

# Do Prize-Linked Incentives Promote Positive Financial Behavior? Evidence from a Debt Reduction Intervention

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**FDIC Consumer Research Symposium** 



### **Prize-Linked Savings**



- Make savings more attractive by linking behavior to a lottery entry
  - Ex. \$25 deposit into a dedicated savings account (CD) = 1 raffle entry (usually for cash prizes)
- Popular internationally
  - UK Premium Bonds
    - Over 50 years old
    - 23 million people participate
    - More than £25 billion saved (Source: NS&I)
- U.S.
  - Commonwealth (formerly D2D) "Save to Win" program (2009)
  - Walmart/Green Dot "Prize Savings" MoneyCard (2016)



### For Many, Debt is the Problem



- Outstanding unsecured debt > \$1 trillion:
  - Credit card debt: \$829B (Federal Reserve, 2018Q2)
  - Average household unsecured debt \$21K (Census, 2011)
    - \$19K for the lowest income quintile
      - Income ~\$11K
- Interest rates can be crippling
  - Credit cards: 15 20% APR
  - Personal Loans: 20 30% APR
  - Payday Loans: 390% APR
- Can be more financial advantageous to pay down debt than build savings



### **Conceptual Motivation and Evidence**



- Prize-linked incentives may work through:
  - Non-linear probability weighting
  - Combating present bias
  - Excitement of gambling
- Alternatively, may simply attract people who are going to engage in the targeted behavior anyway
- Evidence from PLS:
  - Field (non-randomized): Tufano et al. (2011), Cole et al. (2017)
  - Lab: Atalay et al. (2014), Filiz-Ozbay et al. (2015)
  - Field (randomized): Gertler et al. (2018)
- No large RCTs in U.S.
- No evidence on prize-linked debt reduction



### **Study**



- RCT in the U.S. examining whether prize-linked incentives can improve debt repayment behavior
- Outcomes
  - Delinquency and default
  - Amount of debt reduced
  - Financial sustainability for providers
  - Selection effects



#### **Partner**







- Largest nonprofit, full-service credit counseling agency in U.S.
- Debt Management Plan (DMP)
  - Determine affordable repayment plan
  - Reduce interest rates and fees
  - "One monthly payment"
  - ~ 25% drop in first year
  - 1/3 of DMP clients successfully complete



#### Intervention



- "Every Payment Counts Rewards Program"
  - With each monthly on-time, in full debt payment:
    - \$500 monthly prize (Jan Dec 2016)
    - \$10,000 grand prize (end of 2016)
- Sample
  - Q1 2016 DMP starts 4,019 participants
  - Q1 2015 DMP starts 1,431 participants
  - Q1 2014 DMP starts 1,457 participants

### **Data**



- Administrative data
  - Credit Reports
    - Baseline, 1 year, 2 years
  - MMI Administrative data
    - Monthly
  - Marketing data
    - Take-up
    - Emails
    - Newsletters
    - Phone outreach

### **Baseline Financial Characteristics**



	(1)	(2)	(3)	(4)	(5) CBR Sample
Variables	Control	Treatment	Difference	Balance Test	
DMP Balance (1,000s)	15.01 [15.10]	15.55 [15.91]	-0.54 (0.370)	0 (0.001)	0 (0.001)
Months Remaining on DMP (Winsorized 5%)	40.32 [13.78]	40.82 [13.74]	-0.5 (0.330)	0.001 (0.001)	0.001 (0.001)
DMP Monthly Payment	472.57 [456.58]	487.46 [473.17]	-14.89 (11.190)	0 (0.0)	0 (0.0)
Number of Tradelines on the DMP	5.71 [4.08]	5.721 [3.95]	-0.011 (0.097)	-0.001 (0.002)	0 (0.002)
Credit Score	613.58 [78.33]	614.45 [78.67]	-0.88 (1.910)	0 (0.0)	0 (0.0)
CBR Debt (1,000s)	104.53 [133.54]	105.74 [140.41]	-1.2 (3.320)	0 (0.0)	0 (0.0)
CBR Delinquent Payments	36.06 [55.49]	34.82 [55.88]	1.24 (1.350)	0 (0.0)	0 (0.0)
Net Monthly Income (1,000s)	3.06 [2.04]	3.11 [2.23]	-0.05 (0.050)	0.004 (0.004)	0.004 (0.004)
Prior Bankruptcy	0.1125 [0.32]	0.1191 [0.32]	-0.0066 (0.008)	0.023 (0.019)	0.02 (0.020)
N	3440	3467		6907	6725



