

What Makes Annuitization More Appealing?

Online Appendix

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Latest Update:

10/17/2012

Table A2: Effect of partial annuitization on annuity choices	
	Wealth Annuitized
Minimal Framing treatment dummy (omitted)	
All or Nothing treatment dummy	-0.074** (0.027)
Age (Years)	-0.000 (0.003)
Male dummy	-0.027 (0.028)
University degrees dummy	-0.005 (0.028)
Married dummy	0.073* (0.030)
Retired dummy	0.008 (0.034)
Number of Children	-0.008 (0.007)
Homeowner dummy	-0.013 (0.031)
Constant	0.602** (0.142)
Observations	1014
R^2	0.613

Source: Authors' calculations. The dependent variable is the percent of balances annuitized and takes values of 0, 0.25, 0.50, 0.75, or 1.0. The sample excludes participants in the all treatments except the Minimal Framing and All or Nothing treatments. Standard errors are in parentheses. * Significant at the 5% level. ** Significant at the 1% level.

Surveys Interfaces

Annuities Survey 1

Informed Consent (All Treatments)

Informed Consent

Please read this consent agreement carefully before deciding whether to participate in this research experiment.

Purpose of the research:

The purpose of this research is to examine retirement pay-out choices.

What you will do in this research:

You will go through a web-based survey and make hypothetical retirement pay-out choices.

Time required:

We estimate that it will take you about 15 minutes to complete the survey. You are free to take as much time as you need.

Risks:

There are no anticipated risks associated with participating in this study.

Compensation:

For your time commitment, Toluna will award you 1,800 points if you complete the web-based survey.

Confidentiality:

As always, all of the information you provide will be kept strictly confidential. We will not link your responses with your name. The results will be put into summary reports so no individual responses can be identified.

Participation and ending your involvement with the experiment:

Your participation in this study is completely voluntary, and you may end your participation at any time.

Contact:

If you have any questions about this study before you begin, please feel free to contact us at <http://toluna.com/contactus> and mention you are asking about the "Annuities" survey.

Whom to contact about your rights in this research, for questions, concerns, suggestions, or complaints that are not being addressed by the researcher, or research-related harm:

Harvard University Committee on the Use of Human Subjects in Research, 50 Church St., Room 533, Cambridge, MA 02138, Phone (617)495-5459.

Agreement:

I feel that the nature and purpose of this research have been sufficiently explained and I agree to participate in this survey. I understand that I am free to end my participation at any time.

Yes

No

Question 1 Age (All Treatments)

What year were you born?

Question 2 (Inflation)

We will now ask you about what you would choose in the following **hypothetical scenario**:

- Just before you retire at age 65, you are working for a company that will give you pension payments every month for the rest of your life after you retire. This income is guaranteed, but the payments will stop when you die.
- You will also receive Social Security benefits every month for the rest of your life after you retire.
- The cost of living will increase by 2% each year for the rest of your life.
 - That is, **inflation will be 2%**. With inflation, prices rise, so you get *less for your money than you used to*. For example, suppose a basket of groceries costs you \$100 today. A year later, the same groceries will cost you \$102. The price of the groceries has gone up because there has been inflation.
- The interest rate will be **5%** for the rest of your life.

2. Suppose the company lets you choose between the following two retirement income options. The total cost to the company of providing these lifetime payments to you is expected to be **the same** under either option.

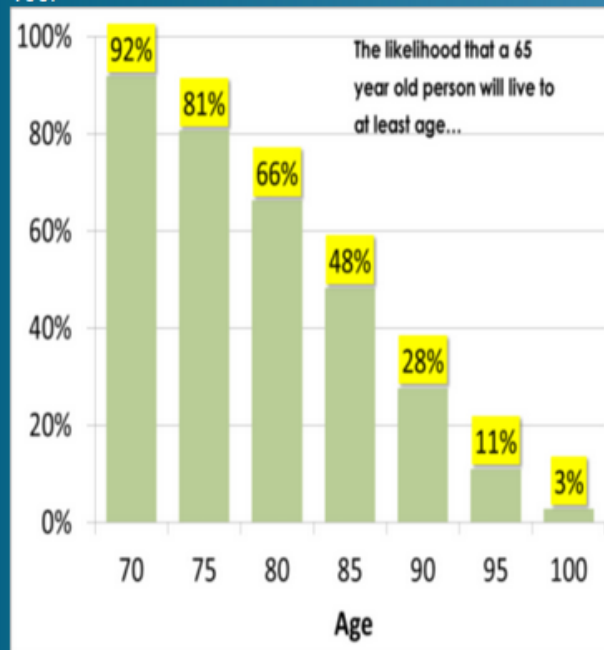
Option A: Match-Inflation Income

Your first year of monthly payments will sum to **\$24,200**. Your monthly payments will rise by 2% each year for the rest of your life. The increase in your payments will match the increase in prices (inflation).

Option B: Steady Income

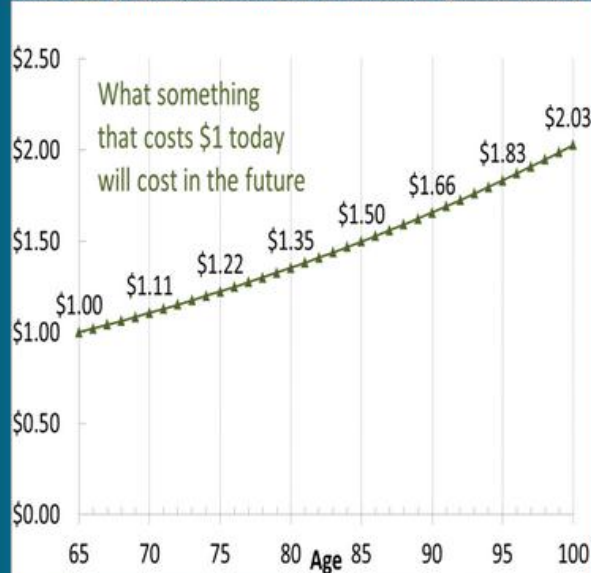
Your first year of monthly payments will sum to **\$29,000**. Your monthly payments will stay the same for the rest of your life. Because inflation is 2% each year, the amount you can buy with your income will fall by 2% each year.

Here is a graph that shows the likelihood that a person aged 65 today will live to at least age 70, 75, 80, 85, 90, 95 and 100.

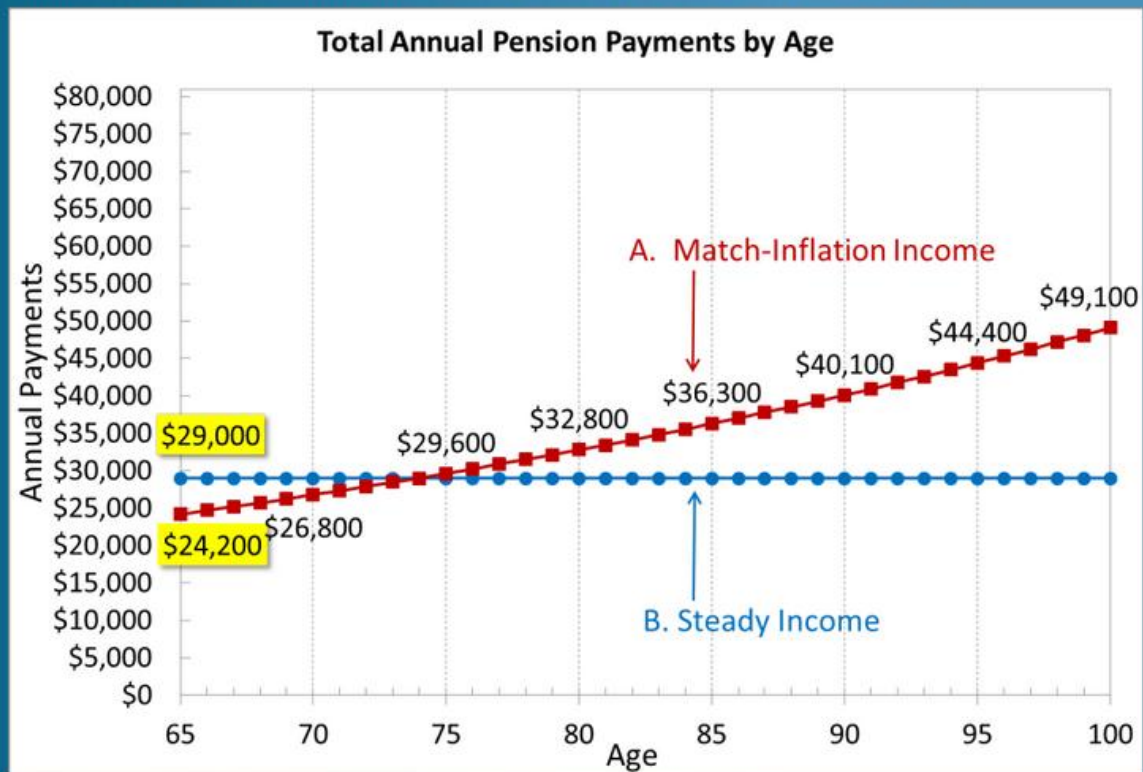


Question 2 (Inflation), Continued

Here is a graph that shows how much things that cost \$1 today will cost you in the future.



