

Simplicity as an Anti-Poverty Policy Tool

Lessons from Behavioral Economics for Simpler & Better Policy

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University of Toronto, Rotman School of Management Nov 23rd, 2016

The Human Mind

The Psychological Mind

More information and choice may distort (or paralyze) decisions and reduce well-being



The Economic Mind

More information and choice improves decisions and well-being

Simpler policy is often better policy

Three Lessons for Simpler Policy Design

Simplify program information
Evidence from the Earned Income Tax Credit

Simplify program structure & incentives Evidence from health insurance

Simplify choice architecture Evidence from retirement savings

Policy Problem

Low Program Take-up

(Bhargava and Manoli, AER 2015)

Background

Large share of eligible individuals fail to claim significant government benefits for which they are eligible – e.g., 25% fail to claim EITC (US) credits amounting to an average of 1 month of income

Economic perspective – Eligible individuals don't take up because of program stigma or administrative enrollment costs

Behavioral perspective – Low take-up due to psychological frictions such as lack of program awareness, hassle costs associated with enrollment, and aversion to program complexity

Research Strategy

Randomize distribution of strategically modified EITC notices and claiming worksheets to 35k eligible non-claimants (\$26m benefits)

Field Experiment w/ IRS

Simplicity & Program Take-up

(Bhargava & Manoli 2015)

How important is informational complexity?

Simply receiving a second notice improved resulted in response of 0.22



 Notice
 ElC0927

 Tax Year
 2009

 Notice Date
 November 20

 Social Security Number
 999 99 999 9999

 To contact us
 1-800-829-10

JAMES Q.HINDS 22 BOULDER STREET HANSON, CT 00000-7253

> You May Be Eligible for a Refund If You Qualify for the Earned Income Credit

Why We Are Sending You this Notice

You may qualify for the earned income credit (EIC). The EIC is for certain people who work and have earned income. This tax credit usually means more money in your pocket. It reduces the amount of tax you owe, and may give you a refund. Our records show:

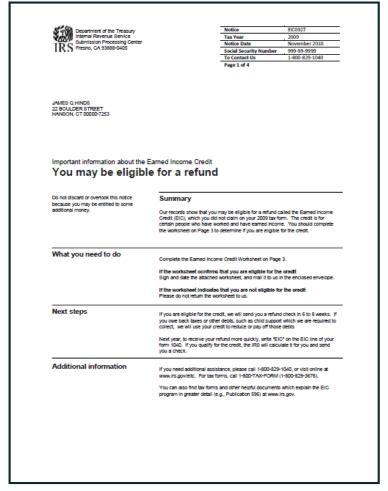
- · Your income falls in the eligible range to receive the EIC,
- · You have a dependent who may be an EIC qualifying child, and
- You did not claim the EIC on your 2009 Individual Income Tax Return.

What You Need to Do

Income is not the only condition that determines if you qualify for EIC. We need you to complete the enclosed EIC Eligibility Check-Sheet to see if you may qualify for the EIC. Take the following steps to complete the check-sheet.

- · Check that you are eligible for the EIC in Step 1.
- If your Social Security Number is not valid or if you are a qualifying dependent of another person, you do
 not qualify.
- If your Social Security Number is valid and you are not a qualifying dependent of another person, you
 may qualify. Continue to Step 2 only if you did not place a check next to any of the eligibility criteria in
 Step 1.
- In Steps 2 and 3, fill in the name and Social Security number for each child who may qualify you for the EIC and check that each child meets the stated requirements.
- Any NO answer for a child means that child is not your qualifying child for the EIC. Do not respond to
 this notice unless you have a qualifying child.
- All YES answers mean a child is your qualifying child for the EIC. Sign and date the declaration on the
 last page of this notice. Mail the completed EIC Eligibility Worksheet to us in the enclosed envelope.

Note: Return the EIC Worksheet to us only if you determine you may qualify for the EIC.



Complex Notice

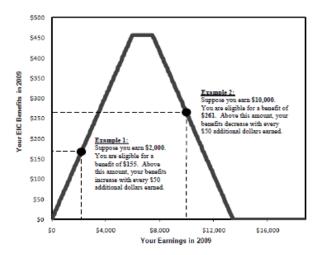
17%

Simple Notice

23%

DO YOU KNOW ABOUT THE EARNED INCOME CREDIT?

The Earned Income Credit (EIC) is designed to provide benefits to working individuals and families. The picture below describes how benefit amounts change based on your yearly earnings (note that the picture is drawn for a single filer with no dependents).



MYTHS AND REALITIES OF THE EIC

Myth: I cannot claim the EIC If I missed the April 16th deadline.

You can correct your tax return and claim the EIC up to 3 years after the April 16th deadline.

Myth: I can only claim the EIC if my Income is very low.

You may qualify for benefits if your earnings are less than \$43,261 if single, and less than \$48,280, if married.

Myth: My child is over 10, so I do not qualify for higher benefits.

If your child is a full-time student or disabled, you may still qualify for higher benefits. Myth: I need to have a bank account to receive EIC benefits.

