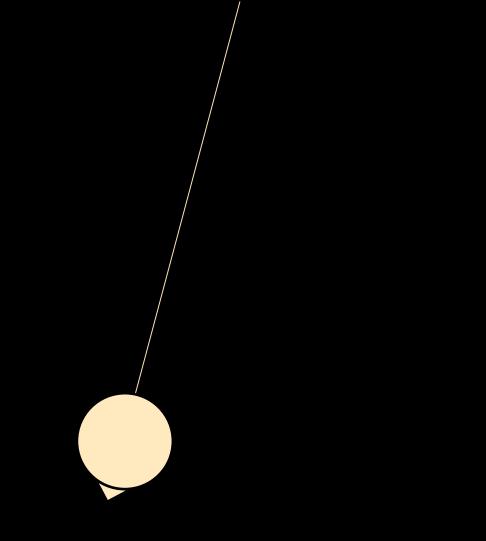
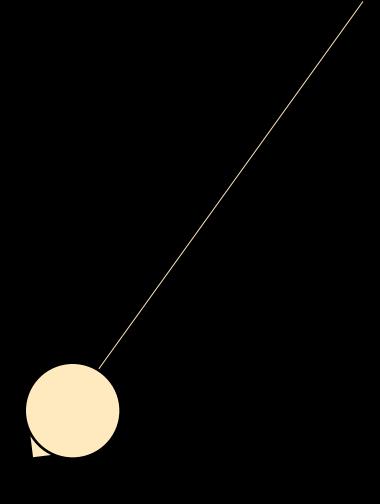
The Savings Myth



David Laibson
Robert I. Goldman Professor of Economics
Harvard University



Policy Pendulum Swings



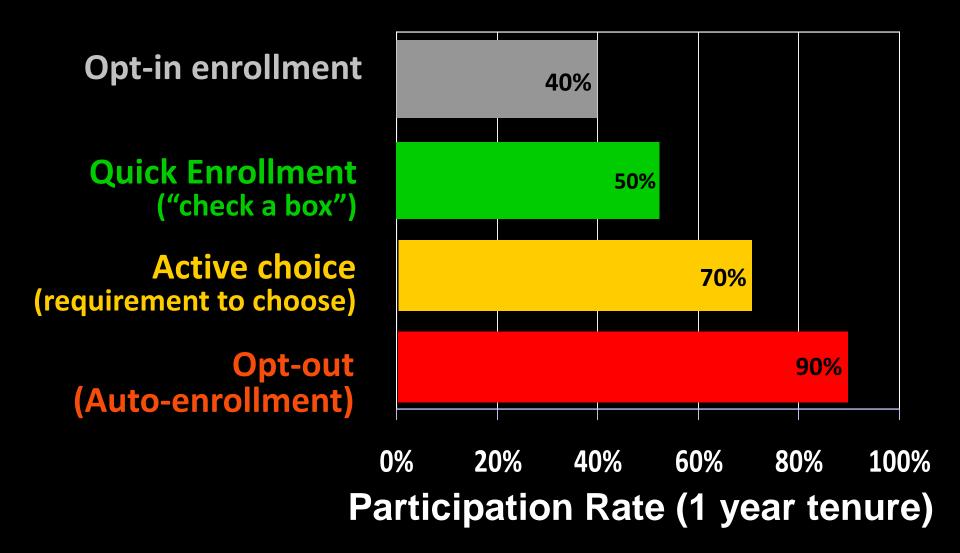
1970 DB pensions strong paternalism





2013
DC pensions
with DB features

Improving 401(k) participation



Madrian and Shea 2001; Choi, Laibson, Madrian, Metrick 2002; Choi, Laibson, Madrian 2009 Carroll, Choi, Laibson, Madrian, and Metrick 2009

Have we cracked the savings code?