The graph below shows how much you will receive under each plan at each age if you are still alive.



Which income option would you choose?

- A. Match-Inflation Income
- B. Steady Income

Question 3 (Inflation)

3. Now suppose that your company offered you the following two income options. The total cost to the company of providing these lifetime payments to you is expected to be **the same** under either option.

Option A: Match-Inflation Income

Your first year of monthly payments will sum to **\$24,200**. Your monthly payments will rise by 2% each year for the rest of your life. The increase in your payments will match the increase in prices (inflation).

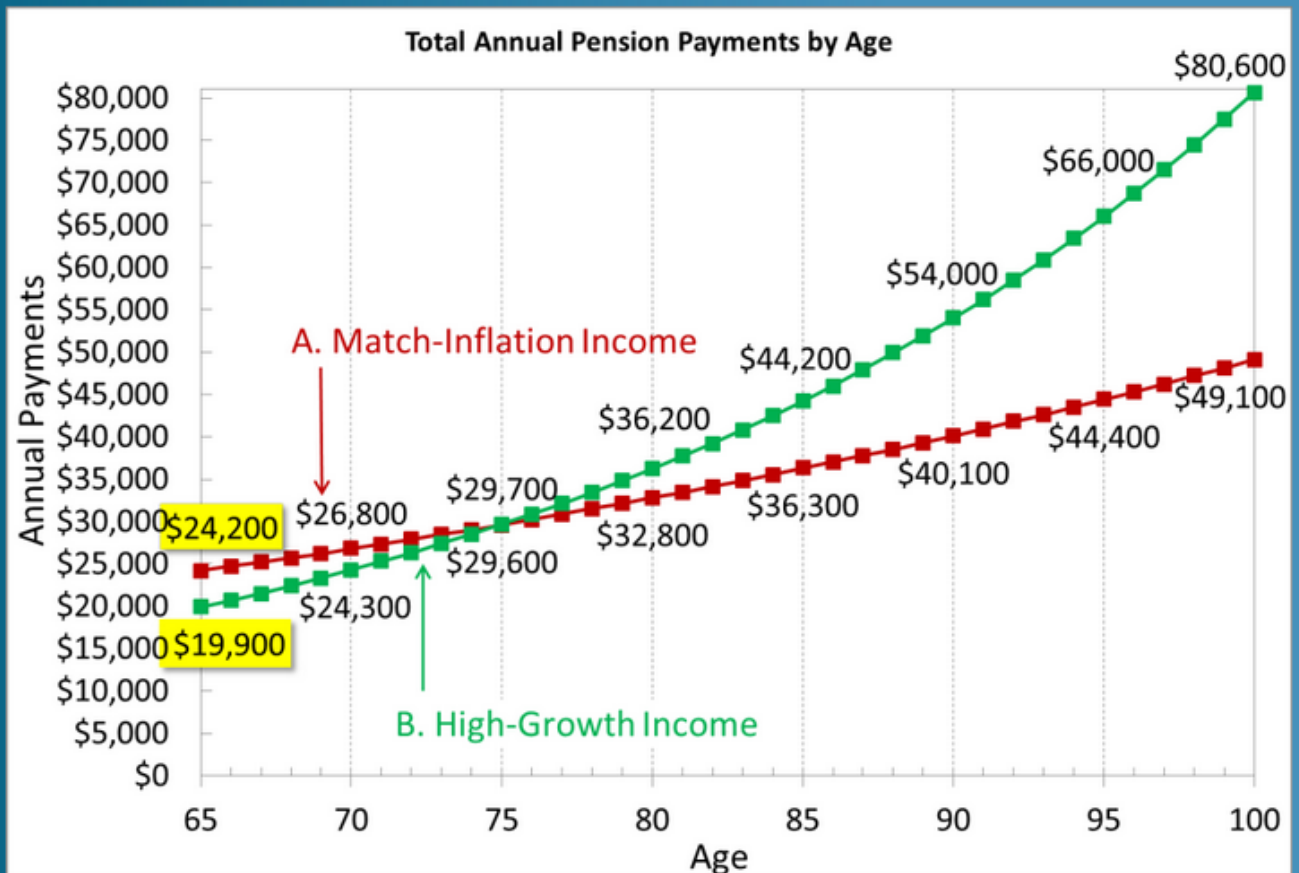
Option B: High-Growth Income

Your first year of monthly payments will sum to **\$19,900**. Your monthly payments will grow by 4% every year. The increase in these payments will be larger than the increase in prices (inflation).

To review the graph that shows the likelihood that a person aged 65 today will live to at least age 70, 75, 80, 85, 90, 95 and 100, click [here](#).

To review the graph that shows how much things that cost \$1 today will cost you in the future, click [here](#).

The graph below shows how much you will receive under each plan at each age if you are still alive.



Which income option would you choose?

- A. Match-Inflation Income
- B. High-Growth Income

Question 4 (Inflation)

4. Suppose your company *only* offers the *Match-Inflation Income* option, but lets you choose how the payments are spread out over the year. The total cost to the company of providing these lifetime payments to you is expected to be *the same* under either option.

Option A: Match-Inflation Income

In the first year, you will receive **\$2,000** every month. This monthly payment will grow by 2% every year for the rest of your life, matching the increase in prices.

Option B: Match-Inflation Income with Bonuses

In the first year, you will receive **\$1,900** in every month except for one, when you will get **\$1,900 plus an extra \$1,200**. You can choose in which month the \$1,200 bonus is paid. This month might be a time when you often want to spend extra. For example, you might like to travel somewhere warm or spend extra money during the December holiday season. The regular monthly payments and the bonus will each grow by 2% every year for the rest of your life.

Which income option would you choose?

- A. Match-Inflation Income
- B. Match-Inflation Income with Bonuses

If one selected the “Match-Inflation Income with Bonuses”:

Question 3b (Inflation)

If you chose Match-Inflation Income with Bonuses, please select the month when the bonus will be paid

Question 5 (Inflation)

5. Now suppose that your company offered you the following two income options. The total cost to the company of providing these lifetime payments to you is expected to be *the same* under either option.

Option A: Match-Inflation Income

You will receive **\$2,000** every month in the first year. These monthly payments will grow 2% each year for the rest of your life, matching the increase in prices.

Option B: Match-Inflation Income with Travel Bonuses

You will receive **\$1,800** every month in the first year. These monthly payments will grow 2% each year for the rest of your life. From age 65 to age 69, you will also receive an extra **\$3,000** every June to use for traveling (or whatever else you want). During your 70s, you will receive an extra **\$2,000** every June. During your 80s, you will receive an extra **\$1,000** every June. Because you probably won't be doing much traveling in your 90s, there is no travel bonus after age 89.

To review the graph that shows the likelihood that a person aged 65 today will live to at least age 70, 75, 80, 85, 90, 95 and 100, click [here](#).

To review the graph that shows how much things that cost \$1 today will cost you in the future, click [here](#).

Which income option would you choose?

- A. Match-Inflation Income
- B. Match-Inflation with Travel Bonuses

Question 6 (Inflation)

The next three questions ask about cashing out your retirement benefit. Cashing out gives you more money up front but reduces your future monthly payments.

6. Suppose your company **only** offers the **Match-Inflation Income** option, but you can cash out some or all of that benefit. No matter how much you cash out, the total cost to the company of providing all payments is expected to be **the same** on average.

Option A: 0% Cash Out

You receive **\$0** immediately.

Your first year of monthly payments will sum to **\$24,200**. Your monthly payments will rise by 2% each year for the rest of your life. The increase in your payments will match the increase in prices (inflation).

Option B: 50% Cash Out

You receive **\$165,000** immediately.

In addition, your first year of monthly payments will sum to **\$12,100**. Your monthly payments will rise by 2% each year for the rest of your life. The increase in your payments will match the increase in prices (inflation).