A check for your EIC benefits can be mailed to you.

Myth: I cannot claim the EIC If I am unemployed or selfemployed.

You can claim the EIC as long as you have some earned Income such as wage income or self-employment income.

Mytti: I can only claim EIC benefits If I have children.

You can claim the EIC without children

For IRS use only - Code F1



Notice	EIC0927 2009		
Tax Year			
Notice Date	November 2010		
Social Security Number	999-99-9999		
To Contact Us	1-800-829-1040		
Page 1 of A			

JAMES Q.HINDS 22 BOULDER STREET HANSON, CT 00000-7253



Important information about the Earned Income Credit

You may be eligible for a refund of up to \$3,043

Do not discard or overlook this notice
because you may be entitled to some
additional money

Depending on your earnings and eligibility, your benefit can be up to \$3,043.

Summary

Our records show that you may be eligible for a refund called the Earned Income Credit (EIC), which you did not claim your 2003 shortom. The credit, which can be up to \$3,043, is for certain people who have worked and have earned Income. You should complete the worksheet on Page 3 to determine if you are eligible for the credit.

What you need to do

Complete the Earned Income Credit Worksheet on Page 3.

If the worksheet confirms that you are eligible for the credit.
Sign and date the attached worksheet, and mail it to us in the enclosed envelope.

If the worksheet indicates that you are not eligible for the credit. Please do not return the worksheet to us.

Next steps

If you are eligible for the credit, we will send you a refund check in 6 to 8 weeks. If you owe back taxes or other debts, such as child support which we are required to collect, we will use your credit to reduce or pay off those debts

Next year, to receive your refund more quickly, write "EIC" on the EIC line of your form 1040. If you qualify for the credit, the IRS will calculate it for you and send you a check.

Additional information

If you need additional assistance, please call 1-800-629-1040, or visit online at www.irs.govietic. For tax forms, call 1-800-TAX-FORM (1-800-829-3676).

You can also find tax forms and other heipful documents which explain the EIC program in greater detail (e.g., Publication 596) at www.irs.gov.



Notice	EIC0927
Tax Year	2009
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Social Security Number	999-99-9999
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Page 1 of 4	

JAMES O HINDS 22 BOULDER STREET HANSON, CT 00000-7253

Important information about the Earned Income Credit You may be eligible for a refund of up to \$5,657

Do not discard or overlook this notice because you may be entitled to some

additional money

Depending on your earnings and eligibility, your benefit can be up to

Summary

Our records show that you may be eligible for a refund called the Earned Income Credit (EIC), which you did not claim on your 2009 tax form. The credit, which can be up to \$5,557, is for credain people who have worked and have earned income. You should complete the worksheet on Page 3 to determine if you are eligible for the credit.

What you need to do

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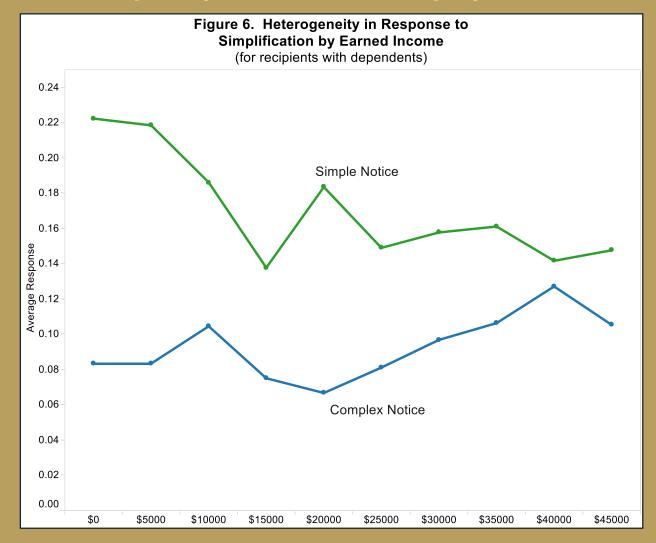
You can also find tax forms and other helpful documents which explain the EIC program in greater detail (e.g., Publication 596) at www.irs.gov

40/

+13%

+6%

Complexity and EITC Take-up by Income



Earned Income of Notice Recipients

Program complexity disproportionately affects take-up of low earners

Three Lessons for Simpler Policy Design

Simplify program information
Evidence from the Earned Income Tax Credit

Simplify program structure & incentives Evidence from health insurance

Simplify choice architecture Evidence from retirement savings

Policy Problem

Sensible Health Plan Choices

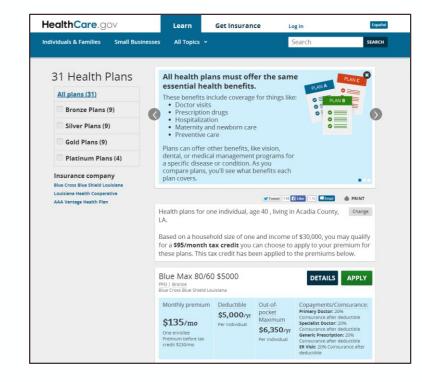
(Bhargava, Loewenstein & Sydnor QJE forthcoming)