- Automatic enrollment (opt-out)
- Re-enrollment (opt-out)
- Target date funds (opt-out)
- Savings rate escalators (opt-out)
- Quick enrollment (opt-in)
- Simplification
- Education
- Matching



Assumptions for simulation (all real 2013 dollars)

- 6.5% guaranteed return
- 2% inflation rate
- 6% 401(k) saving rate
- 100% employer match
- No leakage
- Start working at age 22
- First job: \$35,000
- Start saving at age 22
- 1% real wage growth
- 50% SS replacement
- "4% rule" in retirement

At retirement: 103% replacement ratio

\$719,275 financial assets (+ house + Social Security)

The savings myth:

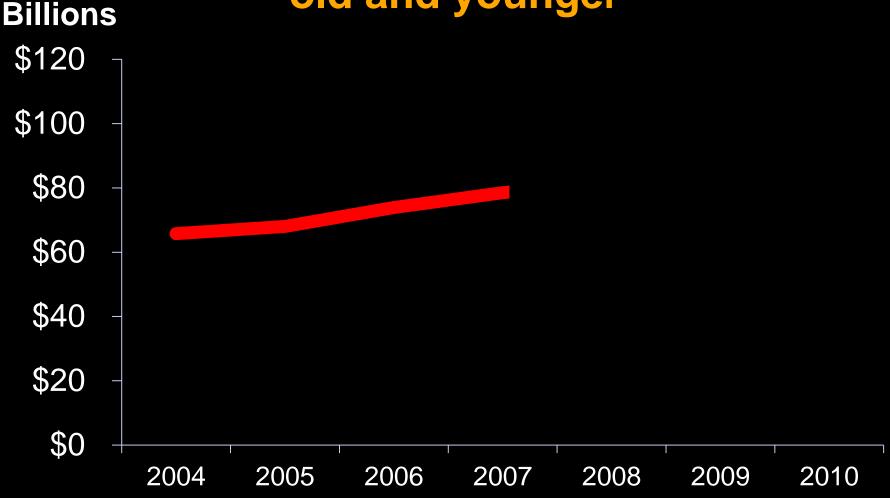
The new retirement savings system is working

The truth:

The new retirement avings system is working

For every two dollars that go into the retirement system about one dollar simultaneously leaks out (before retirement)

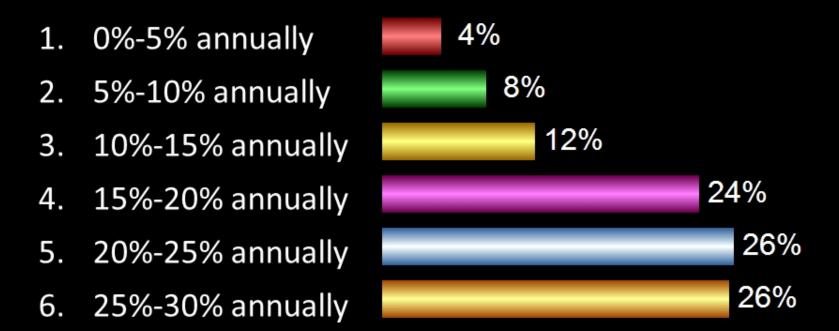
Taxable withdrawals from retirement accounts among households 55 years old and younger



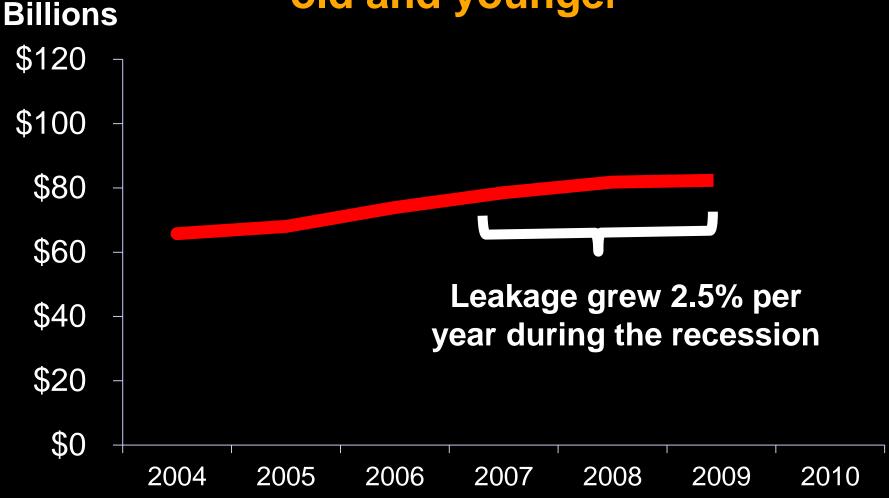
Source: Argento, Bryant, and Sabelhouse (November 2012)

