



ARC CENTRE OF
EXCELLENCE IN
**POPULATION
AGEING
RESEARCH**

Follow the Rating?

How Disclosure Affects Retirement Income
Product Choices in a Discrete Choice Experiment

Hazel Bateman¹ & Inka Eberhardt¹

¹CEPAR, UNSW

December 7, 2020



Australian Government
Australian Research Council



UNSW
SYDNEY



Australian
National
University



Curtin University



THE UNIVERSITY OF
MELBOURNE

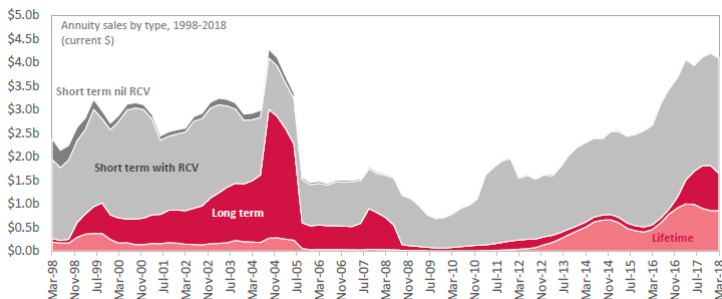


THE UNIVERSITY OF
SYDNEY

1 – What is the Issue?

- Australian retirees have flexibility in the decumulation of their assets.
- BUT:
 - Little choice of retirement income products
 - Most retirees take ABPs and withdraw at minimum drawdown rate

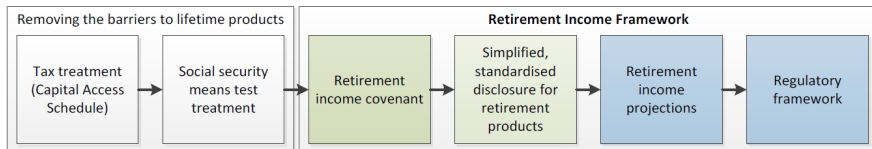
21 Annuity sales have seen a small renaissance in recent years, though remain a small part of a fragile market



(Chomik et al. 2018)

1 – What is the Issue?-II

- Demand side: annuitization puzzle (Brown et al. 2008, 2011, 2013)
- Recent policy focus on decumulation (Australian Government, 2018)



1 – Research Questions

Question 1

Does disclosure affect choice? If yes, how?

Question 2

Do consumers understand the information the Fact Sheets provide?

1 – Our Contributions to the Literature

- As far as we know, we are the first to examine how different Fact Sheets influence the stated choice of retirement income products.
 - We test participants' understanding of information items used in those Fact Sheets.
- We test whether standardized disclosure can reduce product complexity and increase product awareness and (stated) demand for annuity products.

1 – Methodology

- Online discrete choice experiments in September-October and in November 2019
- N=1,007
 - Aged between 55 and 67
 - Needed to have a super account in accumulation
- 52% male, 60 years old on avg., 58% eligible for Age Pension, 23% self-funded

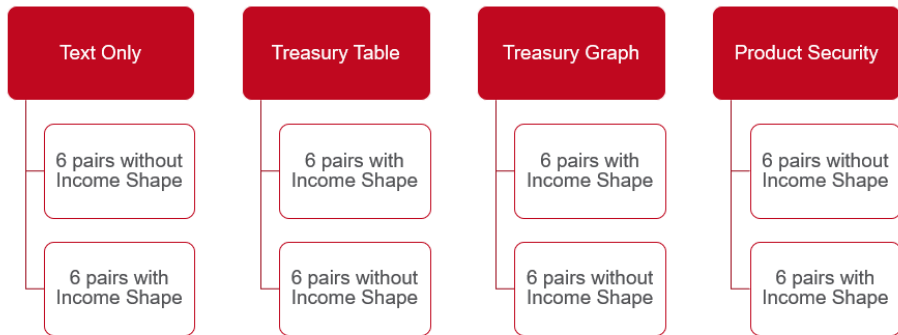
1 – Methodology - II

- Participants make 12 pair-wise choices between four different products:
 1. Immediate lifetime annuity
 2. Account-Based Pension (ABP)
 3. Annuity/ABP (80% annuity, 20% ABP)
 4. ABP/Deferred Annuity (annuitized income from age 85 onwards)
- We have measurements of
 1. **stated choices** between retirement income products
 2. the **understanding** of the Fact Sheets and products
 3. a variety of **characteristics and preferences** of participants

1 – What is on the Fact Sheets?