Option C: 100% Cash Out

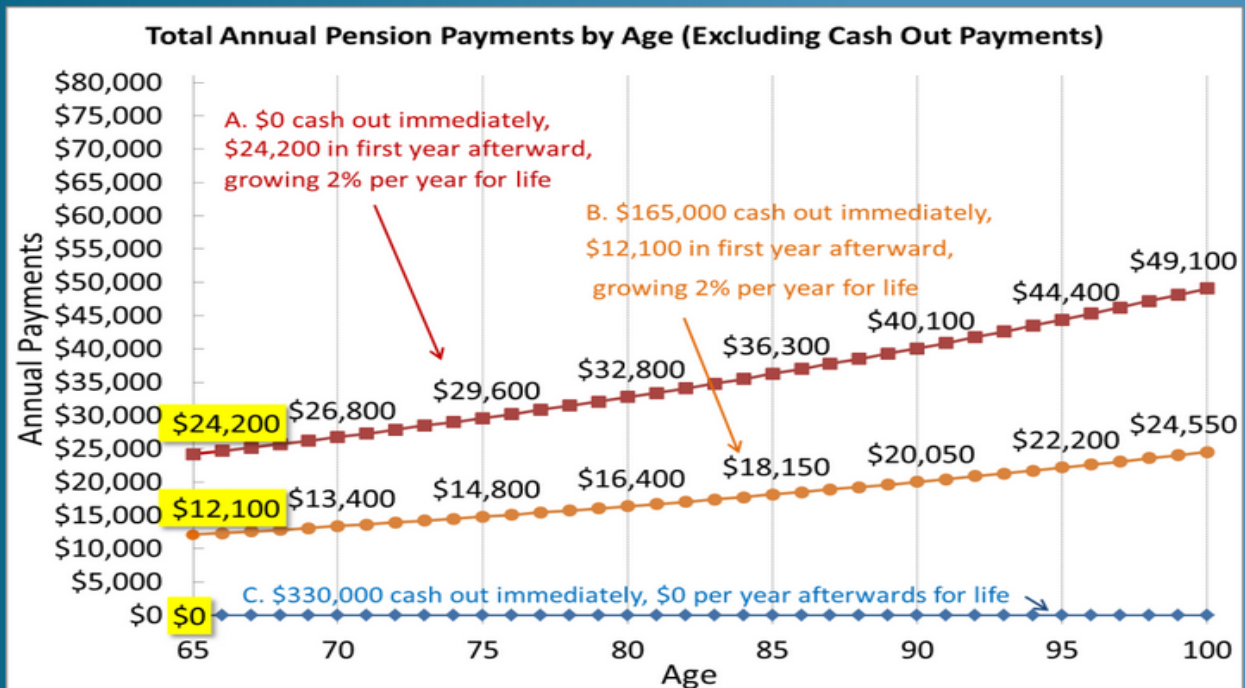
You receive **\$330,000** immediately.

You get no other payments for the rest of your life.

To review the graph that shows the likelihood that a person aged 65 today will live to at least age 70, 75, 80, 85, 90, 95 and 100, click [here](#).

To review the graph that shows how much things that cost \$1 today will cost you in the future, click [here](#).

The graph below shows how much you will receive under each plan at each age if you are still alive.



Which cash out option would you prefer?

- A. \$0 cash out, \$24,200 in Year 1, increasing 2% per year afterwards
- B. \$165,000 cash out, \$12,100 in Year 1, increasing 2% per year afterwards
- C. \$330,000 cash out, \$0 per year afterwards

Question 7 (Inflation)

7. Now suppose your company **only** offers the **Steady Income** option, but you can cash out some or all of that benefit. Cashing out gives you more money up front but reduces your future monthly payments. No matter how much you cash out, the total cost to the company of providing all payments is expected to be **the same** on average.

Option A: 0% Cash Out

You receive **\$0** immediately.

You will receive monthly payments that sum to **\$29,000** per year for the rest of your life.

Option B: 50% Cash Out

You receive **\$165,000** immediately.

In addition, you will receive monthly payments that sum to **\$14,500** per year for the rest of your life.

Option C: 100% Cash Out

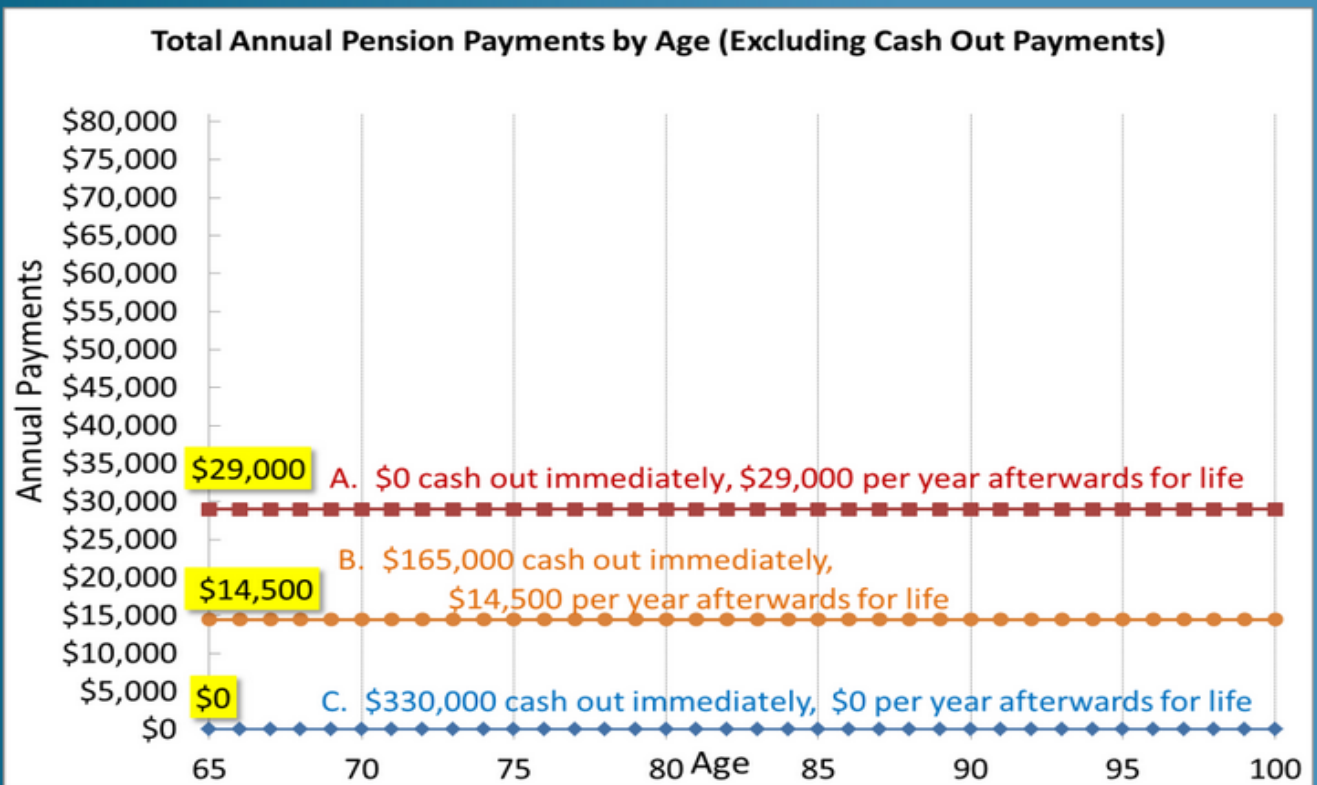
You receive **\$330,000** immediately.

You get no other payments for the rest of your life.

To review the graph that shows the likelihood that a person aged 65 today will live to at least age 70, 75, 80, 85, 90, 95 and 100, click [here](#).

To review the graph that shows how much things that cost \$1 today will cost you in the future, click [here](#).

The graph below shows how much you will receive under each plan at each age if you are still alive.



Which cash out option would you choose?

- A. \$0 cash out, \$29,000 per year afterwards
- B. \$165,000 cash out, \$14,500 per year afterwards
- C. \$330,000 cash out, \$0 per year afterwards

Question 8 (Inflation)

8. Now suppose your company **only** offers the **High-Growth Income** option, but you can cash out some or all of that benefit. Cashing out gives you more money up front but reduces your future monthly payments. No matter how much you cash out, the total cost to the company of providing all payments is expected to be **the same** on average.

Option A: 0% Cash Out

You receive **\$0** immediately.

You will receive monthly payments that sum to **\$19,900** in the first year of retirement.

Your payments will grow by 4% every year for the rest of your life.

Option B: 50% Cash Out

You receive **\$165,000** immediately.

In addition, you will receive monthly payments that sum to **\$9,950** in the first year of retirement.

Your payments will grow by 4% every year for the rest of your life.