Poll question

During the 2007-2009 Great Recession, what was the annualized growth rate of the nominal value of leakage:



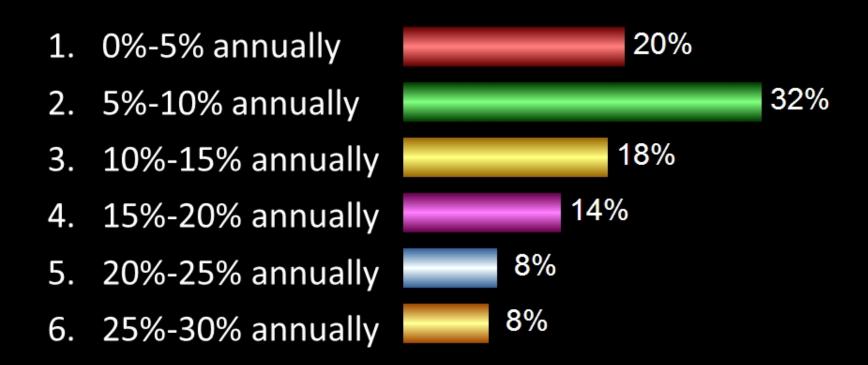
Taxable withdrawals from retirement accounts among households 55 years old and younger



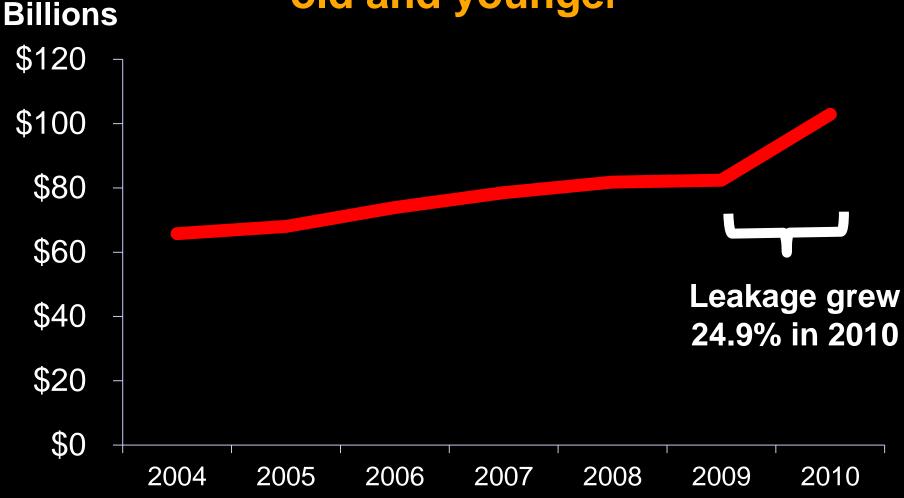
Source: Argento, Bryant, and Sabelhouse (November 2012)

Poll question

In 2010, what was the annualized growth rate of the nominal value of leakage:



Taxable withdrawals from retirement accounts among households 55 years old and younger



Source: Argento, Bryant, and Sabelhouse (November 2012)

Another myth

Leakage is a temporary problem that is likely to go away as the economy recoveries

The truth

Leakage is a temporary problem that is likely to go away as in aconomy recries

Leakage is getting worse

A little more realism

| | Replacement | Financial |
|-------------------|-------------|-----------|
| | Ratio | Assets |
| Original scenario | 1.03 | 719,275 |

Survey of Consumer Finances Household head is 65-74 years old (2007):

Median holding of financial assets is \$68,100

Two-person households age 65-69 (50th percentile)