Background

Health landscape in US recently shifted towards greater choice (ACA - 46 plans, Medicare – 30 plans)

Economic perspective - expanding plan menus should spur insurer competition and lead to better choice

Behavioral perspective – Benefits of greater choice presume individuals make informed, sensible decisions



Research Strategy

Test financial efficiency of health plan choices by exploiting natural experiment created by insurance offering at Fortune 100 firm



Firm let employees "build" their own plan"

	Deductible	Coinsurance	Out Of Pocket Max	Office Visit Copayment
Plan Name	Individual / Family	(after deductible)	Individual / Family	
Medical Option 01	\$350 / \$700	90%	\$1,500 / \$3,750	\$15 primary care / \$40 special
Medical Option 02	\$350 / \$700	90%	\$2,500 / \$6,250	\$15 primary care / \$40 special
Medical Option 03	\$350 / \$700	90%	\$3,000 / \$7,500	\$15 primary care / \$40 special
Medical Option 04	\$350 / \$700	90%	\$1,500 / \$3,750	\$25 primary care / \$35 special
Medical Option 05	\$350 / \$700	90%	\$2,500 / \$6,250	\$25 primary care / \$35 special
Medical Option 06	\$350 / \$700	90%	\$3,000 / \$7,500	\$25 primary care / \$35 special
Medical Option 07	\$350 / \$700	80%	\$1,500 / \$3,750	\$15 primary care / \$40 special
Medical Option 08	\$350 / \$700	80%	\$2,500 / \$6,250	\$15 primary care / \$40 special
Medical Option 09	\$350 / \$700	80%	\$3,000 / \$7,500	\$15 primary care / \$40 special
Medical Option 10	\$350 / \$700	80%	\$1,500 / \$3,750	\$25 primary care / \$35 special
Medical Option 11	\$350 / \$700	80%	\$2,500 / \$6,250	\$25 primary care / \$35 special
Medical Option 12	\$350 / \$700	80%	\$3,000 / \$7,500	\$25 primary care / \$35 specia
Medical Option 13	\$500 / \$1,000	90%	\$1,500 / \$3,750	\$15 primary care / \$40 special
Medical Option 14	\$500 / \$1,000	90%	\$2,500 / \$6,250	\$15 primary care / \$40 specia
Medical Option 15	\$500 / \$1,000	90%	\$3,000 / \$7,500	\$15 primary care / \$40 specia
Medical Option 16	\$500 / \$1,000	90%	\$1,500 / \$3,750	\$25 primary care / \$35 specia
Medical Option 17	\$500 / \$1,000	90%	\$2,500 / \$6,250	\$25 primary care / \$35 specia
Medical Option 18	\$500 / \$1,000	90%	\$3,000 / \$7,500	\$25 primary care / \$35 specia
Medical Option 19	\$500 / \$1,000	80%	\$1,500 / \$3,750	\$15 primary care / \$40 specia
Medical Option 20	\$500 / \$1,000	80%	\$2,500 / \$6,250	\$15 primary care / \$40 specia
Medical Option 21	\$500 / \$1,000	80%	\$3,000 / \$7,500	\$15 primary care / \$40 specia
Medical Option 22	\$500 / \$1,000	80%	\$1,500 / \$3,750	\$25 primary care / \$35 specia
Medical Option 23	\$500 / \$1,000	80%	\$2,500 / \$6,250	\$25 primary care / \$35 specia
Medical Option 24	\$500 / \$1,000	80%	\$3,000 / \$7,500	
Medical Option 25	\$750 / \$1,000	90%		\$25 primary care / \$35 specia
Medical Option 26	\$750 / \$1,500	90%	\$1,500 / \$3,750 \$2,500 / \$6,250	\$15 primary care / \$40 specia \$15 primary care / \$40 specia
		90%		
Medical Option 27 Medical Option 28	\$750 / \$1,500		\$3,000 / \$7,500	\$15 primary care / \$40 specia
	\$750 / \$1,500	90%	\$1,500 / \$3,750	\$25 primary care / \$35 specia
Medical Option 29	\$750 / \$1,500	90%	\$2,500 / \$6,250	\$25 primary care / \$35 specia
Medical Option 30	\$750 / \$1,500	90%	\$3,000 / \$7,500	\$25 primary care / \$35 specia
Medical Option 31	\$750 / \$1,500	80%	\$1,500 / \$3,750	\$15 primary care / \$40 specia
Medical Option 32	\$750 / \$1,500	80%	\$2,500 / \$6,250	\$15 primary care / \$40 specia
Medical Option 33	\$750 / \$1,500	80%	\$3,000 / \$7,500	\$15 primary care / \$40 specia
Medical Option 34	\$750 / \$1,500	80%	\$1,500 / \$3,750	\$25 primary care / \$35 specia
Medical Option 35	\$750 / \$1,500	80%	\$2,500 / \$6,250	\$25 primary care / \$35 specia
Medical Option 36	\$750 / \$1,500	80%	\$3,000 / \$7,500	\$25 primary care / \$35 specia
Medical Option 37	\$1,000 / \$2,000	90%	\$1,500 / \$3,750	\$15 primary care / \$40 specia
Medical Option 38	\$1,000 / \$2,000	90%	\$2,500 / \$6,250	\$15 primary care / \$40 specia
Medical Option 39	\$1,000 / \$2,000	90%	\$3,000 / \$7,500	\$15 primary care / \$40 specia
Medical Option 40	\$1,000 / \$2,000	90%	\$1,500 / \$3,750	\$25 primary care / \$35 specia
Medical Option 41	\$1,000 / \$2,000	90%	\$2,500 / \$6,250	\$25 primary care / \$35 specia
Medical Option 42	\$1,000 / \$2,000	90%	\$3,000 / \$7,500	\$25 primary care / \$35 specia
Medical Option 43	\$1,000 / \$2,000	80%	\$1,500 / \$3,750	\$15 primary care / \$40 specia
Medical Option 44	\$1,000 / \$2,000	80%	\$2,500 / \$6,250	\$15 primary care / \$40 specia
Medical Option 45	\$1,000 / \$2,000	80%	\$3,000 / \$7,500	\$15 primary care / \$40 specia
Medical Option 46	\$1,000 / \$2,000	80%	\$1,500 / \$3,750	\$25 primary care / \$35 specia
Medical Option 47	\$1,000 / \$2,000	80%	\$2,500 / \$6,250	\$25 primary care / \$35 specia
Medical Option 48	\$1,000 / \$2,000	80%	\$3,000 / \$7,500	\$25 primary care / \$35 specia