## **Baseline Demographic Characteristics**



	(1)	(2)	(3)	(4)	(5)
Variables	Control	Treatment	Difference	Balance Test	CBR Sample Balance Test
Age	47.81	47.91	-0.1	0	0
	[14.91]	[15.08]	(0.360)	(0.0)	(0.0)
Number of Dependents	2.404	2.406	-0.002	0	0
	[1.46]	[1.47]	(0.035)	(0.005)	(0.005)
Coclient	0.1805	0.1748	0.0057	-0.022	-0.026
	[0.38]	[0.38]	(0.009)	(0.018)	(0.018)
Female	0.677	0.6848	-0.0078	0.011	0.008
	[0.47]	[0.46]	(0.013)	(0.015)	(0.015)
White	0.6306	0.6355	-0.0048	0.002	0.001
	[0.48]	[0.48]	(0.014)	(0.015)	(0.015)
DMP Start in 2016	0.5814	0.5823	-0.001	-0.014	-0.012
	[0.49]	[0.49]	(0.012)	(0.016)	(0.016)
p-value of F-test of joint significance of all					
explanatory variables				0.935	0.928
N	3440	3467		6907	6725



### **Program Enrollment**



- Three pronged approach
  - Emails
    - An initial offer and a reminder a few days later
  - Auto-dialer campaign
    - Up to 3 attempts to make contact (max 2 per day)
  - Direct phone outreach from MMI counselor
    - Up to 3 attempts





Improving lives through financial education.

Dear %%FIRST%%,

You're invited to enroll in Money Management International's *Every Payment Counts* Rewards Program!

### **EVERY PAYMENT COUNTS** \$10,000 Grand Prize

At Money Management International, we think that hard work should pay you back. That's why we created the *Every Payment Counts* Rewards Program and are making it available to you at no extra cost.

Just make your full monthly Debt Management Plan payment on time, and you'll automatically be entered into a drawing where you could win:

- A \$500 prize awarded every month in 2016
- · A Grand Prize of up to \$10,000 awarded at the end of the year!

Each month you make a complete, on-time payment, you'll earn another chance to win \$500—and the more months you make your scheduled payment on time, the more chances you have to win the \$10,000 Grand Prize! All prizes go toward paying down your debt.

Never miss a chance to win - Sign up today so that you don't miss the next drawing!

## YFS!

CLICK HERE to enroll in the free Every Payment Counts Rewards Program and earn your chance to win \$10,000!

## **NO THANKS**

CLICK HERE to confirm that you're not interested in participating in the free Every Payment Counts Rewards Program.

For official rules and additional program details please visit WEB ADDRESS

Our Services Financial Education Resources Community About Mi

Home

## Congratulations!

#### You are now enrolled in the Every Payment Counts Rewards Program!



Just make your full monthly Debt Management Plan payment on time, and you'll automatically be entered into a drawing where you could win:

- · A \$500 prize awarded every month in 2018
- A Grand Prize of up to \$10,000 awarded at the end of the year

Each month you make a complete, on-time payment, you'll earn another chance to win \$500—and the more months you make your scheduled payment on time, the more chances you have to win the \$10,000 Grand Prize! All prizes go toward paying down your debt.

### Are you sure?

#### You declined to enroll in the Every Payment Counts Rewards Program



If you sign up for the Every Payment Counts Rewards Program, you could have the chance to get up to \$10,000 applied toward paying down your debt!

There is no cost to participate in our Rewards Program. Just make your full monthly Debt Management Plan payment on time, and you'll automatically be entered into a drawing where you could win:

- · A \$500 prize awarded every month in 2016
- · A Grand Prize of up to \$10,000 awarded at the end of the year

Each month you make a complete, on-time payment, you'll earn another chance to win \$500—and the more months you make your scheduled payment on time, the more chances you have to win the \$10,000 Grand Prize! All prizes go toward paying down your debt.

Never miss a chance to win - Sign up today so that you don't miss the next drawing!

Please see our FAQs and Official Program Rules for details. If you have any questions or concerns, you can contact a Money Management International support counselor at 1-XXX-XXX-XXXX.

#### I changed my mind! Let me sign up!

### **Phone Outreach**



#### Auto-dialer

Hello! This call is to notify you of a fantastic opportunity to participate in Money Management International's "Every Payment Counts" Rewards Program. You should have received two emails inviting you to participate in monthly drawings rewarding up to \$500, and a \$10,000 end of the year drawing to go towards repaying debt on your debt management program. If you participate, each month you make your deposit on-time, you'll earn another chance to win \$500—and the more months you make your deposit on time, the more chances you have to win the \$10,000 Grand Prize!