Option C: 100% Cash Out

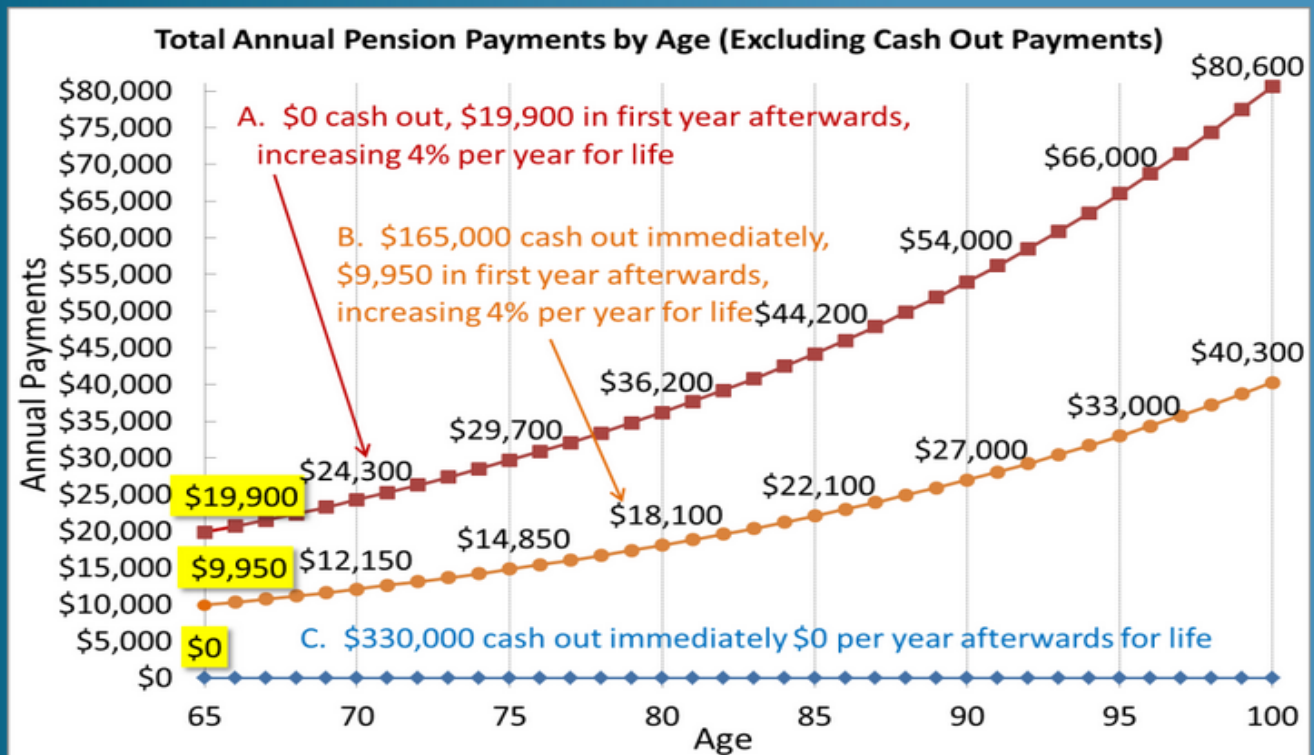
You receive **\$330,000** immediately.

You get no other payments for the rest of your life.

To review the graph that shows the likelihood that a person aged 65 today will live to at least age 70, 75, 80, 85, 90, 95 and 100, click [here](#).

To review the graph that shows how much things that cost \$1 today will cost you in the future, click [here](#).

The graph below shows how much you will receive under each plan at each age if you are still alive.



Which cash out option would you choose?

- A. \$0 cash out, \$19,900 in Year 1, growing 2% afterwards
- B. \$165,000 cash out, \$9,950 in Year 1, growing 2% afterwards
- C. \$330,000 cash out, \$0 per year afterwards

Question 9

The hypothetical portion of the survey is now over. We would now like to ask you a few questions about your answers. We will also ask you some questions about yourself to help us in our research.

9. Rate the importance of the following reasons for your choices between up-front payments ("cash outs") and monthly lifetime payments.

	0 (Not Important)	1	2	3	4	5 (Very Important)
Want to invest the money on my own	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Want flexibility in the timing of my spending	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a big spending need right after retirement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Want to give money to children or others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lifetime payments would not provide for spouse after I die	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worried about dying early	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worried about inflation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worried about company not being able to pay me in the future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Want to prevent overspending	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Want to keep money away from children or others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Want to make sure I have enough income later in life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text" value="None"/>						

Question 10 (All Treatments)

10. What is your gender?

- Male
- Female
- Decline to answer

Question 11 (All Treatments)

11. Which of the following best describes your employment status?

- Employed full-time
- Employed part-time
- Not employed but looking for work
- Retired
- Other (please specify)
- Decline to answer

Question 12 (All Treatments)

12. What is the highest level of education you have completed?

- No High School Diploma
- High School Diploma
- Some College
- College Degree
- Graduate Degree
- Decline to answer

Question 13 (All Treatments)

What is your current status?

- Single, never married
- Married
- Divorced
- Separated
- Widowed
- Living with partner
- Decline to answer

If one answers “Married” or “Living with Partner” (Q14):

What year was your spouse/partner born?

Question 15 (All Treatments)

15. How much longer do you expect to live?

- Longer than the average person my age
- About the same as the average person my age
- Shorter than the average person my age
- Decline to answer

Question 16 (All Treatments)

16. Do you own a home in which you currently reside?

- Yes
- No
- Decline to answer

Question 17 (All Treatments)

17. For each item below, please indicate the range that applies to your household:

Annual income from job(s):

- Below \$25,000
- \$25,000 - \$50,000
- \$50,001 - \$75,000
- \$75,001 - \$100,000
- \$100,001 - \$200,000
- \$200,001 - \$300,000
- More than \$300,000
- Decline to answer

If Question 16 is “Yes”:

Total value of house(s)

- Less than \$50,000
- \$50,000 - \$100,000
- \$100,001 - \$250,000
- \$250,001 - \$500,000
- More than \$500,000
- Decline to answer

Total value of 401(k) and IRAs

- Below \$25,000
- \$25,000 - \$50,000
- \$50,001 - \$75,000
- \$75,001 - \$100,000
- \$100,001 - \$200,000
- \$200,001 - \$300,000
- More than \$300,000
- Decline to answer

Question 17 (All Treatments), Continued

Total value of other financial assets (excluding 401(k) and IRAs)

- Below \$25,000
- \$25,000 - \$50,000
- \$50,001 - \$75,000
- \$75,001 - \$100,000
- \$100,001 - \$200,000
- \$200,001 - \$300,000
- More than \$300,000
- Decline to answer

If Question 16 is “Yes”:

Total amount owed on mortgage(s)

- \$0
- \$1 - \$50,000
- \$50,001 - \$100,000
- \$100,001 - \$250,000
- \$250,001 - \$500,000
- More than \$500,000
- Decline to answer

Total credit card and other non-mortgage debt

- \$0
- \$1 - \$1,000
- \$1,001 - \$5,000
- \$5,001 - \$10,000
- \$10,001 - \$20,000
- More than \$20,000
- Decline to answer

Question 18 (All Treatments)

18. Does your current job (or the most recent job you held, if you're not currently working) offer you a pension that would give you monthly payments for life during retirement?

- Yes
- No
- I have never had a job
- Decline to answer

Question 19 (All Treatments)

19. Did you feel that the questions were clear or did you feel that they were confusing?

Pick a single response from the following scale.

- 0: Completely clear
- 1: Mostly clear
- 2: Sometimes clear
- 3: Sometimes confusing
- 4: Mostly confusing
- 5: Completely confusing
- Decline to answer

Question 20 (All Treatments)

20. Please explain what, if anything, you found to be unclear or confusing.

Annuities Survey 2

ALL TREATMENTS: Informed Consent

Informed Consent

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The purpose of this research is to examine retirement pay-out choices.

What you will do in this research:

You will go through a web-based survey and make hypothetical retirement pay-out choices.

Time required:

We estimate that it will take you about 15 minutes to complete the survey. You are free to take as much time as you need.

Risks:

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For your time commitment, Toluna will award you 1,800 points if you complete the web-based survey.

Confidentiality:

As always, all of the information you provide will be kept strictly confidential. We will not link your responses with your name. The results will be put into summary reports so no individual responses can be identified.

Participation and ending your involvement with the experiment:

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Contact:

If you have any questions about this study before you begin, please feel free to contact us at <http://us.toluna.com/contactus> and mention you are asking about the "Annuities" survey.

Whom to contact about your rights in this research, for questions, concerns, suggestions, or complaints that are not being addressed by the researcher, or research-related harm: Director of IRB Operations at the Harvard University Committee on the Use of Human Subjects in Research, 1414 Massachusetts Avenue, Second Floor, Cambridge, MA 02138. Phone: 617-496-5593; jjjaeger@fas.harvard.edu.

Agreement:

I feel that the nature and purpose of this research have been sufficiently explained and I agree to participate in this survey. I understand that I am free to end my participation at any time.

Yes

No

ALL TREATMENTS: Age

What year were you born?

For help, contact us at <http://toluna.com/contactus>.

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CONTINUE >>

ALL TREATMENTS: Marital Status

Are you married?

Yes

No

For help, contact us at <http://toluna.com/contactus>.

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CONTINUE >>

ALL TREATMENTS: (conditional on being married) Age of Spouse

In what year was your spouse born?

For help, contact us at <http://toluna.com/contactus>.

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CONTINUE >>

Treatment 1: Minimal Framing Question 1 (not married shown)

Suppose that you are 65 years old. You are about to retire and have accumulated \$500,000 in the pension plan at your current employer.

Your employer wants to know whether you prefer to receive this balance as a lump sum payment right now (in other words, a single \$500,000 payment) or as a stream of fixed payments over your lifetime, which your employer calls the guaranteed lifetime income option. This stream of fixed payments is based on current market interest rates. The fixed payments won't change in the future even if market interest rates do change.

You can pick any mix of the two, ranging from 100% lump sum (and no guaranteed income) to 100% guaranteed income (and no lump sum).

To help you better understand the choice you are making, we want to tell you a few things about the guaranteed income option.

