Estimates of the Impact of a Match on Savings Plan Participation

- **Cross sectional variation**
  - Engelhardt and Kumar (2007)
    - 25% increase in match $\rightarrow$ 5 pp increase

- **Experimental variation**
  - Duflo et al. (2006)
    - Increasing match from 0 to 20% $\rightarrow$ 5 pp increase
    - Increasing match from 20% to 50% $\rightarrow$ 6 pp

- **Natural experiments**
  - Choi et al. (2006)
    - Increasing match from 0 to 25% $\rightarrow$ 5 pp increase
  - Beshears et al. (2010) examine firms with automatic enrollment
    - Increasing match from 25% to 50% $\rightarrow$ 3-6 pp increase
Estimates of the Impact of a Match on Savings Plan Participation

Adding a match or increasing the match ⇒ a small increase in participation, ⇒ of 5 to 6 percentage points

Adding a match ⇒ high contributions; increasing the match has no further impact on contributions

Source: Duflo, Gale, Liebman, Orszag and Saez (2006)
How Does the Match Matter?

Source: Choi, Laibson, Madrian and Metrick (2006)
How Does the Match Matter?

Source: Choi, Laibson, Madrian and Metrick (2006)
Alternative Approaches to Increase Savings: Automatic Enrollment

Company A
- Before Automatic Enrollment: 38%
- After Automatic Enrollment: 96%

Company B
- Before Automatic Enrollment: 40%
- After Automatic Enrollment: 85%

Company C
- Before Automatic Enrollment: 50%
- After Automatic Enrollment: 97%

Savings Plan Participation Rate at 12 Months of Tenure

Legend:
- Blue: Before Automatic Enrollment
- Red: After Automatic Enrollment
Alternative Approaches to Increase Savings: Automatic Enrollment

- **Hired under automatic enrollment (3% default)**
- **Hired under automatic enrollment (6% default)**

<table>
<thead>
<tr>
<th>Contribution Rate</th>
<th>Fraction of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>4</td>
</tr>
<tr>
<td>1-2%</td>
<td>9</td>
</tr>
<tr>
<td>3%</td>
<td>28</td>
</tr>
<tr>
<td>4-5%</td>
<td>24</td>
</tr>
<tr>
<td>6%</td>
<td>49</td>
</tr>
<tr>
<td>7-10%</td>
<td>18</td>
</tr>
<tr>
<td>11-15%</td>
<td>23</td>
</tr>
</tbody>
</table>

Legend:
- Green bar: Hired under automatic enrollment (3% default)
- Blue bar: Hired under automatic enrollment (6% default)
Why Does Automatic Enrollment Work So Well at Changing Outcomes?

- **Reason 1**: Most people *want* to save for retirement
  - Perceived need to save
  - Financial reward through employer match
  - Trust in the financial system

- **Reason 2**: Automatic enrollment *simplifies* doing what most people want to do
Alternative Approaches to Increase Savings: Simplification

Company C: 4 months after baseline

- Before Quick Enrollment: 9%
- After Quick Enrollment: 34%

Company D: 4 months after baseline

- Before Quick Enrollment: 6%
- After Quick Enrollment: 16%
Alternative Approaches to Increase Savings: Execution Aids

- **Planning aids**
  - Keller, Keller and Lusardi (2009)
    - Sizeable impact of planning aids
    - Cheap and scalable

- **Commitment products—many studies**
  - Moderate to sizeable effects
  - Many alternative ways to implement

- **Reminders (e.g. text messages)**
  - Karlan at al. (2010)
    - Small but significant effect of reminders
    - No impact of offering a higher interest rate
    - Cheap and scalable intervention
Alternative Approaches to Increase Savings: Execution Aids

<table>
<thead>
<tr>
<th></th>
<th>30 days after hire</th>
<th>60 days after hire</th>
</tr>
</thead>
<tbody>
<tr>
<td>No help</td>
<td>7%</td>
<td>29%</td>
</tr>
<tr>
<td>8-step Planning Aid</td>
<td>22%</td>
<td>45%</td>
</tr>
<tr>
<td>7-step Planning Aid</td>
<td>28%</td>
<td>41%</td>
</tr>
</tbody>
</table>
“SEED” Commitment Savings Experiment in the Philippines

- Save, Earn, Enjoy Deposit (SEED) Product
  - Individuals set a savings goal
    - Either a date
    - Or an amount
  - No withdrawals until goal is met
  - Individuals also offered
    - A lock-box (small fee)
    - Automatic transfers from checking to savings
  - Interest rate same as for other savings products
“SEED” Savings Experiment in the Philippines

Baseline survey of current and former bank clients

- Offered commitment product (50%)
  - Take-up SEED account (28%)
    - Set goal date (70%)
  - Refuse SEED account (72%)
    - Set goal amount (30%)
- Marketing Group (25%)
- Control Group (25%)

Source: Ashraf, Karlan and Yin (2003), “Tying Odysseus to the Mast”
“SEED” Savings Experiment in the Philippines

Change in Total Balances (pesos)

<table>
<thead>
<tr>
<th>Group</th>
<th>Change in Total Balances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>65</td>
</tr>
<tr>
<td>Marketing</td>
<td>189</td>
</tr>
<tr>
<td>SEED</td>
<td>476**</td>
</tr>
</tbody>
</table>

Balance Increase of >20% (relative to control group)

<table>
<thead>
<tr>
<th>Group</th>
<th>Balance Increase of &gt;20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>0%</td>
</tr>
<tr>
<td>Marketing</td>
<td>4%</td>
</tr>
<tr>
<td>SEED</td>
<td>10%**</td>
</tr>
</tbody>
</table>

Source: Ashraf, Karlan and Yin (2003), “Tying Odysseus to the Mast”
Reminders and Savings Outcomes

- Savings experiments in three countries
  - Peru
  - Bolivia
  - Philippines
- New account openers set savings goals and make savings plan
- Treatment groups get periodic reminders (text message or letter)

Source: Karlan, McConnell, Mullainathan and Zinman (2011)
Approaches to Increasing Savings Plan Participation: “Bang for the Buck”

- Automatic Enrollment
- Active choice and commitment products
- Simplification and planning tools
- Reminders
- Match
Conclusions

- Matching
  - Small impact of savings plan participation
- Important determinant of voluntary contributions conditional on participation
- Important impact on asset accumulation (the match increases account balances—this can be very important)

BOTTOM LINE

- Match alone may not be the best approach
- Combining behavioral approaches to increasing participation with a match potentially very effective
- People want to save—make it SIMPLE