#### Direct Outreach

- Calls to home/cell on weekends/off hours
- Calls to work during normal business hours



Improving lives through financial education.

### **EVERY PAYMENT COUNTS** \$10,000 Grand Prize

#### Congratulations to our January Winner!

Congratulations to , our January *Every Payment Counts* rewards winner! is one step closer to conquering his debt.

"I am beyond excited to win \$500 towards my plan, I have never won anything that big before," said when reached for comment. "I have seen all the debts drop in just a year, and all my payments have still been on time and no late fees. Thanks again. I am so thankful to have won this, and in a little shock, but I do appreciate everything."

Great work, Congratulations again!

You can be a winner too! Enroll today in Money Management International's *Every Payment Counts* Rewards Program. The program is free and simple. Just make your full monthly Debt Management Plan payment on time, and you'll automatically be entered into a drawing where you could win:

- · A \$500 prize awarded every month in 2016
- · A Grand Prize of up to \$10,000 awarded at the end of the year!

Each month you make a complete, on-time payment, you'll earn another chance to win \$500—and the more months you make your scheduled payment on time, the more chances you have to win the \$10,000 Grand Prize! All prizes go toward paying down your debt.

Never miss a chance to win – Sign up today so that you don't miss February's drawing!

## YFSI

CLICK HERE to enroll in the free Every Payment Counts Rewards Program and earn your chance to win \$10,000!

### NO THANKS

CLICK HERE to confirm that you're not interested in participating in the free Every Payment Counts Rewards Program.

Click here for official rules.

#### Getting Closer - One Payment at a Time

Every payment gets you one step closer to being debt-free. Keep up the momentum every month and you may just win the big \$10,000 Grand Prize! Good luck!

Login to your <u>MyMMI</u> account to check your balances, review account statuses, and more!

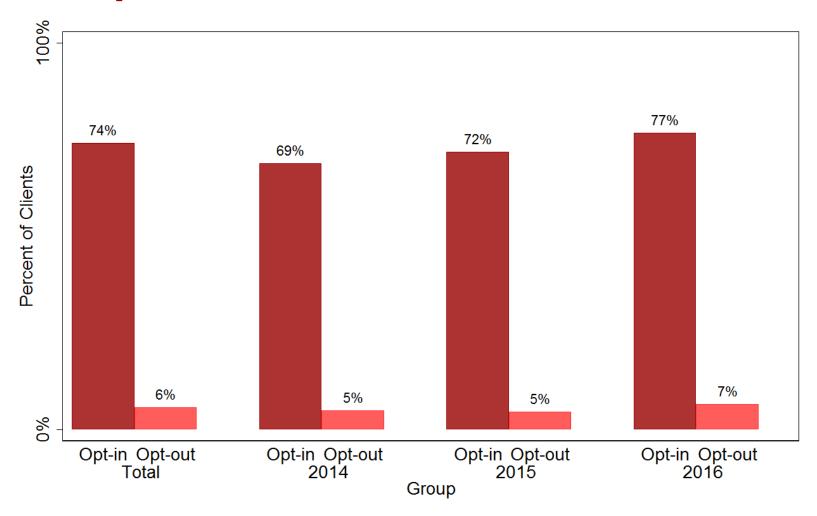
#### About Money Management International

Money Management International (MMI) is a nonprofit, full-service credit counseling agency, providing confidential financial guidance, financial education, counseling and debt management assistance to consumers since 1958. MMI helps consumers frim their expenses, develop a spending plan, and repay debts.

