Retirement Income
What Do We Need & What Have We Got?

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Senior Economist

EBRI-ERF Policy Forum #84
Overview of Remarks on Retirement Income

- Why do we think retirees should annuitize their wealth?
- What resources do retirees have?
- What is the best way to get more annuity income?
The Annuity Puzzle
Simple Economic Models Predict Smooth Spending

Stylized example of life-cycle consumption for hypothetical worker

Source: Author and an Excel spreadsheet
Who Is Getting It Wrong, Retirees or Economists?

» Simple life-cycle models ignore key aspects of retiree choices
  » Annuity pricing
  » Other sources of annuitized wealth
  » Uncertainty (earnings, spending needs)
  » Marriage

» Reichling & Smetters (2015) illustrate why results are “robust”
  » Results driven by mortality assumption
  » Prediction of full annuitization disappears if:
    » Workers learn about their health and mortality over time
    » Health events both increase mortality risk and are costly
Reasonable Conjecture:
Retirees Want Both Annuities and Investments

► Income security requires both:
  » Regular monthly income to cover recurring expenses
  » Resources to tap in time of unexpected need

► Demand for annuities related to composition of resources
  » Social Security
  » Home equity
  » DB pension plans

► Resource composition differs dramatically across households
Retirement Resource Pyramid

- Employer-sponsored retirement plans (DB and DC plans)
- IRAs (including rollovers)
- Homeownership
- Social Security
- Other assets
Social Security Benefits Are Substantial

Average projected annual Social Security benefits net of income tax for workers in the 1960s birth cohort,* constant 2018 USD†

Quintile of lifetime household earnings

<table>
<thead>
<tr>
<th>Quintile of lifetime household earnings</th>
<th>Average Social Security Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest</td>
<td>$13,000</td>
</tr>
<tr>
<td>Second</td>
<td>$18,000</td>
</tr>
<tr>
<td>Middle</td>
<td>$23,000</td>
</tr>
<tr>
<td>Fourth</td>
<td>$28,000</td>
</tr>
<tr>
<td>Highest</td>
<td>$32,000</td>
</tr>
<tr>
<td>All</td>
<td>$23,000</td>
</tr>
</tbody>
</table>

*Scheduled benefits if claimed at the full benefit age (age 67)
†Rounded to the nearest thousand

Sources: Congressional Budget Office and Investment Company Institute

December 13, 2018
Social Security Benefit Formula Is Progressive

Average projected Social Security replacement rate* for workers in 1960s birth cohort †

<table>
<thead>
<tr>
<th>Quintile of lifetime household earnings</th>
<th>Lowest</th>
<th>Second</th>
<th>Middle</th>
<th>Fourth</th>
<th>Highest</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>98%</td>
<td>73%</td>
<td>62%</td>
<td>53%</td>
<td>39%</td>
<td>65%</td>
</tr>
</tbody>
</table>

*Scheduled benefits net of income tax as percentage of average inflation-indexed earnings
†If claimed at the full benefit age (age 67)
Sources: Congressional Budget Office and Investment Company Institute

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Most Near-Retiree Households Have Resources from Employer Plans and IRAs

Percentage of working households aged 55 to 64, 2016

- Retirement assets (DC + IRA) only
- Both DB benefits and retirement assets
- DB benefits only

<table>
<thead>
<tr>
<th>Household income quintile</th>
<th>Retirement assets (DC + IRA) only</th>
<th>Both DB benefits and retirement assets</th>
<th>DB benefits only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest &lt;$35K</td>
<td>31</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Second $35K-$64K</td>
<td>43</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>Middle $64K-$96K</td>
<td>46</td>
<td>34</td>
<td>12</td>
</tr>
<tr>
<td>Fourth $96K-$171K</td>
<td>37</td>
<td>48</td>
<td>8</td>
</tr>
<tr>
<td>Highest &gt;=$171K</td>
<td>53</td>
<td>38</td>
<td>5</td>
</tr>
<tr>
<td>All</td>
<td>81</td>
<td>42</td>
<td>29</td>
</tr>
</tbody>
</table>

Source: Federal Reserve Board's Survey of Consumer Finances

December 13, 2018

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Retirement Assets Increase with Household Income

Retirement assets (DC + IRA) for working households aged 55 to 64 with retirement assets, thousands of dollars, 2016

Source: Federal Reserve Board’s Survey of Consumer Finances

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Many Near Retirement Are Already Highly Annuitized

Percentage of comprehensive wealth by wealth quintile, * 2010

- Other
- DC pension + IRA
- DB pension wealth
- Net housing wealth
- Social Security wealth

<table>
<thead>
<tr>
<th>Quintile of wealth</th>
<th>Lowest</th>
<th>Second</th>
<th>Middle</th>
<th>Fourth</th>
<th>Highest</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>4</td>
<td>6</td>
<td>9</td>
<td>13</td>
<td>27</td>
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<tr>
<td>2</td>
<td>12</td>
<td>14</td>
<td>15</td>
<td>21</td>
<td>22</td>
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<tr>
<td>2</td>
<td>80</td>
<td>62</td>
<td>44</td>
<td>30</td>
<td>19</td>
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<tr>
<td>2</td>
<td>94%</td>
<td>84%</td>
<td>76%</td>
<td>66%</td>
<td>50%</td>
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</tbody>
</table>

*Data represent households with at least one member aged 57 to 62 and exclude the top and bottom 1 percent. Source: ICI tabulation derived from an updated Table 3 of Gustman, Steinmeier, and Tabatabai (2009)
The Best Way to “Buy” Annuities
Social Security Benefits Adjust Based on Claiming Age

Average projected Social Security benefits net of income tax for workers born in the 1960s, * constant 2018 USD †

<table>
<thead>
<tr>
<th>Claiming age</th>
<th>Average projected Social Security benefits net of income tax</th>
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<tbody>
<tr>
<td>Age 62</td>
<td>$16,000</td>
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<td>Age 65</td>
<td>$20,000</td>
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<tr>
<td>Age 67</td>
<td>$23,000</td>
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<td>Age 70</td>
<td>$29,000</td>
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</tbody>
</table>

*Scheduled benefits if claimed at the full benefit age (age 67)
†Rounded to the nearest thousand
Sources: Congressional Budget Office and Investment Company Institute
No One Who Claims Social Security Before Age 70 Should Purchase a Market-Priced Annuity

» Delayed claiming produces more “bang-for-the-buck”
  » Benefit adjustments designed to be actuarially fair
  » Better than actuarially fair at current interest rates/mortality

» Those contemplating purchasing a market-priced annuity should
  » Delay claiming Social Security benefits
  » Spend down funds earmarked for annuity purchase
Note: Does Not Mean All *Should* Delay Claiming

Average projected Social Security replacement rate* for workers in 1960s birth cohort who claim at age 70

<table>
<thead>
<tr>
<th>Quintile of lifetime household earnings</th>
<th>122%</th>
<th>90%</th>
<th>77%</th>
<th>66%</th>
<th>49%</th>
<th>80%</th>
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<tbody>
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*Scheduled benefits net of income tax as percentage of average inflation-indexed earnings

Sources: Congressional Budget Office and Investment Company Institute
Need for Retirement Income Is a Market Opportunity, Not a Public Policy Concern

Public Policy
» Retirees want both annuities and investments
» Most Americans already highly annuitized
» Most lower-income household should not purchase a market-priced annuity (delay claiming Social Security instead)

Market Opportunity
» Many higher-income households likely desire additional regular income, especially given the shift from DB to DC