- If you choose 100% guaranteed income:
 - You will receive \$2,981 per month (which adds up to \$35,772 per year) in payments for the rest of your life.
 - The guaranteed income payments will stop when you die.
- If you choose less than 100% guaranteed income, the monthly payments will be scaled down proportionally, but you will receive a bigger up-front lump sum payment.
 - For example, if you choose 50% guaranteed income, you would get $\$2,981 \div 2 = \$1,490.50$ per month for the rest of your life, as well as a single \$250,000 payment up front.

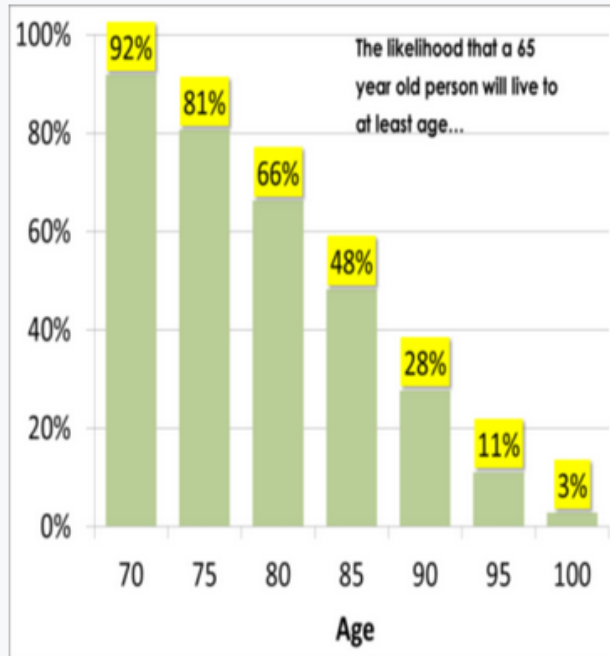
How would you choose to receive your pension payments?

Lower lump sum/ More guaranteed income						Higher lump sum/ Less guaranteed income
0% lump sum, 100% guaranteed income (\$0 up front, \$2,981 monthly payment)	25% lump sum, 75% guaranteed income (\$125,000 up front, \$2,235.75 monthly payment)	50% lump sum, 50% guaranteed income (\$250,000 up front, \$1,490.50 monthly payment)	75% lump sum, 25% guaranteed income (\$375,000 up front, \$745.25 monthly payment)	100% lump sum, 0% guaranteed income (\$500,000 up front, \$0 monthly payment)		
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

For help, contact us at <http://toluna.com/contactus>.

Treatment 1: Minimal Framing Question 2 (not married shown)

The below graph shows the likelihood that a person aged 65 today will live to at least age 70, 75, 80, 85, 90, 95 and 100.



Now how would you choose to receive your pension payments? (It's OK to give the same answer you gave in the previous question.)

Lower lump sum/
More guaranteed
income

Higher lump sum/
Less guaranteed
income



- 0% lump sum, 100% guaranteed income (\$0 up front, \$2,981 monthly payment)
- 25% lump sum, 75% guaranteed income (\$125,000 up front, \$2,235.75 monthly payment)
- 50% lump sum, 50% guaranteed income (\$250,000 up front, \$1,490.50 monthly payment)
- 75% lump sum, 25% guaranteed income (\$375,000 up front, \$745.25 monthly payment)
- 100% lump sum, 0% guaranteed income (\$500,000 up front, \$0 monthly payment)



Treatment 1: Minimal Framing Question 1 (married shown)

Suppose that you are 65 years old. You are about to retire and have accumulated \$500,000 in the pension plan at your current employer.

Your employer wants to know whether you prefer to receive this balance as a lump sum payment right now (in other words, a single \$500,000 payment) or as a stream of fixed payments over your lifetime, which your employer calls the guaranteed lifetime income option. This stream of fixed payments is based on current market interest rates. The fixed payments won't change in the future even if market interest rates do change.

You can pick any mix of the two, ranging from 100% lump sum (and no guaranteed income) to 100% guaranteed income (and no lump sum).

To help you better understand the choice you are making, we want to tell you a few things about the guaranteed income option.

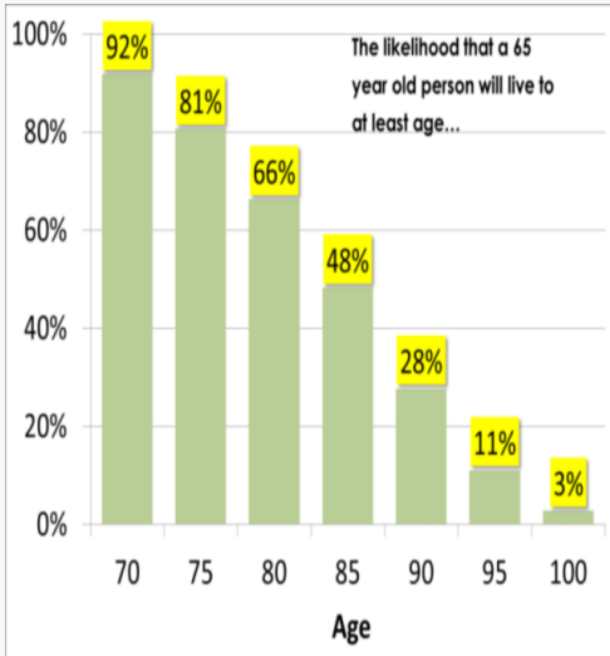
- If you choose 100% guaranteed income:
 - You will receive \$2,616 per month (which adds up to \$31,392 per year) in payments as long as you or your spouse are alive.
 - The guaranteed income payments will stop when both you and your spouse are no longer alive.
- If you choose less than 100% guaranteed income, the monthly payments will be scaled down proportionally, but you will receive a bigger up-front lump sum payment.
 - For example, if you choose 50% guaranteed income, you would get $\$2,616 \div 2 = \$1,308$ per month for the rest of your life as long as you or your spouse are alive, as well as a single \$250,000 payment up front.

How would you choose to receive your pension payments?

Lower lump sum/ More guaranteed income						Higher lump sum/ Less guaranteed income
0% lump sum, 100% guaranteed income (\$0 up front, \$2,616 monthly payment)	25% lump sum, 75% guaranteed income (\$125,000 up front, \$1,962 monthly payment)	50% lump sum, 50% guaranteed income (\$250,000 up front, \$1,308 monthly payment)	75% lump sum, 25% guaranteed income (\$375,000 up front, \$654 monthly payment)	100% lump sum, 0% guaranteed income (\$500,000 up front, \$0 monthly payment)		
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

Treatment 1: Minimal Framing Question 2 (married shown)

The below graph shows the likelihood that a person aged 65 today will live to at least age 70, 75, 80, 85, 90, 95 and 100.



Now how would you choose to receive your pension payments? (It's OK to give the same answer you gave in the previous question.)

Lower lump sum/
More guaranteed
income

Higher lump sum/
Less guaranteed
income



0% lump sum, 100%
guaranteed income
(\$0 up front, \$2,616
monthly payment)



25% lump sum, 75%
guaranteed income
(\$125,000 up front,
\$1,962 monthly
payment)



50% lump sum,
50% guaranteed
income (\$250,000
up front, \$1,308
monthly payment)



75% lump sum,
25% guaranteed
income (\$375,000
up front, \$654
monthly payment)



100% lump sum,
0% guaranteed
income (\$500,000
up front, \$0 monthly
payment)



Treatment 2: All or Nothing Question 1 (not married shown below)

Suppose that you are 65 years old. You are about to retire and have accumulated \$500,000 in the pension plan at your current employer.

Your employer wants to know whether you prefer to receive this balance as a lump sum payment right now (in other words, a single \$500,000 payment) or as a stream of fixed payments over your lifetime, which your employer calls the guaranteed lifetime income option. This stream of fixed payments is based on current market interest rates. The fixed payments won't change in the future even if market interest rates do change.

To help you better understand the choice you are making, we want to tell you a few things about your two options.

- If you choose the guaranteed income option, you will receive \$2,981 per month (which adds up to \$35,772 per year) in payments for the rest of your life.
- The guaranteed income payments will stop when you die.
- If you choose the lump-sum option, you will receive \$500,000 when you retire, and no other payments for the rest of your life.

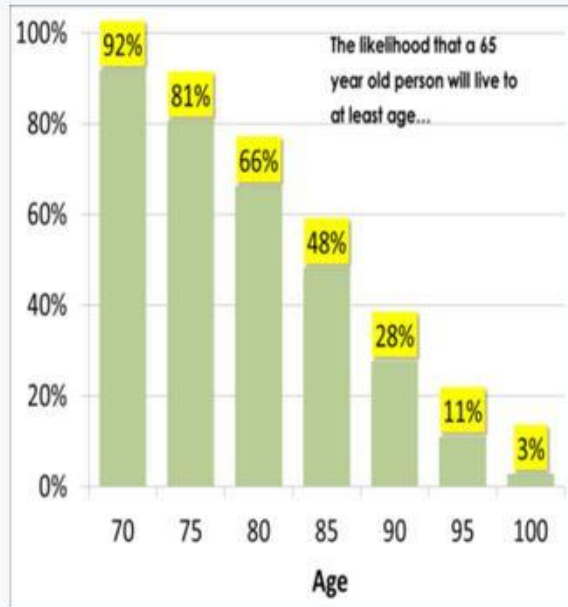
How would you choose to receive your pension payments?