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## Take-up

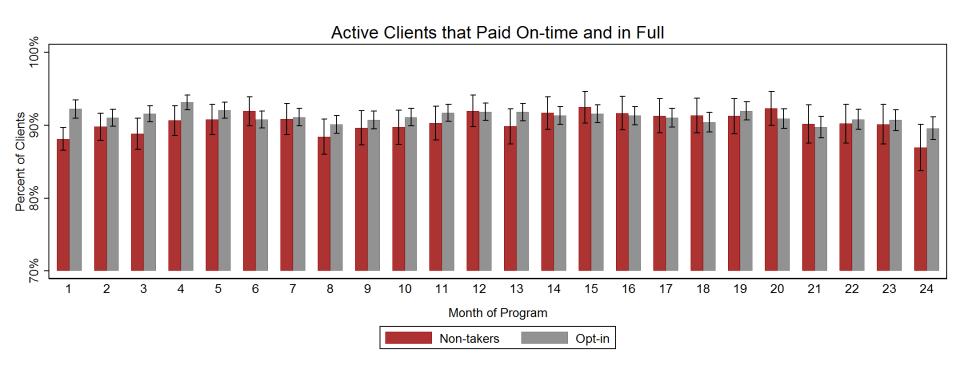






## On-time Payment Behavior (Selection & Treatment Effects)

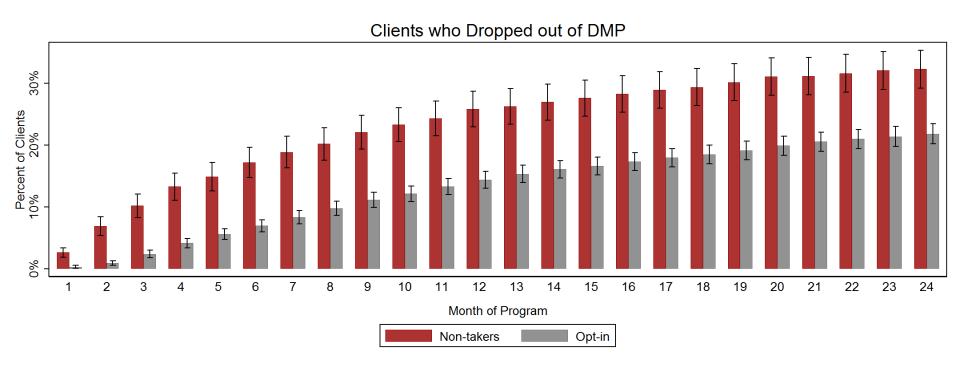






## **Dropouts (Selection & Treatment Effects)**







## **DMP Outcomes** (Selection + Treatment Effects)

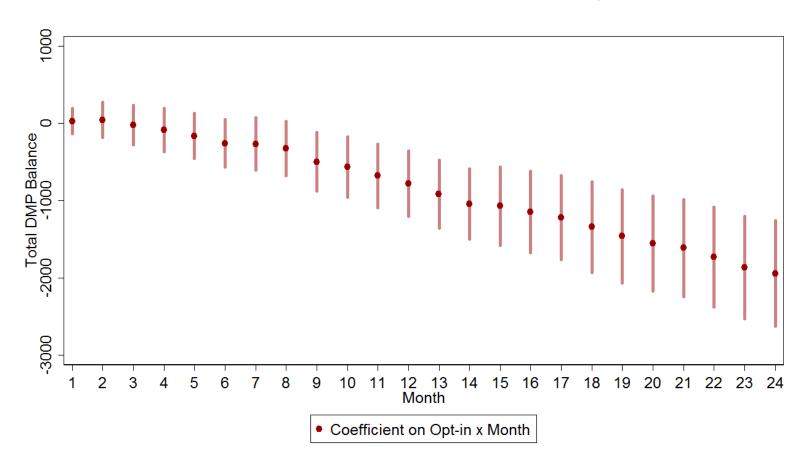


VARIABLES	(1) On-time Payment	(2) Active Account	(3) Drop Out	(4) Completed DMP	(5) Total DMP Balance
Opt-in x Incentive Period [i]	0.016**	0.108***	-0.095***	-0.013**	-247.953*
	(0.007)	(0.012)	(0.011)	(0.006)	(147.269)
Opt-in x Post Incentive Period [ii]	0.002	0.114***	-0.111***	-0.003	-1,347.989***
	(0.008)	(0.018)	(0.017)	(0.011)	(282.203)
Incentive Period		-0.196***	0.164***	0.033***	-2,078.853***
		(0.011)	(0.011)	(0.005)	(128.431)
Post Incentive Period		-0.409***	0.295***	0.114***	-4,994.906***
		(0.016)	(0.015)	(0.010)	(230.739)
Constant	0.927***	1.000***	0.000	0.000	15,815.208***
	(0.006)	(0.005)	(0.005)	(0.003)	(93.080)
Adjusted R-squared	0.001	0.631	0.689	0.532	0.924
Individual Fixed Effects	No	Yes	Yes	Yes	Yes
Observations	65870	86675	86675	86675	86675
Individuals	3467	3467	3467	3467	3467
P-value of [i]=[ii]	0.047	0.630	0.122	0.242	0.000
Average Outcome - End of Incentive Period	0.907	0.785	0.162	0.053	11870.857
Average Outcome - 24-months	0.890	0.582	0.245	0.173	8136.770