- Treasury proposes five information items:
 1. Average Annual Income (net of fees and taxes)
 2. Product Rating measuring the combined downside market, inflation, and longevity risks on a scale from 1 to 7- calculated as per AGA (2018)
 3. Potential Income Shape of annual income throughout retirement (at the 5th, 50th & 95th percentiles)
 4. Access to Capital if a consumer decides to sell the product
 5. Death Benefit

2 – Experimental Design

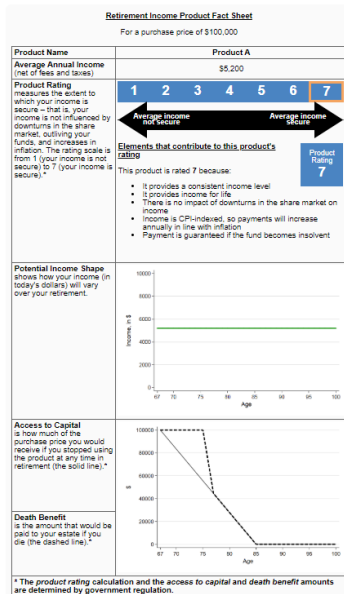


2 – Treasury Table

Retirement Income Product Fact Sheet			
For a purchase price of \$100,000			
Product Name	Product A		
Average Annual Income (net of fees and taxes)	\$5,200		
Product Rating measures the extent to which your income is secure – that is, your income is not influenced by downturns in the share market, outliving your funds, and increases in inflation. The rating scale is from 1 (your income is not secure) to 7 (your income is secure). ^a	<div> <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> </div>		
	<div> <div>Average income not secure</div> <div>Average income secure</div> </div>		
	Elements that contribute to this product's rating This product is rated 7 because: <ul style="list-style-type: none"> It provides a consistent income level It provides income for life There is no impact of downturns in the share market on income Income is CPI-indexed, so payments will increase annually in line with inflation Payment is guaranteed if the fund becomes insolvent 		
	<div>Product Rating 7</div>		
Potential Income Shape shows how your income (in today's dollars) will vary over your retirement.			
Access to Capital is how much of the purchase price you would receive if you stopped using the product at any time in retirement (columns 1 and 2). ^a	(1)	(2)	(3)
	Age	Amount of purchase price available for	% of purchase price that you can withdraw
Death Benefit is the amount that would be paid to your estate if you die (column 3). ^a	67	\$100,000	100%
	70	\$83,330	83%
	75	\$55,560	56%
	80	\$27,780	28%
	85	\$0	0%
	90	\$0	0%
	95	\$0	0%
			Death Benefit
	67		\$100,000
	70		\$100,000
	75		\$100,000
	80		\$27,780
	85		\$0
	90		\$0
	95		\$0

^a The product rating calculation and the access to capital and death benefit amounts are determined by government regulation.

2 – Treasury Graph



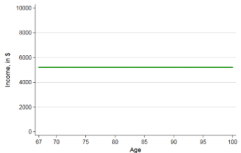
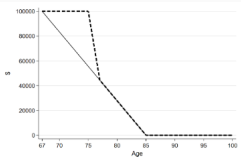
2 – Text Only