Deductible Choice:

- \$350
- \$500
- \$750
- \$1,000

• Coinsurance:

- 90%
- 80%

• Out-of-Pocket Maximum

- \$1,500
- \$2,500
- \$3,000

Office Visit Copayment

- \$15
- \$25

48 Plan Options



Employees chose from standardized menus

Build Your Own Medical Option

1. Which annual deductible meets your needs?

(Remember, a lower deductibles me

Deductible Individual/Fam In Network

\$350 Individual; \$700 Family
Out of Network
\$3,500 Individual; \$7,000 Fan

In Network

\$500 Individual; \$1,000 Famil
Out of Network

\$3,500 Individual; \$7,000 Fam

In Network

C \$750 Individual; \$1,500 Famil
Out of Network
\$3,500 Individual; \$7,000 Famil

In Network

\$1,000 Individual; \$2,000 Fan Out of Network \$3,500 Individual; \$7,000 Fan

In Network

\$1,250 Individual; \$2,500 Fam Out of Network \$3,500 Individual; \$7,000 Fam

Examples

- Bill knows that he'll need outpatier costs as low as possible-and does coverage option (\$350 deductible) but he'll also pay less down the ro
- Fiona has diabetes. She manages hospitalized if she doesn't eat righ saved up, but that doesn't mean s On the other hand, she doesn't like middle coverage options (\$500 dec
- Barb and her husband are healthy that an unexpected health care ex return for coverage with lower pay may be right for them.

What's Best for You?

Think about how likely it is you or a fa surgery. Also think about whether you deductible would cover more of your o lower costs later is higher costs in eve







Coinsurance In Network

90% Coinsurance Out of Network 60% Coinsurance

In Network

80% Coinsurance
Out of Network
50% Coinsurance

Examples

- Bill is expecting to have knee surgery soon and wants to minimize the significant of to have after he meets his deductible. By choosing the higher (90%) coinsurance of share less of the cost of his surgery and the physical therapy that he knows he'll a knows he'll pay more from his paycheck for higher coverage, but that's a tradeoff himself in return for lower costs down the road.
- Fiona has diabetes-so even though she takes good care of herself, she worries at pay for a medical emergency. She's already planning on managing some of this risl an option with a mid-range deductible. That's why she thinks the lower (80%) coin is probably right for her. Fiona may be a worrier but she's also smart when it come Why pay extra for a higher coinsurance option when she's not 100% sure she'll evideductible?
- Barb and her husband rarely see the doctor-except for preventive screenings which 100% by CVS Caremark. They don't expect to meet their deductible because they chave many expenses. So why pay more for a higher coverage coinsurance option to never use? For Barb, the lowest coverage coinsurance option (80%) is the best fit.