## DMP Balance (Selection & Treatment Effects)





## **CBR Outcomes (Selection + Treatment Effects)**

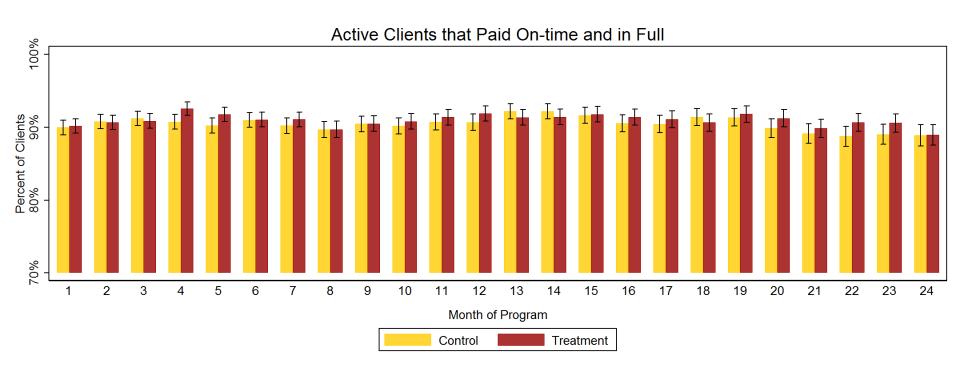


VARIABLES	(1) Non-mortgage Charge-off	(2) Late Payments	(3) Credit Score	(4) Non-mortgage Debt (Winsorized Top 1%)
Opt-in x Incentive Period [i]	-1,044.78***	-6.434***	-2.72	-453.79
	(343.41)	(1.565)	(2.92)	(672.54)
Opt-in x Post Incentive Period [ii]	-1,015.11**	-10.661***	-1.84	-109.67
	(429.16)	(2.817)	(3.33)	(1,017.64)
Incentive Period	2,078.68***	16.460***	9.53***	-2,149.21***
	(313.91)	(1.352)	(2.54)	(554.43)
Post Incentive Period	2,901.14***	32.182***	26.43***	-3,705.44***
	(381.00)	(2.463)	(2.87)	(862.49)
Constant	1,595.42***	35.129***	615.16***	41,291.52***
	(97.27)	(0.600)	(0.83)	(238.45)
Adjusted R-squared	0.65	0.801	0.74	0.90
Individual Fixed Effects	Yes	Yes	Yes	Yes
Observations	9696	9696	9576	9696
Individuals	3232	3232	3192	3232
P-value of [i]=[ii]	0.897	0.017	0.723	0.639
Average Outcome - End of Incentive Period	2900.54	46.825	622.68	38806.32
Average Outcome - 24-months	3744.97	59.417	640.22	37504.88