Retirement Income Product Fact Sheet

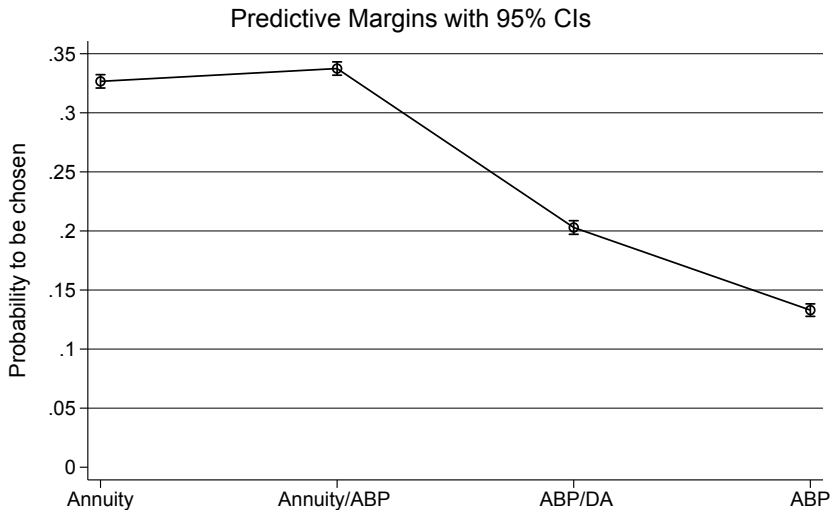
For a purchase price of \$100,000

Product Name	Product A
Average Annual Income (net of fees and taxes)	\$5,200
Product Rating measures the extent to which your income is secure – that is, your income is not influenced by downturns in the share market, outliving your funds, and increases in inflation.*	This product is rated 7 on a risk measure from 1 to 7 <i>(where 1 means that the average income from the product is not secure and 7 means that the average income is secure)</i>
Potential Income Shape	<ul style="list-style-type: none">Regular income payments for the rest of your lifeIncome is CPI-indexed, so payments will increase annually in line with inflationIncome does not vary with changes in asset returns such as sharesYou cannot withdraw additional money
Access to Capital is how much of the purchase price you would receive if you stopped using the product at any time in retirement.*	<p>If you stop using your product before age 85:</p> <ul style="list-style-type: none">You will get back some part of the purchase priceThe amount paid depends on your age and is determined by government regulation <p>If you stop using your product at or after age 85:</p> <ul style="list-style-type: none">You will get nothing back
Death Benefit is the amount that would be paid to your estate if you die.*	<p>If you die before age 76:</p> <ul style="list-style-type: none">The income payments stop, and the purchase price will be paid to your estate <p>If you die between age 76 and age 85:</p> <ul style="list-style-type: none">The income payments stop, and some money will be paid to your estate. The amount paid depends on your age and is determined by government regulation <p>If you die at or after age 85:</p> <ul style="list-style-type: none">The income payments stop, and no money will be paid to your estate
* The product rating calculation and the access to capital and death benefit amounts are determined by government regulation.	

2 – Product Security

Retirement Income Product Fact Sheet	
For a purchase price of \$100,000	
Product Name	Product A
Average Annual Income (net of fees and taxes)	\$5,200
Product Security describes the extent to which your income is secure - that is, your income is not influenced by downturns in the share market, outliving your funds, and increases in inflation.	<p>This product:</p> <ul style="list-style-type: none">provides a consistent income levelprovides income for lifeis designed so that there is no impact of downturns in the share market on incomeprovides CPI-indexed income, so payments will increase annually in line with inflation <p>Payment is guaranteed if the fund becomes insolvent.</p>
Potential Income Shape shows how your income (in today's dollars) will vary over your retirement.	
Access to Capital is how much of the purchase price you would receive if you stopped using the product at any time in retirement (the solid line).*	
Death Benefit is the amount that would be paid to your estate if you die (the dashed line).*	
* The access to capital and death benefit amounts are determined by government regulation.	

3 – Consumers Chose the Annuity/ABP 34% and the Annuity 33% of the Time. ABP was Least Preferred (13%)



3 – The Text Only Treatment Makes the Annuity Less and the ABP More Favourable

	T-Table	T-Graph	Text Only	Product Sec.
Annuity	34.14%	37.6%	26.2%	33.2%
Annuity/ABP	35.2%	34.1%	32.8%	31.1%
ABP/Deferred Annuity	18.1%	21.0%	19.6%	21.0%
ABP	12.5%	7.3%	21.3%	7.3%

What Drives these Results?