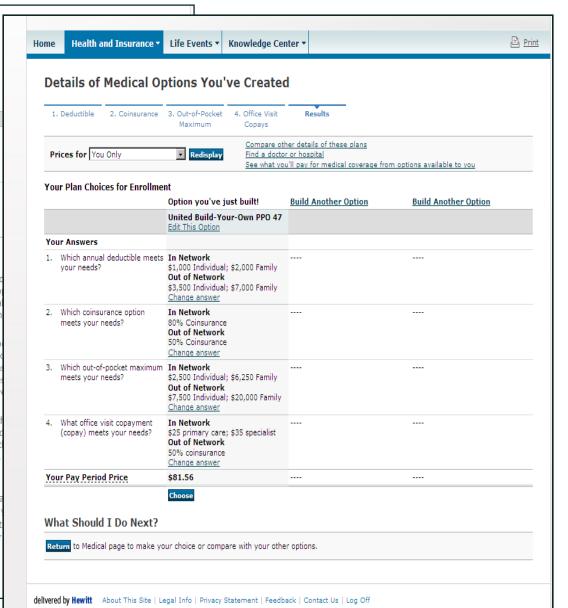
What's Best for You?

Think about how much care you expect to need after you meet your deductible. If it's higher coinsurance percentage may make sense. If it's a little-or you're not sure-then decide if it's worth paying extra for higher coverage you may not use. Also remember the difference in coinsurance for a \$100 service would only be a \$10 difference out of your





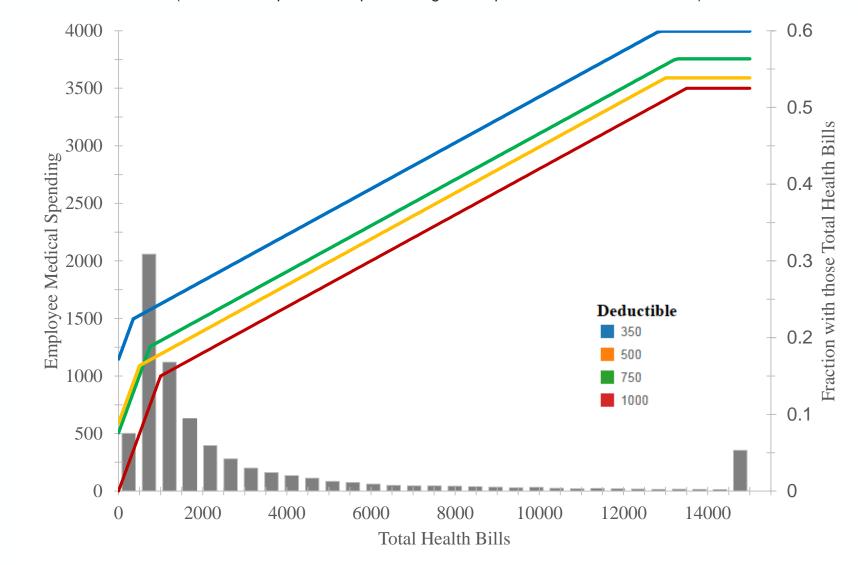




Nearly every low-deductible plan was "dominated"

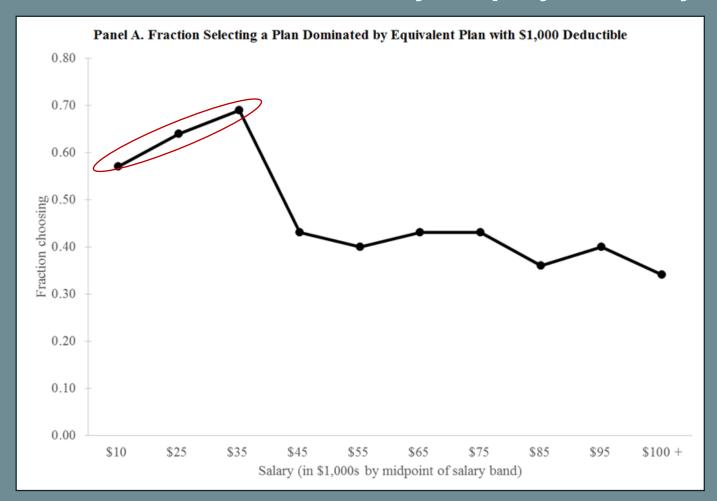
Total Employee Spending by Health Bills by Deductible

(Schedules depicted for 4 plans fixing Out-of-pocket max and coinsurance)



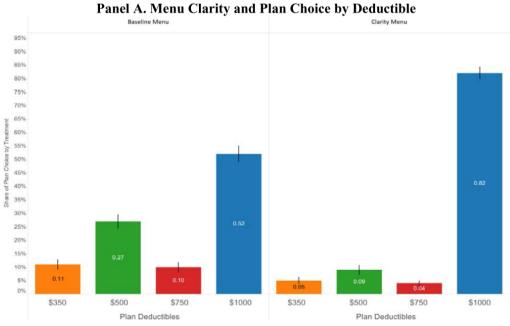
Employees
would need to
spend \$600 in
premiums
to save an
expected \$250
(max of \$500)

Dominated Plan Choice by Employee Salary



55% of employees chose dominated plans at a cost equivalent to 24% of premiums

Low earners more likely to choose dominated plans and less likely to subsequently switch