- Guaranteed lifetime income (\$0 up front, \$2,981 monthly payment)
- Lump sum payment (\$500,000 up front, \$0 monthly payment)

For help, contact us at <http://toluna.com/contactus>.

Treatment 2: All or Nothing Question 2 (not married shown below)

The below graph shows the likelihood that a person aged 65 today will live to at least age 70, 75, 80, 85, 90, 95 and 100.



Now how would you choose to receive your pension payments? (It's OK to give the same answer you gave in the previous question.)

- Guaranteed lifetime income (\$0 up front, \$2,981 monthly payment)
- Lump sum payment (\$500,000 up front, \$0 monthly payment)

For help, contact us at <http://toluna.com/contactus>.

Treatment 3: Good Deal Question 1 (not married shown below)

Suppose that you are 65 years old. You are about to retire and have accumulated \$500,000 in the pension plan at your current employer.

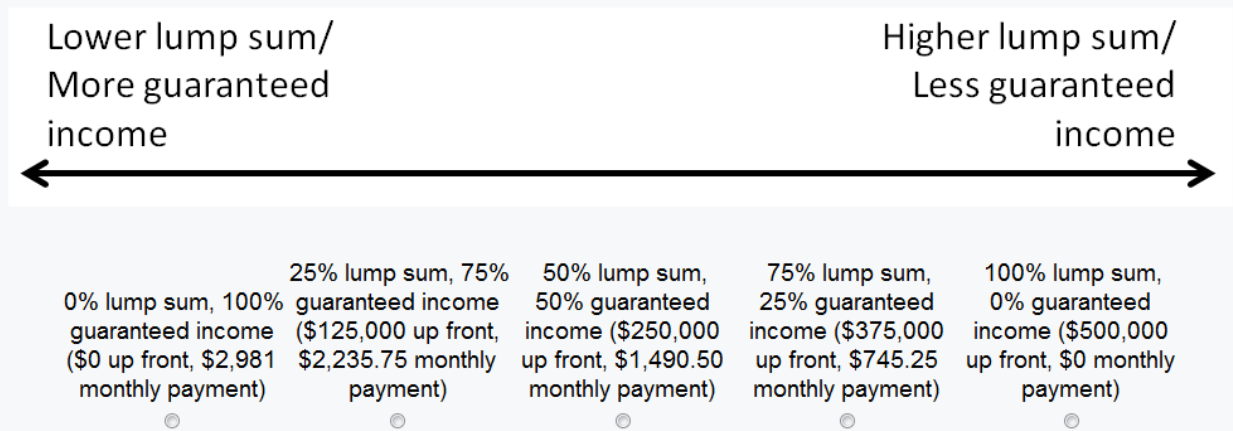
Your employer wants to know whether you prefer to receive this balance as a lump sum payment right now (in other words, a single \$500,000 payment) or as a stream of fixed payments over your lifetime, which your employer calls the guaranteed lifetime income option. This stream of fixed payments is based on current market interest rates. The fixed payments won't change in the future even if market interest rates do change. The guaranteed lifetime income option gives you higher payments than you would get by buying an identical product from an insurance company because your employer will not charge you fees.

You can pick any mix of the two, ranging from 100% lump sum (and no guaranteed income) to 100% guaranteed income (and no lump sum).

To help you better understand the choice you are making, we want to tell you a few things about the guaranteed income option.

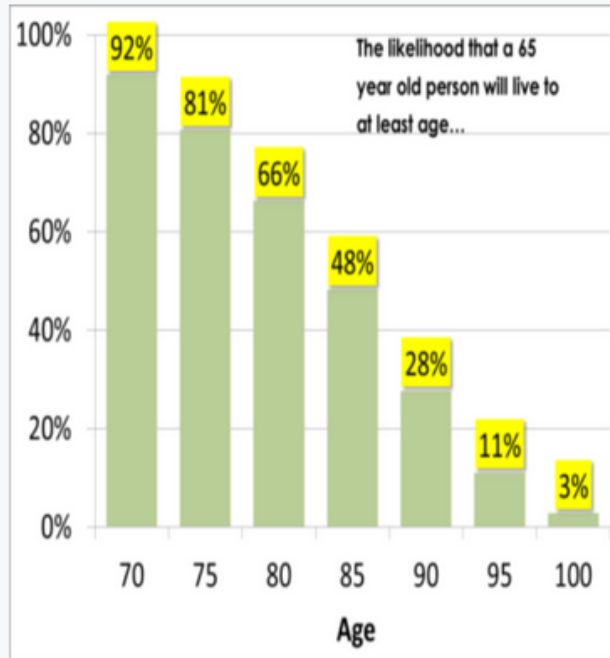
- If you choose 100% guaranteed income:
 - You will receive \$2,981 per month (which adds up to \$35,772 per year) in payments for the rest of your life.
 - The guaranteed income payments will stop when you die.
- If you choose less than 100% guaranteed income, the monthly payments will be scaled down proportionally, but you will receive a bigger up-front lump sum payment.
 - For example, if you choose 50% guaranteed income, you would get $\$2,981 \div 2 = \$1,490.50$ per month for the rest of your life, as well as a single \$250,000 payment up front.

How would you choose to receive your pension payments?



Treatment 3: Good Deal Question 2 (not married shown below)

The below graph shows the likelihood that a person aged 65 today will live to at least age 70, 75, 80, 85, 90, 95 and 100.



Now how would you choose to receive your pension payments? (It's OK to give the same answer you gave in the previous question.)

Lower lump sum/
More guaranteed
income

Higher lump sum/
Less guaranteed
income

<p>0% lump sum, 100% guaranteed income (\$0 up front, \$2,981 monthly payment)</p> <input type="radio"/>	<p>25% lump sum, 75% guaranteed income (\$125,000 up front, \$2,235.75 monthly payment)</p> <input type="radio"/>	<p>50% lump sum, 50% guaranteed income (\$250,000 up front, \$1,490.50 monthly payment)</p> <input type="radio"/>	<p>75% lump sum, 25% guaranteed income (\$375,000 up front, \$745.25 monthly payment)</p> <input type="radio"/>	<p>100% lump sum, 0% guaranteed income (\$500,000 up front, \$0 monthly payment)</p> <input type="radio"/>
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Treatment 4: Total Payments Question 1 (not married shown below)

Suppose that you are 65 years old. You are about to retire and have accumulated \$500,000 in the pension plan at your current employer.

Your employer wants to know whether you prefer to receive this balance as a lump sum payment right now (in other words, a single \$500,000 payment) or as a stream of fixed payments over your lifetime, which your employer calls the guaranteed lifetime income option. This stream of fixed payments is based on current market interest rates. The fixed payments won't change in the future even if market interest rates do change.

You can pick any mix of the two, ranging from 100% lump sum (and no guaranteed income) to 100% guaranteed income (and no lump sum).

To help you better understand the choice you are making, we want to tell you a few things about the guaranteed income option.

- If you choose 100% guaranteed income:
 - You will receive \$2,981 per month (which adds up to \$35,772 per year) in payments for the rest of your life.
 - The guaranteed income payments will stop when you die.
- If you choose less than 100% guaranteed income, the monthly payments will be scaled down proportionally, but you will receive a bigger up-front lump sum payment.
 - For example, if you choose 50% guaranteed income, you would get $\$2,981 \div 2 = \$1,490.50$ per month for the rest of your life, as well as a single \$250,000 payment up front.
- If you choose to receive guaranteed income, your total payments will depend on the length of your life. The average individual who chooses 100% guaranteed income will receive total lifetime payments of \$695,765.

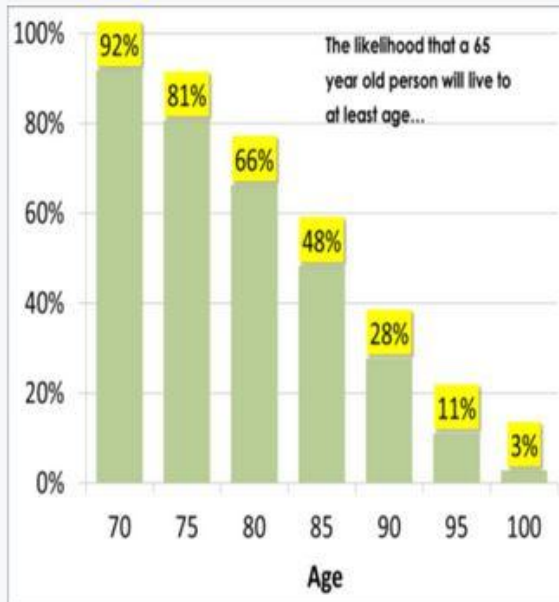
How would you choose to receive your pension payments?