3 – Knowledge about Information Items

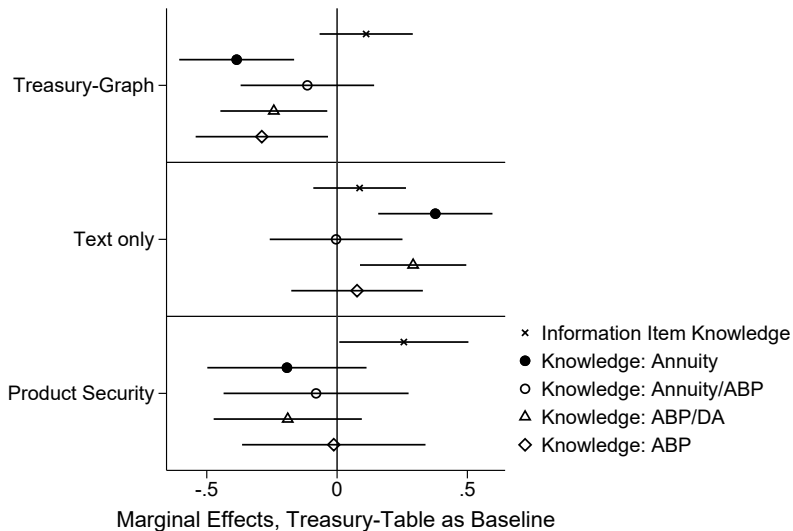
Questions	Correct Answers	Don't Know
Annual Income= Income of First Year?	65.5%	8.0%
Product Rating- Secure Income?*	68.1%	6.9%
Product Rating- Three Type of Risks	57.5%	15.1%
Withdrawing Money Without Selling?	32.5%	10.9%
Death Benefit= Access to Capital?	78.9%	12.6%

* participants in the Product Security did not answer this question

Out of four questions, participants answered 2.35 questions correctly (SD=1.11)

7.05% answered no questions correctly, 14.30% had one correct answer, 29.99% two, 33.57% three, and 15.09% all four questions correctly.

3 – Differences in Knowledge between Fact Sheets



3 – Differences in Product Perceptions

- We run regressions on product perceptions of understanding, risk, and control
- We regress on Fact Sheet type, information item knowledge, product knowledge, graph literacy, and superannuation knowledge
- We also control for male, age, having long-term relationship/being married, having a bequest motive, financial risk preference, financial literacy, numeracy, being eligible for Full or Part Age Pension, and being a member of a DC pension plan

3 – Differences in Product Perceptions - II

Perceived Understanding

- #DK's: information item knowledge negatively, product knowledge and being a DC member positively correlated
- Being eligible for Full or Part Age Pension negatively correlated for ABP/DA & ABP (5% significance level)

Perceived Risk

- T-Graph negatively correlated with perceived risk of Annuity/ABP & ABP/DA
- Text Only positively correlated with perceived risk of Annuity & Annuity/ABP
- Product Knowledge negatively correlated with perceived risk of all products except ABP/DA
- Numeracy negatively correlated with perceived risk of Annuity & Annuity/ABP

3 – Differences in Product Perceptions - III

Perceived Control

- **Text Only** positively correlated with ABP, **Product Security** positively with ABP/DA
- **Information Item Knowledge & #DK's information item knowledge** negatively correlated with perceived control of all products (effect twice as large for ABP than for others)
- **#DK's Financial Literacy** negatively correlated with perceived control of all products
- **Men** are more likely to perceive control of ABP higher than women