## On-time Payment Behavior (Intent-to-Treat)

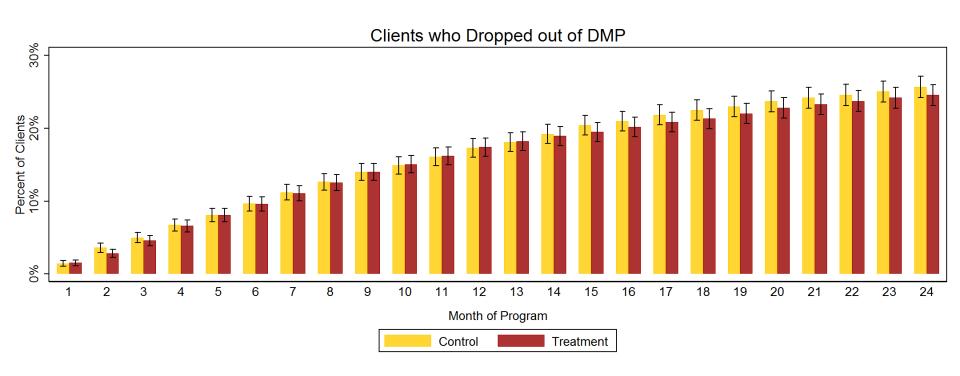






## **Dropouts** (Intent-to-Treat)







## **DMP Outcomes** (Intent-to-Treat)



	(1)	(2)	(3)	(4)	(5)
VARIABLES	On-time Payment	Active Account	<b>Drop Out</b>	Completed DMP	Total DMP Balance
Treatment x Incentive Period [i]	0.005	0.004	-0.001	-0.003	46.704
Treatment x moentive r enda [i]	(0.004)	(0.006)	(0.006)	(0.003)	(91.140)
Treatment x Post Incentive Period [ii]	0.004	0.018*	-0.008	-0.010	5.212
	(0.005)	(0.011)	(0.010)	(0.007)	(187.174)
Incentive Period		-0.120***	0.094***	0.026***	-2,310.237***
		(0.005)	(0.004)	(0.002)	(65.902)
Post Incentive Period		-0.343***	0.221***	0.121***	-5,999.076***
		(800.0)	(0.007)	(0.005)	(129.861)
Constant	0.920***	1.000***	0.000	0.000	15,535.333***
	(0.005)	(0.004)	(0.004)	(0.002)	(65.777)
Adjusted R-squared	0.001	0.629	0.686	0.534	0.925
Individual Fixed Effects	No	Yes	Yes	Yes	Yes
Observations	130283	172675	172675	172675	172675
Individuals	6907	6907	6907	6907	6907
P-value of [i]=[ii]	0.855	0.061	0.249	0.226	0.740
Average Outcome - End of Incentive Period	0.899	0.785	0.160	0.055	11558.683
Average Outcome - 24-months	0.889	0.569	0.251	0.181	7884.096



## DMP Outcomes - 2016 Cohort (Intent-to-Treat)



VARIABLES	(1) On-time Payment	(2) Active Account	(3) Drop Out	(4) Completed DMP	(5) Total DMP Balance
Treatment x Incentive Period [i]	-0.001	0.002	-0.002	0.000	33.933
	(0.006)	(0.009)	(800.0)	(0.003)	(128.313)
Treatment x Post Incentive Period [ii]	0.001	0.013	-0.005	-0.008	30.998
	(0.007)	(0.014)	(0.014)	(0.007)	(242.153)
Incentive Period		-0.129***	0.117***	0.012***	-2,137.393***
		(0.006)	(0.006)	(0.002)	(94.163)
Post Incentive Period		-0.345***	0.281***	0.063***	-5,401.629***
		(0.010)	(0.010)	(0.005)	(169.607)
Constant	0.892***	1.000***	0.000	0.000	17,257.085***
	(0.012)	(0.005)	(0.005)	(0.002)	(88.659)
Adjusted R-squared	0.000	0.649	0.679	0.528	0.942
Individual Fixed Effects	No	Yes	Yes	Yes	Yes
Observations	73081	100475	100475	100475	100475
Individuals	4019	4019	4019	4019	4019
P-value of [i]=[ii]	0.756	0.233	0.702	0.127	0.985
Average Outcome - End of Incentive Period	0.887	0.771	0.204	0.025	13785.867
Average Outcome - 24-months	0.893	0.577	0.326	0.096	10238.883



## DMP Outcomes - 2015 Cohort (Intent-to-Treat)



VARIABLES	(1) On-time Payment	(2) Active Account	(3) Drop Out	(4) Completed DMP	(5) Total DMP Balance
Treatment x Incentive Period [i]	0.004	-0.015	0.010	0.004	-150.061
	(0.009)	(0.013)	(0.011)	(0.007)	(172.695)
Treatment x Post Incentive Period [ii]	0.010	0.001	-0.007	0.006	-414.944
	(0.011)	(0.022)	(0.019)	(0.016)	(441.738)
Incentive Period		-0.089***	0.064***	0.025***	-2,299.027***
I		(0.009)	(800.0)	(0.005)	(113.690)
Post Incentive Period		-0.287***	0.159***	0.128***	-6,460.453***
		(0.016)	(0.013)	(0.011)	(280.030)
Constant	0.924***	1.000***	0.000	0.000	14,864.508***
	(0.007)	(800.0)	(0.007)	(0.005)	(142.395)
Adjusted R-squared	0.000	0.612	0.689	0.521	0.882
Individual Fixed Effects	No	Yes	Yes	Yes	Yes
Observations	29208	35775	35775	35775	35775
Individuals	1431	1431	1431	1431	1431
P-value of [i]=[ii]	0.510	0.336	0.144	0.882	0.400
Average Outcome - End of Incentive Period	0.912	0.825	0.118	0.057	10501.844
Average Outcome - 24-months	0.914	0.624	0.176	0.200	6414.670