Lower lump sum/ More guaranteed income		Higher lump sum/ Less guaranteed income		
0% lump sum, 100% guaranteed income (\$0 up front, \$2,981 monthly payment)	25% lump sum, 75% guaranteed income (\$125,000 up front, \$2,235.75 monthly payment)	50% lump sum, 50% guaranteed income (\$250,000 up front, \$1,490.50 monthly payment)	75% lump sum, 25% guaranteed income (\$375,000 up front, \$745.25 monthly payment)	100% lump sum, 0% guaranteed income (\$500,000 up front, \$0 monthly payment)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For help, contact us at <http://toluna.com/contactus>.

Treatment 4: Total Payments Question 2 (not married shown below)

The below graph shows the likelihood that a person aged 65 today will live to at least age 70, 75, 80, 85, 90, 95 and 100.



Now how would you choose to receive your pension payments? (It's OK to give the same answer you gave in the previous question.)



- 0% lump sum, 100% guaranteed income (\$0 up front, \$2,981 monthly payment)
- 25% lump sum, 75% guaranteed income (\$125,000 up front, \$2,235.75 monthly payment)
- 50% lump sum, 50% guaranteed income (\$250,000 up front, \$1,490.50 monthly payment)
- 75% lump sum, 25% guaranteed income (\$375,000 up front, \$745.25 monthly payment)
- 100% lump sum, 0% guaranteed income (\$500,000 up front, \$0 monthly payment)

Treatment 5: Investment Framing Question 1 (not married shown below)

Suppose that you are 65 years old. You are about to retire and have accumulated \$500,000 in the pension plan at your current employer.

Your employer wants to know whether you prefer to receive this balance as a lump sum payment right now (in other words, a single \$500,000 payment) or as a stream of fixed payments over your lifetime, which your employer calls the guaranteed lifetime income option. This stream of fixed payments is based on current market interest rates. The fixed payments won't change in the future even if market interest rates do change.

You can pick any mix of the two, ranging from 100% lump sum (and no guaranteed income) to 100% guaranteed income (and no lump sum).

To help you better understand the choice you are making, we want to tell you a few things about the guaranteed income option.

- If you choose 100% guaranteed income:
 - You will receive \$2,981 per month (which adds up to \$35,772 per year) in payments for the rest of your life.
 - The guaranteed income payments will stop when you die.
- If you choose less than 100% guaranteed income, the monthly payments will be scaled down proportionally, but you will receive a bigger up-front lump sum payment.
 - For example, if you choose 50% guaranteed income, you would get $\$2,981 \div 2 = \$1,490.50$ per month for the rest of your life, as well as a single \$250,000 payment up front.
- Under the guaranteed income option, you get a higher return on your \$500,000 investment if you die old and a lower return if you die young.
- Under the lump sum, you get the same return whether you die young or old.

How would you choose to receive your pension payments?

Higher return if you die
old/ Lower return if you
die young

Same return whether
you die young or old



0% lump sum, 100%
guaranteed income (\$0
up front, \$2,981
monthly payment)



25% lump sum, 75%
guaranteed income
(\$125,000 up front,
\$2,235.75 monthly
payment)



50% lump sum, 50%
guaranteed income
(\$250,000 up front,
\$1,490.50 monthly
payment)



75% lump sum, 25%
guaranteed income
(\$375,000 up front,
\$745.25 monthly
payment)

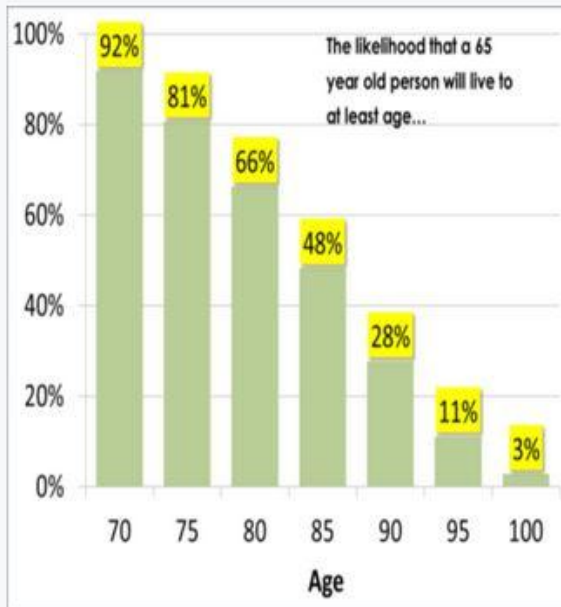


100% lump sum, 0%
guaranteed income
(\$500,000 up front, \$0
monthly payment)



Treatment 6: Flexibility and Control Question 2 (not married shown below)

The below graph shows the likelihood that a person aged 65 today will live to at least age 70, 75, 80, 85, 90, 95 and 100.



Now how would you choose to receive your pension payments? (It's OK to give the same answer you gave in the previous question.)



- | | | | | |
|--|---|---|---|--|
| <p>0% lump sum, 100% guaranteed income (\$0 up front, \$2,981 monthly payment)</p> <input type="radio"/> | <p>25% lump sum, 75% guaranteed income (\$125,000 up front, \$2,235.75 monthly payment)</p> <input type="radio"/> | <p>50% lump sum, 50% guaranteed income (\$250,000 up front, \$1,490.50 monthly payment)</p> <input type="radio"/> | <p>75% lump sum, 25% guaranteed income (\$375,000 up front, \$745.25 monthly payment)</p> <input type="radio"/> | <p>100% lump sum, 0% guaranteed income (\$500,000 up front, \$0 monthly payment)</p> <input type="radio"/> |
|--|---|---|---|--|



Treatment 7: Longevity Insurance Question 1 (not married shown below)

Suppose that you are 65 years old. You are about to retire and have accumulated \$500,000 in the pension plan at your current employer.

Your employer wants to know whether you prefer to receive this balance as a lump sum payment right now (in other words, a single \$500,000 payment) or as a stream of fixed payments over your lifetime, which your employer calls the guaranteed lifetime income option. This stream of fixed payments is based on current market interest rates. The fixed payments won't change in the future even if market interest rates do change.

You can pick any mix of the two, ranging from 100% lump sum (and no guaranteed income) to 100% guaranteed income (and no lump sum).

To help you better understand the choice you are making, we want to tell you a few things about the guaranteed income option.

- If you choose 100% guaranteed income:
 - You will receive \$2,981 per month (which adds up to \$35,772 per year) in payments for the rest of your life.
 - The guaranteed income payments will stop when you die.
- If you choose less than 100% guaranteed income, the monthly payments will be scaled down proportionally, but you will receive a bigger up-front lump sum payment.
 - For example, if you choose 50% guaranteed income, you would get $\$2,981 \div 2 = \$1,490.50$ per month for the rest of your life, as well as a single \$250,000 payment up front.
- Choosing more guaranteed income gives you more assurance that you will not outlive your savings, since the monthly payments will continue as long as you live.

How would you choose to receive your pension payments?

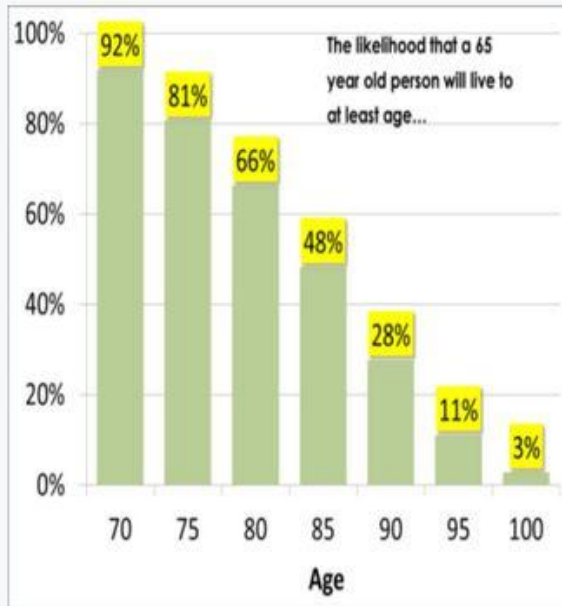


0% lump sum, 100% guaranteed income (\$0 up front, \$2,981 monthly payment)	25% lump sum, 75% guaranteed income (\$125,000 up front, \$2,235.75 monthly payment)	50% lump sum, 50% guaranteed income (\$250,000 up front, \$1,490.50 monthly payment)	75% lump sum, 25% guaranteed income (\$375,000 up front, \$745.25 monthly payment)	100% lump sum, 0% guaranteed income (\$500,000 up front, \$0 monthly payment)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For help, contact us at <http://foiuna.com/contactus>.

Treatment 8: Mortality Credits Treatment Question 2 (not married shown below)

The below graph shows the likelihood that a person aged 65 today will live to at least age 70, 75, 80, 85, 90, 95 and 100.



Now how would you choose to receive your pension payments? (It's OK to give the same answer you gave in the previous question.)