3 – Impact of Information Items

	T.Table	T.Graph	Text Only	Product Sec.
Annual Income, per \$100	0.02*** (0.00)	0.01*** (0.00)	0.03*** (0.00)	0.02*** (0.01)
Product Rating	0.06*** (0.00)	0.05*** (0.00)	0.03*** (0.01)	0.03*** (0.01)
Access to Capital, per \$1,000	0.00*** (0.00)	0.00 (0.00)	0.00*** (0.00)	0.00 (0.00)
With Income Shape	0.02 (0.01)	0.03** (0.01)	0.01 (0.02)	0.01 (0.03)
Perceived Understanding	0.03 (0.04)	0.12*** (0.03)	0.07*** (0.03)	0.11*** (0.04)
Perceived Risk	-0.03*** (0.01)	-0.03** (0.01)	-0.08*** (0.01)	-0.01 (0.03)
Perceived Control	0.05*** (0.02)	0.07*** (0.02)	0.06*** (0.01)	0.11*** (0.03)
Product Knowledge	-0.01* (0.01)	0.00 (0.01)	0.01 (0.01)	0.01 (0.01)
Info. Item Knowledge	0.01 (0.01)	0.01 (0.01)	0.00 (0.01)	-0.00 (0.02)
Pseudo R-Squared	20.77%	32.32%	13.66%	22.73%
Observations	3,588	3,576	3,660	1,260

4 – Discussion and Next Steps

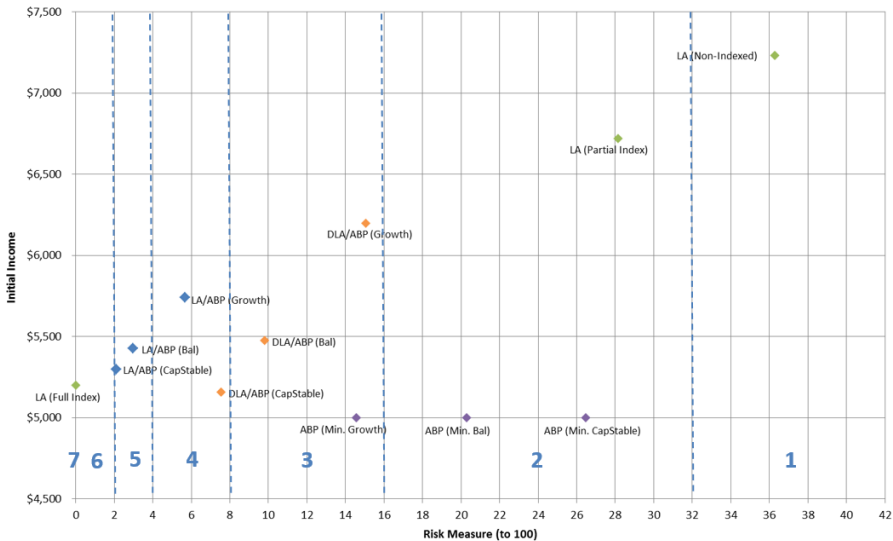
- Annuity & Annuity/ABP preferred in experiment, in contrast to revealed preferences
- Fact Sheets impact product knowledge and perceptions of risk and control
- Product Rating impacts choice, dependent on salience
⇒ needs to be carefully designed!
- Perceptions very important for choice
- Follow-up:
 - starting with a clean sheet: what do people need to know?
- How do Fact Sheets affect decision-making in the field?



Looking forward to feedback and questions!

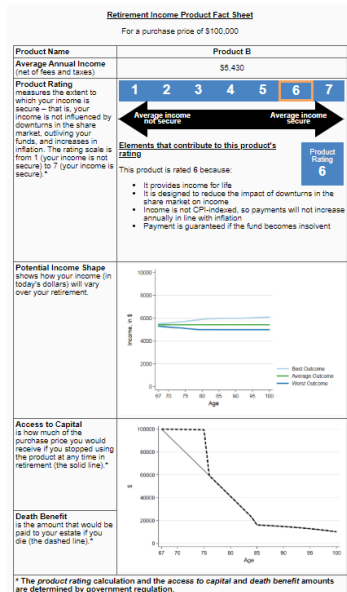
Inka Eberhardt
i.eberhardt@unsw.edu.au

Risk vs Income

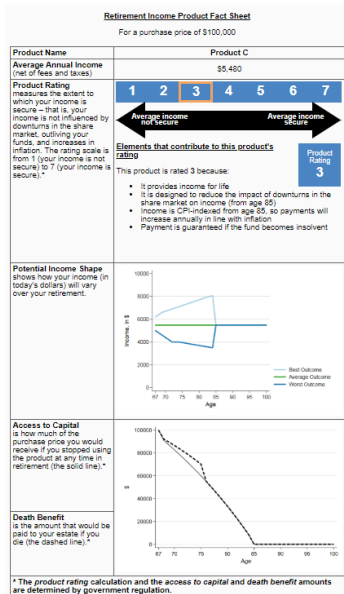


(AGA, 2018)