## DMP Outcomes - 2014 Cohort (Intent-to-Treat)



VARIABLES	(1) On-time Payment	(2) Active Account	(3) Drop Out	(4) Completed DMP	(5) Total DMP Balance
Treatment x Incentive Period [i]	0.016*	0.028**	-0.009	-0.020*	260.703
	(0.009)	(0.013)	(0.010)	(0.010)	(180.126)
Treatment x Post Incentive Period [ii]	0.014	0.047**	-0.017	-0.029	328.906
	(0.011)	(0.023)	(0.016)	(0.021)	(382.828)
Incentive Period		-0.127***	0.053***	0.075***	-2,876.127***
		(0.010)	(0.007)	(800.0)	(131.682)
Post Incentive Period		-0.392***	0.111***	0.282***	-7,254.650***
		(0.016)	(0.011)	(0.015)	(285.234)
Constant	0.930***	1.000***	0.000	0.000	11,444.893***
	(0.007)	(800.0)	(0.006)	(0.007)	(130.601)
Adjusted R-squared	0.005	0.583	0.703	0.543	0.833
Individual Fixed Effects	No	Yes	Yes	Yes	Yes
Observations	27994	36425	36425	36425	36425
Individuals	1457	1457	1457	1457	1457
P-value of [i]=[ii]	0.794	0.276	0.390	0.551	0.784
Average Outcome - End of Incentive Period	0.917	0.785	0.079	0.136	6453.180
Average Outcome - 24-months	0.849	0.491	0.116	0.394	2831.838



## **CBR Outcomes** (Intent-to-Treat)



VARIABLES	(1) Non-mortgage Charge-off	(2) Late Payments	(3) Credit Score	(4) Non-mortgage Debt (Winsorized Top 1%)
Tuesday and to be continued Deviced (ii)	000.40	0.770	4.40	204.00
Treatment x Incentive Period [i]	223.13	0.776	-1.43	-381.08
L	(186.85)	(1.020)	(1.76)	(446.36)
Treatment x Post Incentive Period [ii]	193.02	0.505	-1.93	-8.57
	(250.54)	(1.740)	(2.06)	(638.74)
Incentive Period	1,081.99***	10.920***	8.94***	-2,104.12***
	(132.48)	(0.758)	(1.24)	(314.80)
Post Incentive Period	1,956.53***	23.783***	27.00***	-3,778.07***
	(177.54)	(1.259)	(1.47)	(445.01)
Constant	1,693.49***	35.869***	614.35***	41,138.27***
	(69.00)	(0.441)	(0.58)	(167.43)
Adjusted R-squared	0.63	0.789	0.73	0.91
Individual Fixed Effects	Yes	Yes	Yes	Yes
Observations	19239	19239	18936	19239
Individuals	6413	6413	6312	6413
P-value of [i]=[ii]	0.846	0.798	0.751	0.411
Average Outcome - End of Incentive Period	2887.93	47.180	622.57	38842.09
Average Outcome - 24-months	3747.30	59.907	640.37	37355.87



## **CBR Outcomes - 2016 Cohort** (Intent-to-Treat)



VARIABLES	(1) Non-mortgage Charge-off	(2) Late Payments	(3) Credit Score	(4) Non-mortgage Debt (Winsorized Top 1%)
Treatment x Incentive Period [i]	394.80	1.149	-2.17	-146.58
	(288.86)	(1.391)	(2.50)	(567.34)
Treatment x Post Incentive Period [ii]	491.60	1.088	-2.34	131.93
	(379.22)	(2.395)	(2.89)	(824.99)
Incentive Period	1,551.13***	14.919***	2.24	-2,603.28***
	(202.05)	(1.016)	(1.75)	(400.55)
Post Incentive Period	2,712.67***	30.799***	26.25***	-4,673.22***
	(269.45)	(1.720)	(2.05)	(576.55)
Constant	1,442.02***	30.544***	600.02***	43,406.04***
	(105.75)	(0.606)	(0.83)	(214.24)
Adjusted R-squared	0.54	0.750	0.69	0.91
Individual Fixed Effects	Yes	Yes	Yes	Yes
Observations	10959	10959	10788	10959
Individuals	3653	3653	3596	3653
P-value of [i]=[ii]	0.672	0.967	0.936	0.639
Average Outcome - End of Incentive Period	3192.44	46.042	601.15	40728.77
Average Outcome - 24-months	4402.84	61.892	625.08	38799.42