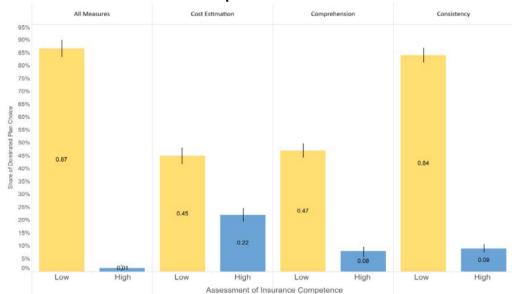
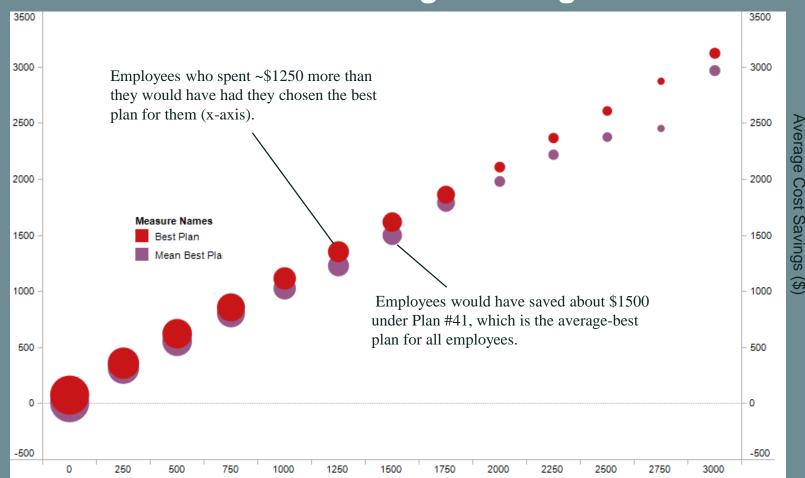


Figure V
Menu Clarity, Insurance Competence, and Plan Choice – Results from Experiment 2

Follow-up experiments suggest poor choices **not** caused by menu complexity but lack of insurance understanding

Counterfactual Savings w/ Single Best Plan



Sub-Optimality of PY 2010 Choice Based on Ex-Post Out-of-Pocket Spend (\$)

Policy Remedy #1 Restrict Menus

Single best-plan would have saved employees \$40m – nearly as much as choice w/ perfect foresight

Simplified Insurance Plans from Oscar

Choose your plan \$6,850 yearly max All Oscar plans include the same \$267_{/mo} \$20 primary care visits (2x) great doctor network, great medical \$20 generic drugs Simple Bronze View Plan Highlights \$20 lab tests from Ouest care, and great member experience. You save \$95 in financial aid Plus free perks \$5,900 yearly max 24/7 calls with a doctor \$336 ma Free primary care visits Free generic drugs Simple Silver View Plan Highlights Free lab tests from Quest \$ \$240 in fitness rewards You save \$95 in financial aid Checkup and preventive care Misfit Flash step tracker \$3,000 yearly max Free primary care visits Free generic drugs View Plan Highlights Free lab tests from Quest You save \$95 in financial aid \$1,000 yearly max Free primary care visits Free generic drugs Simple Platinum View Plan Highlights Free lab tests from Quest You save \$95 in financial aid Currently viewing Simple plans > Compare all plans

Policy Remedy #2 Simplify Incentives

Simplifying, and standardizing, insurance structure may promote more efficient choices and utilization

Three Lessons for Simpler Policy Design

Simplify program information
Evidence from the Earned Income Tax Credit

2 Simplify program structure & incentives Evidence from health insurance

3 Simplify choice architecture Evidence from retirement savings

Policy Problem

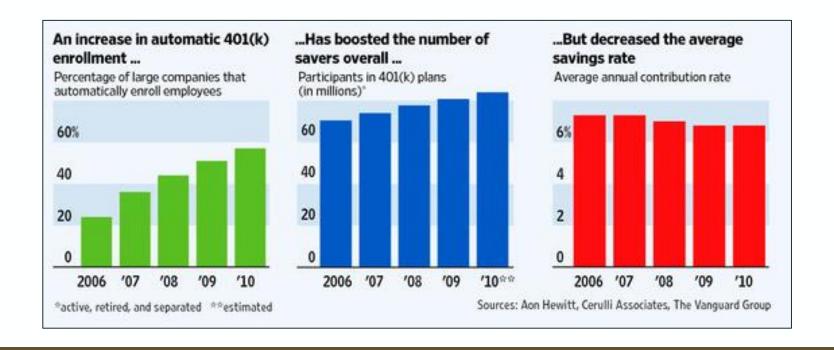
Low Employee Savings

(e.g., NIRS 2013 Report)

Background

Large majority of US households have accumulated insufficient assets for a financially secure retirement and have low emergency liquidity

Introduction of 401(k) auto-enrollment sharply increased employee participation in retirement plans over past 15 years but savings has not improved...