Financial assets: \$ 111,600

Home equity: \$ 150,000

Other non-annuity assets:\$ 0

PV of Social Security and DB: \$ 571,575

Net worth: \$1,015,317

Real per capita annuity value \$ 20,306

Two-person households age 65-69 (25th percentile)

Financial assets: \$ 13,500

• Home equity: \$ 63,000

Other non-annuity assets: \$ -100

PV of Social Security and DB: \$353,873

Net worth: \$609,949

Real per capita annuity value \$ 12,199

Single-person households age 65-69 (50th percentile)

Financial assets: \$ 12,500

Home equity: \$ 52,000

Other non-annuity assets:

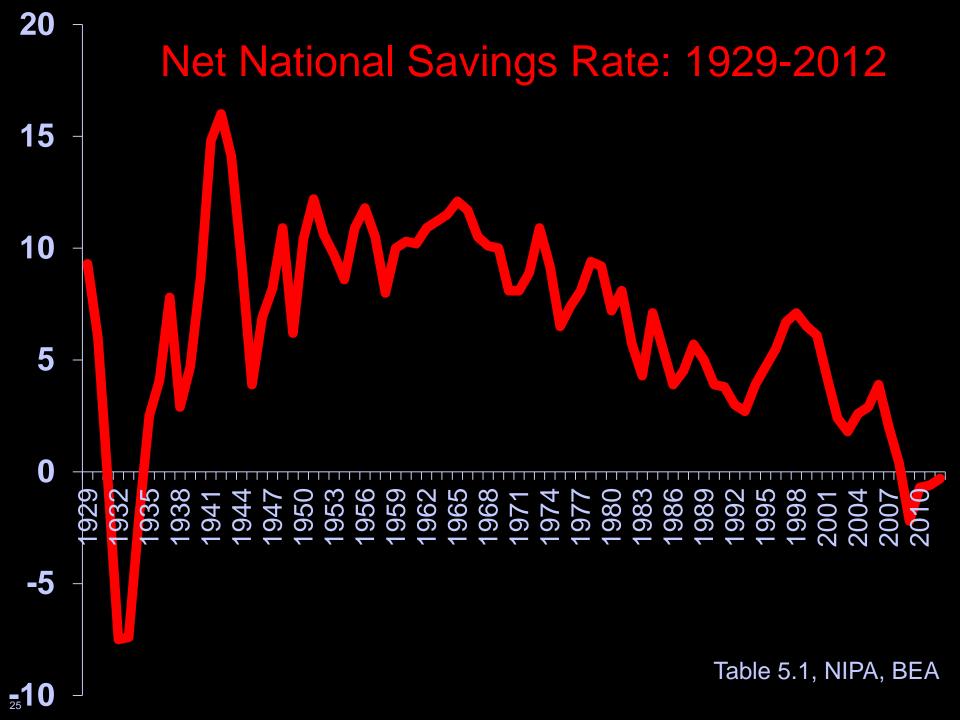
PV of Social Security and DB: \$268,766

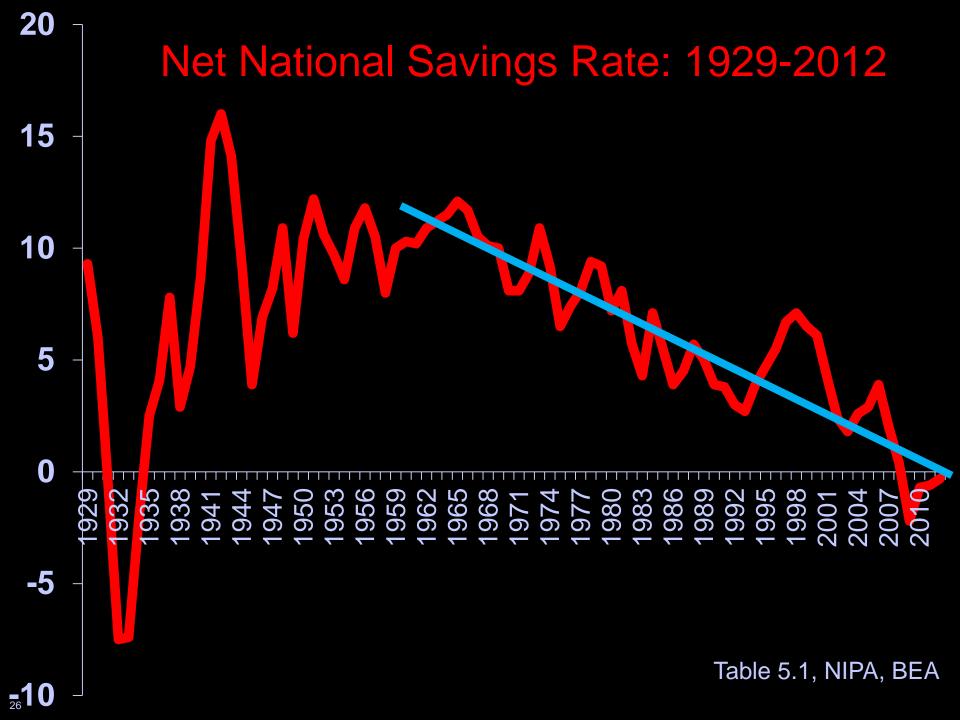
• Net worth: \$414,435

Real p.c. annuity value \$ 16,577

Single-person households age 65-69 (25th percentile)

- Financial assets: \$ 300
- Home equity:\$ 0
- Other non-annuity assets: \$ -1,000
- PV of Social Security and DB: \$173,114
- Net worth: \$237,154
- Real annuity value \$ 9,486





Behavioral Economics (Psychology and Economics)

 Improves economic analysis, by incorporating psychological factors that influence economic behavior.

Psychological origins of undersaving

Would you like to have

- A) 15 minute massage now or
- B) 20 minute massage in an hour

Would you like to have

- C) 15 minute massage in a week or
- D) 20 minute massage in a week and an hour

Choosing fruit vs. chocolate

Choosing Today

Eating Next Week

Time

If you were deciding today, would you choose fruit or chocolate for next week?





Read and van Leeuwen (1998)

Patient choices for the future:

Choosing Today

Eating Next Week

Time

Today, subjects typically choose fruit for next week.

74% choose fruit





Impatient choices for today:

Choosing and Eating Simultaneously

Time

If you were deciding today, would you choose fruit or chocolate for today?





