96	
Equality p-value		[0.57]	[0.43]	[0.56]	[0.51]	[0.31]	[0.66]
<i>V. SMS Reminder</i>							
Control	10,200	42.69	25,046	0.53	0.97	4.62	
Treatment	20,002	42.22	23,711	0.51	0.98	4.70	
Equality p-value		[0.01]	[0.16]	[0.00]	[0.70]	[0.01]	[0.00]

Outline

- ① Motivation and Background
- ② RCT Design and Data
- ③ **Treatment Effects**
- ④ Survey Evidence on Mechanisms
- ⑤ Conclusion and Policy Implications

Measuring Disclosure Effectiveness

Two primary measures

- close/substantially empty their account (other switching)
- whether switch to internal account (internal switching)

External Switching + Internal Switching := Any Switching

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- Differentiation across banks besides interest rates makes classification of “wrong” decisions problematic
- Solution: study any switching given internal switching option.
Can take a stronger stand even though smaller rate gain
- Key: Hard to rationalize preference to stay with dominated easy-access savings product at the same bank (apart from switching frictions)

Results: Overall Effects Modest



Only Modest Effects Across Designs

Trial	Front-page switching box annual statement		Reverse-page switching box		Digital reminder rate decrease	
	<u>Any</u> (1)	<u>Internal</u> (2)	<u>Any</u> (3)	<u>Internal</u> (4)	<u>Any</u> (5)	<u>Internal</u> (6)
Call to Action	0.009*** (0.002)	0.005*** (0.001)				
Best Internal Rate	0.029*** (0.002)	0.025*** (0.002)	-0.0002 (0.007)	0.002 (0.001)		
Best Internal and Competitor Rates	0.018*** (0.002)	0.017*** (0.002)	-0.004 (0.007)	0.0005 (0.001)		
Best Internal and Competitor Rates + Graph	0.021*** (0.002)	0.020*** (0.002)				
Best Internal Rate, Personalized			-0.006 (0.007)	0.001 (0.001)		
Best Internal and Competitor Rates, Personalized			-0.002 (0.007)	0.001 (0.001)		
Email					0.053*** (0.009)	0.051*** (0.009)
SMS					0.042*** (0.009)	0.037*** (0.008)
Controls	yes	yes	yes	yes	yes	yes
Control-Group Mean	0.026	0.009	0.077	0.026	0.400	0.267
Treatment Effect Equality <i>p</i> -value	0.000	0.000	0.873	0.722	0.228	0.114
Observations	61,879	61,879	13,261	13,261	15,487	15,487

Who responds best to disclosure?

- Maybe just not worth it for average consumer?
- Rich measures of heterogeneity: age, balance, number of products with same provider, account age, gender, etc.
 - Low disclosure effectiveness not driven by specific demographic
- Perhaps the gains just aren't enough to care about?
 - Treatment effects similar for large balances (lots to gain), retirees (lower opp cost time)
- Perhaps I like my bank: have my checking account there, trust the brand, find ATMs convenient, automatic transfers set up?
 - Focus on internal switching to reduce impact of bank brand

Who responds best to disclosure?

	Front page	Reverse page	Return form	Digital reminder	SMS reminder
Treatment Indicator	0.01* (0.006)	-0.028 (0.018)	0.065** (0.026)	0.026 (0.023)	0.016 (0.022)
Treatment ×					
Age 40-60 yrs	-0.0003 (0.006)	0.004 (0.016)	-0.006 (0.028)	0.046** (0.021)	-0.004 (0.010)
Age 60-80 yrs	0.009 (0.006)	0.002 (0.017)	0.036 (0.030)	0.055** (0.022)	-0.000 (0.013)
Age >80 yrs	0.029*** (0.008)	-0.022 (0.024)	0.017 (0.032)	0.031 (0.058)	0.007 (0.053)
Gain £50-100	0.006 (0.005)	0.020 (0.015)	0.022 (0.036)	0.026 (0.025)	-0.007 (0.013)
Gain £100-500	0.003 (0.005)	0.015 (0.012)	0.032 (0.023)	0.001 (0.020)	-0.029*** (0.010)
Gain >£500	0.007 (0.013)	-0.007 (0.024)	0.005 (0.056)	-0.029 (0.029)	-0.006 (0.016)
Checking Acct	0.005 (0.004)	0.026* (0.014)	0.011 (0.036)	-0.02 (0.020)	0.015 (0.022)
Main Effect Controls	✓	✓	✓	✓	✓
Equality p-value	0.0002	0.44	0.27	0.10	0.21
Observations	61,879	13,261	4,003	15,487	30,202

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Why disclosure so ineffective? Survey Results

- Caveats: N = 738, just trials 1-2, 10% response rate
 - Many can't recall getting or noticing disclosure (40%)
 - Those that did, many did not read beyond front page or skimmed the letter (60-75%)
 - Many that remember the letter are unaware higher available interest rates (US: most mortgagors think they got best rate)
 - Those that switched report being satisfied
 - Most expected switching process to be more onerous than it turned out to be (~15 minutes)
- Beliefs about costs/benefits inhibiting attention

Why are deposits so sticky?

- Strong brand preference given that when people do respond to financial incentives to reoptimize savings, most is internal switching
 - Consistent with endogenous differentiation response of banks
- Tremendous degree of inattention
 - Rational? Equally inattentive when Return on Attention higher
- Consistent with model that has fixed cost of opening up reoptimization decision
- Backdrop is pessimistic beliefs about costs and benefits of switching
- Driven by years of fine print, paperwork, differentiation

Lessons for Disclosure Design

- Trigger events: Effects strongest when tied to a nearby salient event, i.e., impending/recent rate change.
 - Disclose at point of decision, not after
- Graphical depiction of disclosure: no benefit
- Burying the disclosure on last page: undoes any benefit of disclosure
- Process improvements: facilitating internal switching strongest effect
- Myriad of ways to nullify effects of disclosure (or modestly improve)
- Suspicion of motives when sent by current bank. Standardized gov't form?
- Magic disclosure design out there?
- Inattention probably rational given the importance of average consumer disclosure. “Alarm fatigue” in consumer protection?

Implications for Policy

Way forward?

- New products (e.g. Target-date Mutual Funds; Switchcraft)
- Prioritize among disclosures, avoid Nash Equilibrium of fine print overload (Plain English campaign)
- Other types of interventions in addition to (or sometimes instead of) mandated disclosure

Conclusion

- Tested informational consumer disclosure + process simplification w/ RCTs for 124,000
- Design matters, but even best designs have modest effects
 - Even for those who can easily switch internally + have large balances
- Why are deposits sticky? Pessimistic beliefs about switching benefits and costs
- Little evidence regulators could mandate some magic optimal design that facilitates attentiveness and action, calling into question policy reliance on disclosure for retail sector