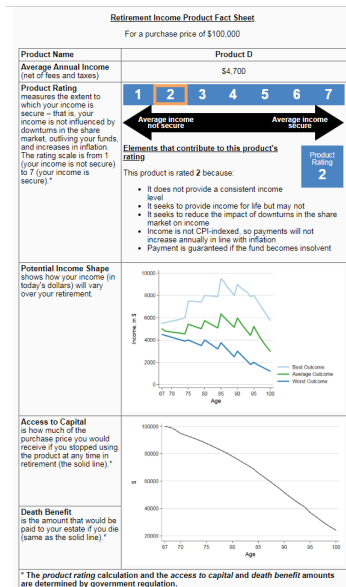
5 – Treasury Graph



5 – Treasury Graph



5 – Treasury Graph



5 – Treasury Table

Retirement Income Product Fact Sheet

For a purchase price of \$100,000

Product Name	Product B		
Average Annual Income (net of fees and taxes)	\$5,430		
Product Rating measures the extent to which your income is secure – that is, your income is not influenced by downturns in the share market, outliving your funds, and increases in inflation. The rating scale is from 1 (your income is not secure) to 7 (your income is secure).*	<div> <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> </div> <div> <div>Average income not secure</div> <div>Average income secure</div> </div> <div> Elements that contribute to this product's rating This product is rated 6 because: <ul style="list-style-type: none"> It provides income for life It is designed to reduce the impact of downturns in the share market on income Income is not CPI-indexed, so payments will not increase in line with inflation Payment is guaranteed if the fund becomes insolvent </div> <div> Product Rating 6 </div>		
Potential Income Shape shows how your income (in today's dollars) will vary over your retirement.			
Access to Capital is how much of the purchase price you would receive if you stopped using the product at any time in retirement (columns 1 and 2).*	(1)	(2)	(3)
	Age	Amount of purchase price available for	% of purchase price that you can withdraw
	67	\$100,000	100%
	70	\$86,470	86%
	75	\$63,890	64%
	80	\$41,170	41%
	85	\$16,100	16%
	90	\$14,750	15%
	95	\$12,820	12%
Death Benefit is the amount that would be paid to your estate if you die (column 3).*	Death Benefit		
	67	\$100,000	\$100,000
	70	\$86,470	\$99,800
	75	\$63,890	\$99,440
	80	\$41,170	\$41,170
	85	\$16,100	\$16,100
	90	\$14,750	\$14,750
	95	\$12,820	\$12,820

* The product rating calculation and the access to capital and death benefit amounts are determined by government regulation.

5 – Text Only

Retirement Income Product Fact Sheet

For a purchase price of \$100,000

Product Name	Product B
Average Annual Income (net of fees and taxes)	\$5,430
Product Rating measures the extent to which your income is secure – that is, your income is not influenced by downturns in the share market, outliving your funds, and increases in inflation.*	This product is rated 6 on a risk measure from 1 to 7 <i>(where 1 means that the average income from the product is not secure and 7 means that the average income is secure)</i>
Potential Income Shape	<ul style="list-style-type: none">• Regular income payments for the rest of your life• Income is not CPI-indexed, so payments will not increase annually in line with inflation• Income may vary with changes in asset returns such as shares• You can withdraw additional money as and when needed, but this can decrease your regular income
Access to Capital is how much of the purchase price you would receive if you stopped using the product at any time in retirement.*	If you stop using this product at any time in retirement: <ul style="list-style-type: none">• You will get back some part of the purchase price• The amount paid depends on your age and is determined by government regulation
Death Benefit is the amount that would be paid to your estate if you die.*	If you die, the income payments stop, and some money will be paid to your estate. The amount paid depends on your age and is determined by government regulation.
* The product rating calculation and the access to capital and death benefit amounts are determined by government regulation.	