Impatient choices for today:

Choosing and Eating Simultaneously

Time



70% choose chocolate



Present bias

Immediate events get full weight.

Everything else gets half weight.

Procrastination

- Exercise has effort cost 6
- Delayed health benefit of 8

- Exercise Today: $-6 + \frac{1}{2}[8] = -2$
- Exercise Tomorrow: $0 + \frac{1}{2} [-6 + 8] = 1$

Joining a Gym

- Cost of membership: \$75 per month
- Number of visits: 4
- Cost per visit: \$19
- Cost of "pay per visit": \$10

Saving intentions vs. saving behavior

Out of every 100 surveyed employees

68 self-report saving too little

24 plan to raise savings rate in next 2 months

3 actually follow through

Why do people procrastinate in saving?

- 1. If I join the 401(k) today, I suffer 100% of the sign-up hassles. The hassles loom 50% as large, if I plan to join next month.
- 2. I'll have more free time next month.
- 3. My family is living paycheck to paycheck right now. Our finances will be in better shape next month.

Key Solutions

- Raise the typical saving rate by using higher default saving rates and auto-escalation
 - -6% is the new 3%
 - One employer has a non-contingent 10% employer contribution and is adopting auto-enrollment with a 6% contribution and escalation to 10%
- Switch the match threshold from 6% to 10% of pay
 - Lower the match rate from 50 cents to 40 cents per dollar?
- Automatic re-enrollment for non-participants (and low savers) during "open enrollment"
- Alternatively, use active choice during "open enrollment"

Automatic re-enrollment for non-participants

You are currently not participating in ABC's retirement savings plan, and you are therefore not receiving matching contributions from ABC. To enable you to obtain matching contributions, we will automatically enroll you in the plan on January 1, 2013 at a savings rate of 6% of your pay.