## **CBR Outcomes - 2015 Cohort** (Intent-to-Treat)



VARIABLES	(1) Non-mortgage Charge-off	(2) Late Payments	(3) Credit Score	(4) Non-mortgage Debt (Winsorized Top 1%)
Treatment x Incentive Period [i]	-74.67	0.506	-0.24	-592.83
	(361.53)	(1.916)	(3.39)	(1,058.56)
Treatment x Post Incentive Period [ii]	-290.83	1.863	-4.85	-931.74
	(464.27)	(3.388)	(4.09)	(1,521.04)
Incentive Period	739.33***	7.294***	24.53***	-1,621.95**
	(258.87)	(1.264)	(2.35)	(714.78)
Post Incentive Period	1,296.88***	16.452***	40.59***	-2,137.39**
	(328.49)	(2.246)	(2.93)	(1,061.49)
Constant	2,111.17***	41.699***	615.92***	39,788.21***
	(130.41)	(0.850)	(1.12)	(401.48)
Adjusted R-squared	0.73	0.843	0.75	0.90
Individual Fixed Effects	Yes	Yes	Yes	Yes
Observations	4053	4053	3996	4053
Individuals	1351	1351	1332	1351
P-value of [i]=[ii]	0.445	0.516	0.170	0.743
Average Outcome - End of Incentive Period	2812.92	49.248	640.33	37867.87
Average Outcome - 24-months	3261.66	59.089	654.05	37181.85



## **CBR Outcomes - 2014 Cohort** (Intent-to-Treat)



VARIABLES	(1) Non-mortgage Charge-off	(2) Late Payments	(3) Credit Score	(4) Non-mortgage Debt (Winsorized Top 1%)
Treatment x Incentive Period [i]	51.91	-0.019	-0.61	-778.08
	(184.07)	(2.172)	(3.18)	(965.79)
Treatment x Post Incentive Period [ii]	-135.88	-2.460	1.80	528.27
	(337.69)	(3.495)	(3.99)	(1,318.61)
Incentive Period	199.31	4.074**	11.35***	-1,277.52*
	(158.81)	(1.812)	(2.27)	(708.87)
Post Incentive Period	636.67***	12.698***	15.94***	-3,038.53***
	(243.54)	(2.770)	(2.89)	(907.82)
Constant	1,944.99***	44.083***	650.10***	36,553.26***
	(79.14)	(0.899)	(1.07)	(351.33)
Adjusted R-squared	0.83	0.835	0.75	0.90
Individual Fixed Effects	Yes	Yes	Yes	Yes
Observations	4227	4227	4152	4227
Individuals	1409	1409	1384	1409
P-value of [i]=[ii]	0.477	0.258	0.462	0.168
Average Outcome - End of Incentive Period	2170.38	48.148	661.15	34884.76
Average Outcome - 24-months	2513.38	55.544	666.94	33780.18



### **Selection - Baseline Differences**



	(1)	(2)	(3)
Variables	Non-takers	Takers	Difference
DMP Balance (1,000s)	13.3	16.34	-3.030***
	[13.54]	[16.60]	(0.610)
Months Remaining on DMP (Winsorized 5%)	38.99	41.46	-2.470***
	[13.49]	[13.77]	(0.530)
DMP Monthly Payment	439.91	504.13	-64.220***
	[410.78]	[492.16]	(18.30)
Number of Tradelines on the DMP	5.217	5.898	-0.681***
	[3.71]	[4.02]	(0.153)
Credit Score	604.67	617.9	-13.230***
	[78.55]	[78.44]	(3.060)
CBR Debt (1,000s)	96.24	109.09	-12.850**
	[142.94]	[139.38]	(5.460)
CBR Delinquent Payments	39.73	33.09	6.640***
	[58.30]	[54.91]	(2.170)
Net Monthly Income (1,000s)	2.98	3.15	-0.170**
	[2.02]	[2.30]	(0.090)
Prior Bankruptcy	0.13	0.1153	0.0147
	[0.34]	[0.32]	(0.013)
N	900	2567	3467



### **Selection - Baseline Differences**



	(1)	(2)	(3)
Variables	Non-takers	Takers	Difference
DMP Balance (1,000s)	13.3	16.34	-3.030***
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### **Insights**



- Strong consumer interest and positive correlational effects
  - Takers:
    - More timely with debt repayment
    - Less likely to drop out of DMP
    - Pay off more of their debt
    - Positive outcomes on their CBR
- Correlational effects are driven entirely by selection
  - No ITT effects
  - Consumers who are more likely to repay debt successfully are more likely to take-up incentives
- Prize-linked incentives may not modify behavior and may simply reward financially successful individuals for existing behavior





## Thanks!

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