Lower lump sum/
More guaranteed
income

Higher lump sum/
Less guaranteed
income



0% lump sum, 100%
guaranteed income (\$0
up front, \$2,981 monthly
payment)



25% lump sum, 75%
guaranteed income
(\$125,000 up front,
\$2,235.75 monthly
payment)



50% lump sum, 50%
guaranteed income
(\$250,000 up front,
\$1,490.50 monthly
payment)



75% lump sum, 25%
guaranteed income
(\$375,000 up front,
\$745.25 monthly
payment)



100% lump sum, 0%
guaranteed income
(\$500,000 up front, \$0
monthly payment)



ALL TREATMENTS: COLA Question 1 (not married shown below)

Now suppose that your employer only offers a guaranteed lifetime income option. But you can choose whether you want a cost-of-living adjustment (COLA) to your payments.

If you don't choose a cost-of-living adjustment, then your monthly pension payment will be \$2,981 a month for the rest of your life.

If you do choose a cost-of-living adjustment, then your first monthly pension payment will be \$2,033 a month, but this amount will increase over time at a rate equal to the inflation rate (as measured by the Consumer Price Index).

Which option do you prefer?

- No cost-of-living adjustment
- Cost-of-living adjustment

For help, contact us at <http://toluna.com/contactus>.

ALL TREATMENTS: COLA Question 2 (not married shown below)

Now suppose that your employer only offers a guaranteed lifetime income option. But you can choose whether you want a cost-of-living adjustment (COLA) to your payments.

If you don't choose a cost-of-living adjustment, then your monthly pension payment will be \$2,981 a month for the rest of your life. This means that as the cost of living increases, \$2,981 per month will buy fewer goods and services. For example, if the cost of living increases by 2% per year for the rest of your life and you don't have a cost-of-living adjustment, your monthly pension payment will buy 33% fewer goods and services at age 85 than it does at age 65.

If you do choose a cost-of-living adjustment, then your first monthly pension payment will be \$2,033 a month, but this amount will increase over time at a rate equal to the inflation rate (as measured by the Consumer Price Index). So your monthly payment will buy about the same amount of goods and services at every age in the future as it does at age 65.

Which option do you prefer?

- No cost-of-living adjustment
- Cost-of-living adjustment

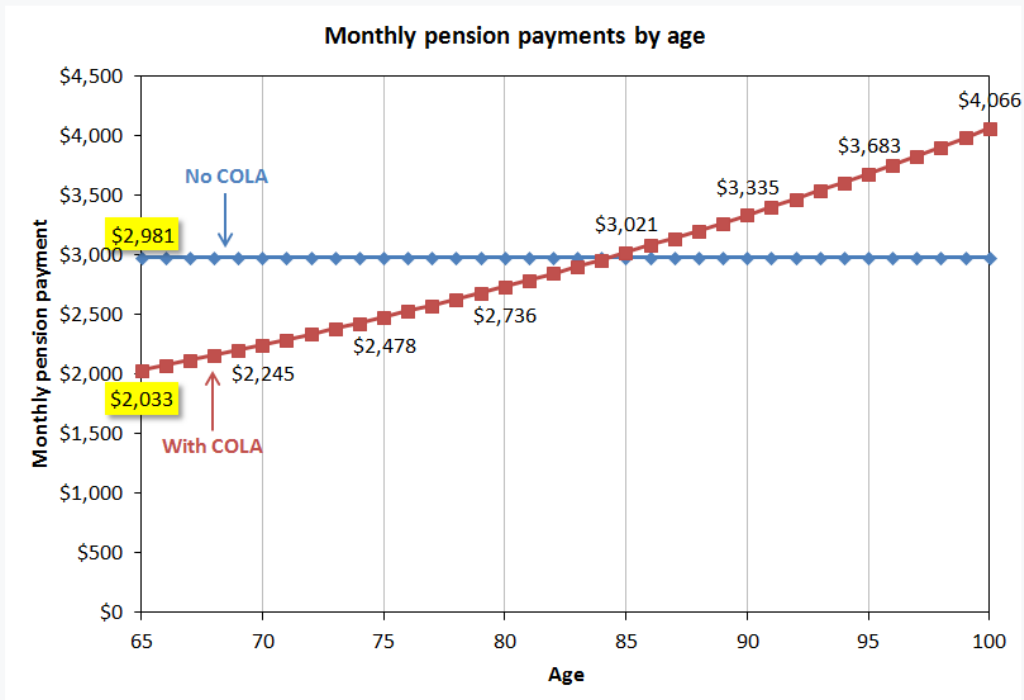
For help, contact us at <http://toluna.com/contactus>.

ALL TREATMENTS: COLA Question 3 (not married shown below)

Now suppose that your employer only offers a guaranteed lifetime income option. But you can choose whether you want a cost-of-living adjustment (COLA) to your payments.

If you don't choose a cost-of-living adjustment, then your monthly pension payment will be \$2,981 a month for the rest of your life. This means that as the cost of living increases, \$2,981 per month will buy fewer goods and services. For example, if the cost of living increases by 2% per year for the rest of your life and you don't have a cost-of-living adjustment, your monthly pension payment will buy 33% fewer goods and services at age 85 than it does at age 65.

If you do choose a cost-of-living adjustment, then your first monthly pension payment will be \$2,033 a month, but this amount will increase over time at a rate equal to the inflation rate (as measured by the Consumer Price Index). So your monthly payment will buy about the same amount of goods and services at every age in the future as it does at age 65.



Which option do you prefer?

- No cost-of-living adjustment
- Cost-of-living adjustment

ALL TREATMENTS: Rate the Importance...

Rate the importance of the following reasons for your choices between the lump sum and guaranteed income payments.

	0 (Not Important)	1	2	3	4	5
Want to invest the money on my own	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Want flexibility in the timing of my spending	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I might have a big spending need sometime during retirement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Want to give money to children or others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worried about dying early	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worried about inflation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worried about company not being able to pay me in the future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Want to prevent overspending	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Want to keep money away from children or others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Want to make sure I have enough income later in life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="text" value="None"/>						

ALL TREATMENTS: Demographic Questions

The hypothetical choice portion of the survey is now over. We would now like to ask you some questions about yourself to help us in our research.

What is your gender?

- Male
- Female
- Decline to answer

Which of the following best describes your employment status?

- Employed full-time
- Employed part-time
- Not employed but looking for work
- Retired
- Other (please specify)
- Decline to answer

What is the highest level of education you have completed?

- No High School Diploma
- High School Diploma
- Some College
- College Degree
- Graduate Degree
- Decline to answer

How many children do you have (including step-children)?

How long do you expect to live?

- Longer than the average person my age
- About the same as the average person my age
- Shorter than the average person my age
- Decline to answer

Do you own a home in which you currently reside?

- Yes
- No
- Decline to answer

For help, contact us at <http://toluna.com/contactus>.

ALL TREATMENTS: Income Questions

For each item below, please indicate the range that applies to your household:

Annual income from job(s):

- Below \$25,000
- \$25,000 - \$50,000
- \$50,001 - \$75,000
- \$75,001 - \$100,000
- \$100,001 - \$200,000
- \$200,001 - \$300,000
- More than \$300,000
- Decline to answer

Total value of house(s)

- Less than \$50,000
- \$50,000 - \$100,000
- \$100,001 - \$250,000
- \$250,001 - \$500,000
- More than \$500,000
- Decline to answer

Total value of 401(k) and IRAs

- Below \$25,000
- \$25,000 - \$50,000
- \$50,001 - \$75,000
- \$75,001 - \$100,000
- \$100,001 - \$200,000
- \$200,001 - \$300,000
- More than \$300,000
- Decline to answer

ALL TREATMENTS: Income Questions (continued...)

Total value of other financial assets (excluding 401(k) and IRAs)

- Below \$25,000
- \$25,000 - \$50,000
- \$50,001 - \$75,000
- \$75,001 - \$100,000
- \$100,001 - \$200,000
- \$200,001 - \$300,000
- More than \$300,000
- Decline to answer

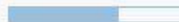
Total amount owed on mortgage(s)

- \$0
- \$1 - \$50,000
- \$50,001 - \$100,000
- \$100,001 - \$250,000
- \$250,001 - \$500,000
- More than \$500,000
- Decline to answer

Total credit card and other non-mortgage debt

- \$0
- \$1 - \$1,000
- \$1,001 - \$5,000
- \$5,001 - \$10,000
- \$10,001 - \$20,000
- More than \$20,000
- Decline to answer

For help, contact us at <http://toluna.com/contactus>.



ALL TREATMENTS: Final Questions

Does your current job (or the most recent job you held, if you're not currently working) offer you a pension that would give you monthly payments for life during retirement?

- Yes
- No
- I have never had a job
- Decline to answer

Did you feel that the questions were clear or did you feel that they were confusing?

Pick a single response from the following scale.

- 0: Completely clear
- 1: Mostly clear
- 2: Sometimes clear
- 3: Sometimes confusing
- 4: Mostly confusing
- 5: Completely confusing
- Decline to answer

Please explain what, if anything, you found to be unclear or confusing.