If you do not want to participate in the savings plan, click here:

DO NOT JOIN the savings plan.

To continue with open enrollment, click here: **CONTINUE** with open enrollment.

Active decision for non-participants

You are currently not saving in ABC's retirement savings plan, and you are therefore not receiving matching contributions from ABC.

If you want to participate in the savings plan and receive matching contributions, click here:

JOIN the savings plan and pick my savings rate.

If you do want to participate in the savings plan, giving up matching contributions, click here:

DO NOT JOIN the savings plan.

Key Solutions

- Raise the typical saving rate by using higher default saving rates and auto-escalation
- Switch the match threshold from 6% to 10% of pay
- Automatic re-enrollment for non-participants (and low savers) during "open enrollment"
- Alternatively, use active choice during "open enrollment"
- Discourage distributions and rollovers at separation
 - Your 401(k) is a better place for these funds than the typical checking account or IRA rollover account

Key General Idea

- Recognize the new 401(k) landscape. 401(k)'s now cover:
 - Retirement
 - Downpayments
 - Education
 - Medical hardships
 - General rainy day spending
- If 1 dollar comes out for every 2 that go in, then we need to roughly double the savings rate in 401(k) plans

If you recognize your own self-control problems...

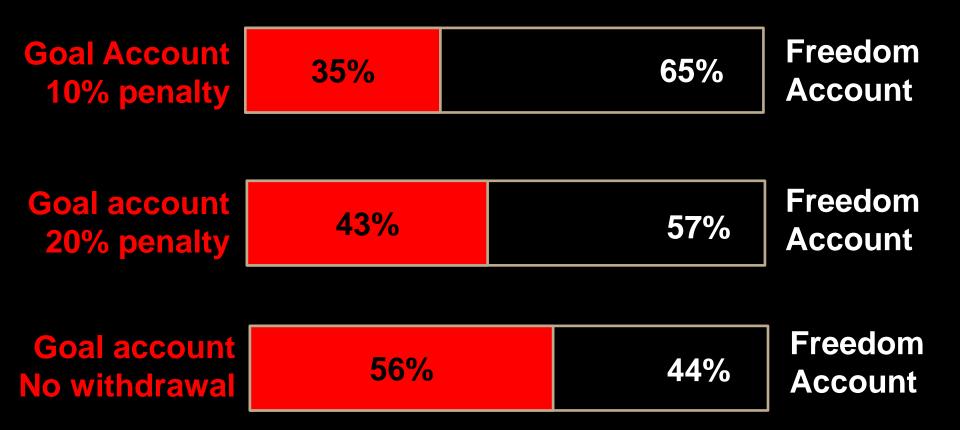
- You'll be willing to tie your own hands
- Force tomorrow's self to do what today's self isn't willing to do
 - Personal trainer
 - Exercise class
 - Exercise partner

How to design a commitment contract

Participants divide \$\$\$ between:

- Freedom account (22% interest)
- Goal account (22% interest)
 - -withdrawal restriction

Initial investment in goal account

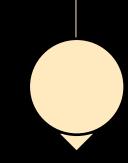


In the real world, how could we reduce leakage?

- Why are there 300 flavors of ice cream and only one kind of voluntary retirement savings account?
- Why aren't households able to choose how to save?
- Status quo: one-size-fits-all IRA/401(k)
- An alternative:
 - Divide your money however you see fit, across a standard IRA/401(k) and a lockbox IRA/401(k)
- We could give people at least some freedom to choose how to manage temptation
- What would happen? Shouldn't we find out?

Summary

- The retirement savings system is still not working.
- Low savings rates and high leakage rates are crippling the wealth accumulation phase.
- Employers and employees need to recognize that 401(k)'s and IRA's have become general purpose savings vehicles.
- We need to ramp up savings rates since leakage is probably here to stay.



2015?
DC pensions
that work in practice and not just in theory