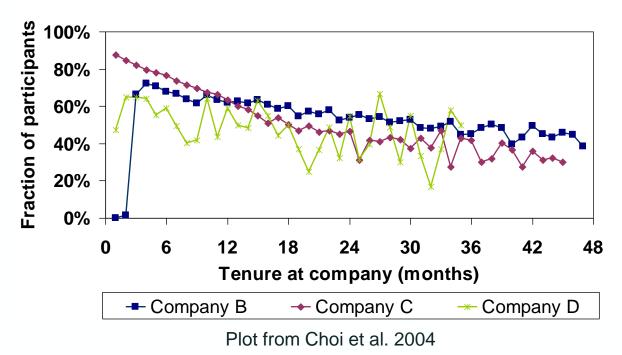


Policy Problem

Low Employee Savings

Lack of aggregate savings due in part to low defaults, consumer inertia

Fraction of participants hired during auto-enrollment at both default contribution rate and asset allocation



Research Strategy

Field experiment, in collaboration w/ Voya Financial, to explore sensitivity of savings to 401(k) plan incentives and choice architecture.

Preliminary Research

Choice Interface & Engagement

Preliminary – please do not cite (Benartzi, Bhargava, Conell-Price, & Mason, in progress)

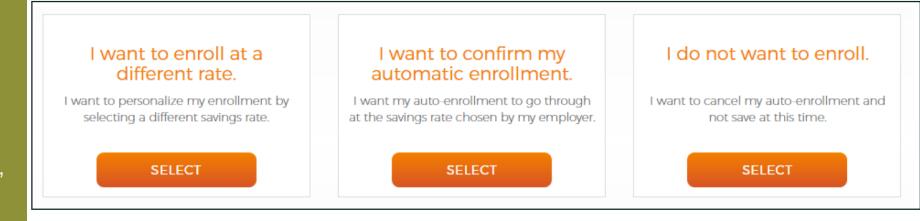
Does enrollment setting shape savings decisions?

401(k) Enrollment Home Page

Default Contribution Rate: 3 percent

Matching Contribution: Dollar-for-Dollar up to 6 percent

 $(N = \sim 6900 \text{ pre-test using hypothetical plan choices})$



40%

7%

53%

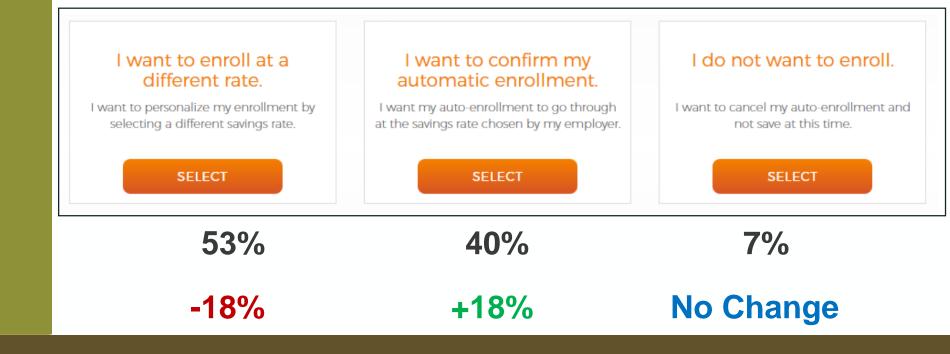
Preliminary Research

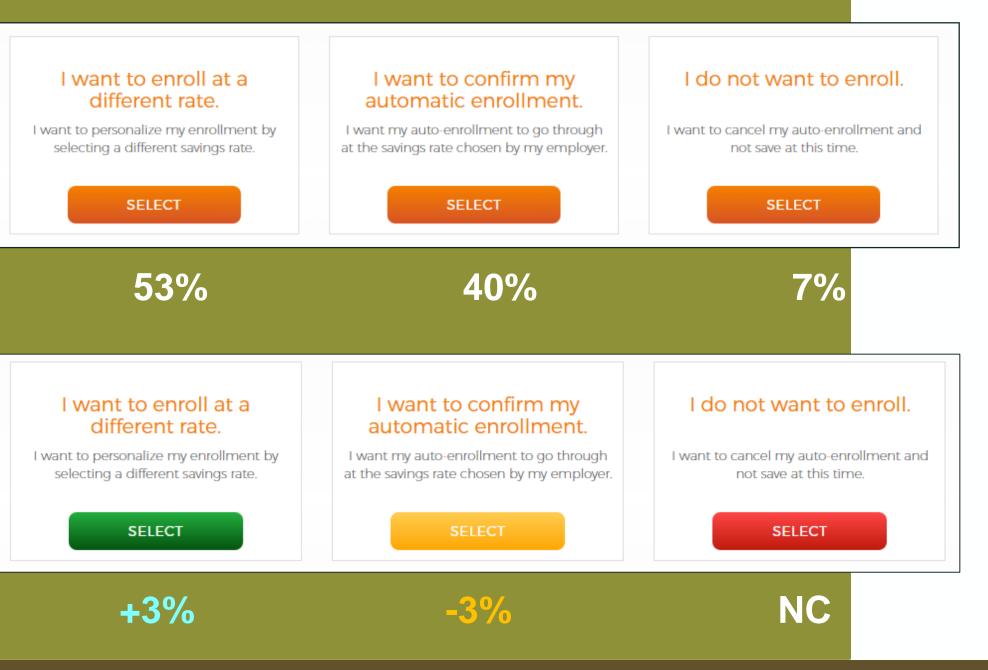
Sensitivity to Match Generosity

How do people respond to changes in incentives?