5 – Treasury Table

Retirement Income Product Fact Sheet			
For a purchase price of \$100,000			
Product Name	Product C		
Average Annual Income (net of fees and taxes)	\$5,480		
Product Rating measures the extent to which your income is secure – that is, your income is not influenced by downturns in the share market, outliving your funds, and increases in inflation. The rating scale is from 1 (your income is not secure) to 7 (your income is secure).*	<div> <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> </div> <div> <div>Average income not secure</div> <div>Average income secure</div> </div> <div> <div>Elements that contribute to this product's rating</div> <div>This product is rated 3 because: <ul style="list-style-type: none"> It provides income for life It is designed to reduce the impact of downturns in the share market on income (from age 85) Income is CPI-indexed from age 85, so payments will increase in line with inflation Payment is guaranteed if the fund becomes insolvent </div> <div>Product Rating 3</div> </div>		
Potential Income Shape shows how your income (in today's dollars) will vary over your retirement.			
Access to Capital is how much of the purchase price you would receive if you stopped using the product at any time in retirement (columns 1 and 2).*	(1)	(2)	(3)
	Age	Amount of purchase price available for	% of purchase price that you can withdraw
	67	\$100,000	100%
	70	\$82,690	83%
	75	\$59,970	60%
	80	\$33,250	33%
	85	\$0	0%
	90	\$0	0%
	95	\$0	0%
Death Benefit is the amount that would be paid to your estate if you die (column 3).*	Death Benefit		
	67	\$100,000	\$100,000
	70	\$82,690	\$86,520
	75	\$59,970	\$70,190
	80	\$33,250	\$33,250
	85	\$0	\$0
	90	\$0	\$0
	95	\$0	\$0
* The product rating calculation and the access to capital and death benefit amounts are determined by government regulation.			

5 – Text Only

Retirement Income Product Fact Sheet

For a purchase price of \$100,000

Product Name	Product C
Average Annual Income (net of fees and taxes)	\$5,480
Product Rating measures the extent to which your income is secure – that is, your income is not influenced by downturns in the share market, outliving your funds, and increases in inflation.*	This product is rated 3 on a risk measure from 1 to 7 <i>(where 1 means that the average income from the product is not secure and 7 means that the average income is secure)</i>
Potential Income Shape	<ul style="list-style-type: none"> Regular income payments for the rest of your life <p>Up to age 85:</p> <ul style="list-style-type: none"> Income is not CPI-indexed, so payments will not increase annually in line with inflation Income may vary with changes in asset returns such as shares You can withdraw additional money as and when needed, but this can decrease your regular income <p>From age 85:</p> <ul style="list-style-type: none"> Income is CPI-indexed, so payments will increase annually in line with inflation Income does not vary with changes in asset returns You cannot withdraw additional money
Access to Capital is how much of the purchase price you would receive if you stopped using the product at any time in retirement.*	<p>If you stop using this product before age 85:</p> <ul style="list-style-type: none"> You will get back some part of the purchase price The amount paid depends on your age and is determined by government regulation <p>If you stop using this product at or after age 85:</p> <ul style="list-style-type: none"> You will get nothing back
Death Benefit is the amount that would be paid to your estate if you die.*	<p>If you die before age 85:</p> <ul style="list-style-type: none"> The income payments stop, and some money will be paid to your estate. The amount paid depends on your age and is determined by government regulation <p>If you die at or after age 85:</p> <ul style="list-style-type: none"> The income payments stop, and no money will be paid to your estate
* The product rating calculation and the access to capital and death benefit amounts are determined by government regulation.	