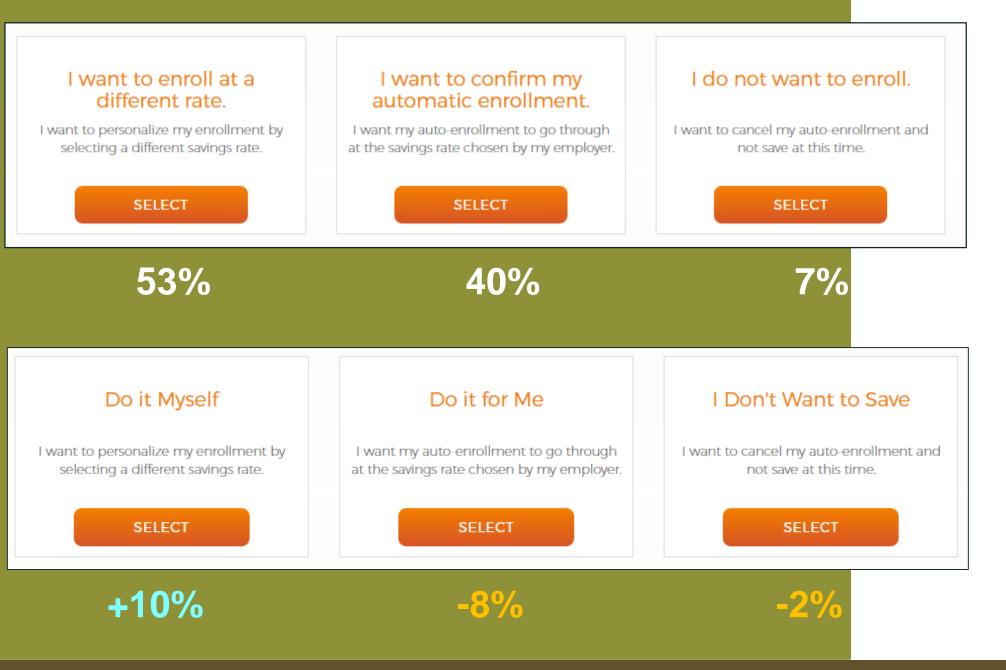
Original Default Contribution Rate: 3 percent Original Match: Dollar-for-Dollar up to 6 percent

New Default Contribution Rate: 3 percent New Match: Dollar-for-Dollar up to 3 percent



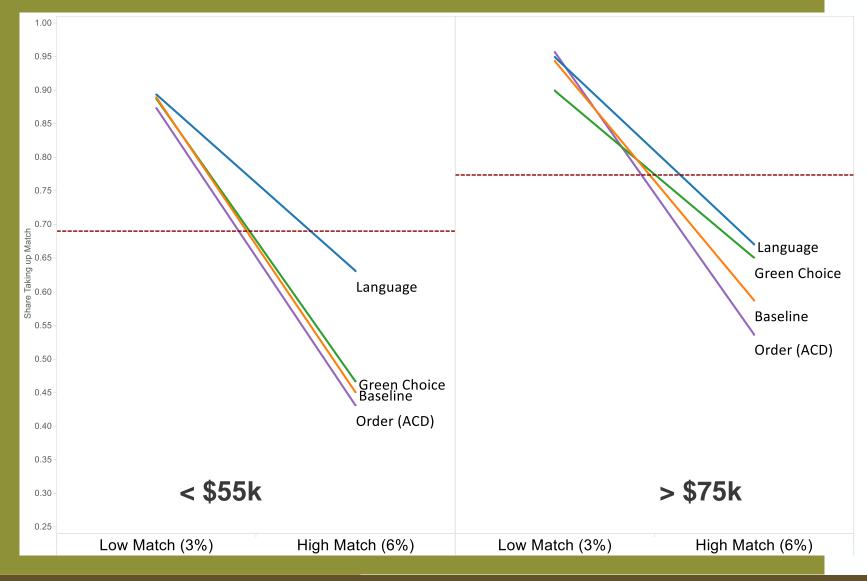


What happens when we change COLOR?



What happens when we change LANGUAGE?

Take-up of Match by Income, Interface, and Match Generosity



Choice architecture may affect people differently across policy-relevant dimensions like income

BE & Policy Design

Overall lessons for policy design

Simplify Disclosures

- Simplify visual presentation
- Use reminders
- Highlight relevant information
- Customize (or automatically populate)

Simplify Incentives & Program Structure

- Introduce defaults (but remember they are sticky)
- Restrict menus to suitable choices
- Simplify underlying structure of incentives

Simplify Choice Architecture

- Provide decision aids not just education
- Offer (customized) recommendations
- Iteratively test through randomized designs

Thank you sbhar@andrew.cmu.edu