5 – Treasury Table

Retirement Income Product Fact Sheet																																							
For a purchase price of \$100,000																																							
Product Name	Product D																																						
Average Annual Income (net of fees and taxes)	\$4,700																																						
Product Rating measures the extent to which your income is secure – that is, your income is not influenced by downturns in the share market, outliving your funds, and increases in inflation. The rating scale is from 1 (your income is not secure) to 7 (your income is secure).*	<div><div>1234567</div><div>Average income not secureAverage income secure</div></div>																																						
	<div>Elements that contribute to this product's rating</div> <div>This product is rated 2 because:</div> <ul style="list-style-type: none">It does not provide a consistent income levelIt seeks to provide income for life but may notIt seeks to reduce the impact of downturns in the share market on incomeIncome is not CPI-indexed, so payments will not increase annually in line with inflationPayment is guaranteed if the fund becomes insolvent																																						
Potential Income Shape shows how your income (in today's dollars) will vary over your retirement.																																							
Access to Capital is how much of the purchase price you would receive if you stopped using the product at any time in retirement (columns 1 and 2).*	<table><tr><th></th><th>(1)</th><th>(2)</th><th>(3)</th></tr><tr><th>Age</th><th>Amount of purchase price available for</th><th>% of purchase price that you can withdraw</th><th>Death Benefit</th></tr><tr><td>67</td><td>\$100,000</td><td>100%</td><td>\$100,000</td></tr><tr><td>70</td><td>\$94,990</td><td>95%</td><td>\$94,990</td></tr><tr><td>75</td><td>\$87,630</td><td>88%</td><td>\$87,630</td></tr><tr><td>80</td><td>\$78,210</td><td>78%</td><td>\$78,210</td></tr><tr><td>85</td><td>\$66,000</td><td>66%</td><td>\$66,000</td></tr><tr><td>90</td><td>\$54,780</td><td>55%</td><td>\$54,780</td></tr><tr><td>95</td><td>\$37,000</td><td>37%</td><td>\$37,000</td></tr></table>				(1)	(2)	(3)	Age	Amount of purchase price available for	% of purchase price that you can withdraw	Death Benefit	67	\$100,000	100%	\$100,000	70	\$94,990	95%	\$94,990	75	\$87,630	88%	\$87,630	80	\$78,210	78%	\$78,210	85	\$66,000	66%	\$66,000	90	\$54,780	55%	\$54,780	95	\$37,000	37%	\$37,000
	(1)	(2)	(3)																																				
Age	Amount of purchase price available for	% of purchase price that you can withdraw	Death Benefit																																				
67	\$100,000	100%	\$100,000																																				
70	\$94,990	95%	\$94,990																																				
75	\$87,630	88%	\$87,630																																				
80	\$78,210	78%	\$78,210																																				
85	\$66,000	66%	\$66,000																																				
90	\$54,780	55%	\$54,780																																				
95	\$37,000	37%	\$37,000																																				
Death Benefit is the amount that would be paid to your estate if you die (column 3).*																																							

* The product rating calculation and the access to capital and death benefit amounts are determined by government regulation.

* The product rating calculation and the access to capital and death benefit amounts are determined by government regulation.

5 – Text Only

Retirement Income Product Fact Sheet

For a purchase price of \$100,000

Product Name	Product D
Average Annual Income (net of fees and taxes)	\$4,700
Product Rating measures the extent to which your income is secure – that is, your income is not influenced by downturns in the share market, outliving your funds, and increases in inflation.*	This product is rated 2 on a risk measure from 1 to 7 <i>(where 1 means that the average income from the product is not secure and 7 means that the average income is secure)</i>
Potential Income Shape	<ul style="list-style-type: none"> Regular income payments for the rest of your life are not guaranteed Income is not CPI-indexed, so payments will not increase annually in line with inflation Income is withdrawn at the minimum withdrawal rate set by the government The income you withdraw may vary with changes in asset returns such as shares You can withdraw additional money as and when needed How long you receive income payments will depend on how much you withdraw each year and the investment returns you receive
Access to Capital is how much of the purchase price you would receive if you stopped using the product at any time in retirement.*	If you stop using this product at any time in retirement: <ul style="list-style-type: none"> You will get back any balance in the investment account
Death Benefit is the amount that would be paid to your estate if you die.*	If you die, any balance in the investment account will be paid to your estate
* The product rating calculation and the access to capital and death benefit amounts are determined by government regulation.	