

Slide 13

NATIONAL
ACADEMY
OF SOCIAL
INSURANCE

Payouts at Retirement

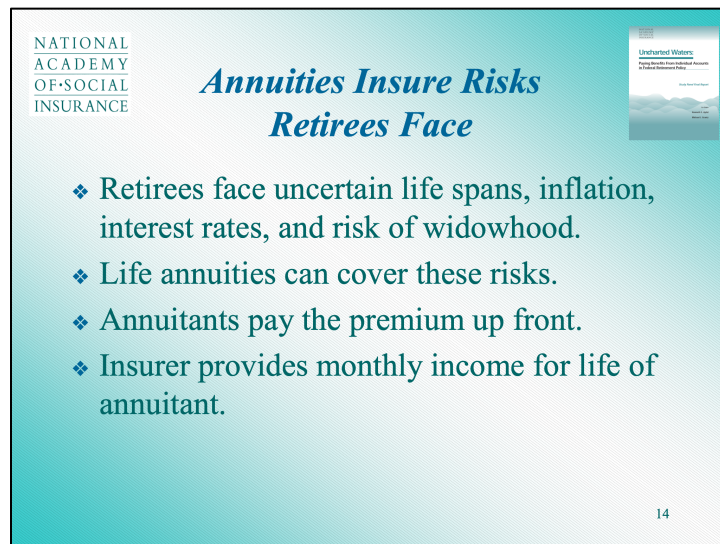
*Jeffrey Brown, University of Illinois
at Urbana-Champaign*



- ❖ Annuities insure retirees' financial risks
- ❖ Pros and cons of mandatory annuities
- ❖ Joint-life annuities: symmetric or contingent
- ❖ Features affects price: inflation, spouse protection
- ❖ Guarantees and prices
- ❖ Timing and interests of heirs

13

Our next speak is Jeff Brown of the University of Illinois. He will discuss some features of annuities.



NATIONAL
ACADEMY
OF SOCIAL
INSURANCE

***Annuities Insure Risks
Retirees Face***

- ❖ Retirees face uncertain life spans, inflation, interest rates, and risk of widowhood.
- ❖ Life annuities can cover these risks.
- ❖ Annuitants pay the premium up front.
- ❖ Insurer provides monthly income for life of annuitant.

14

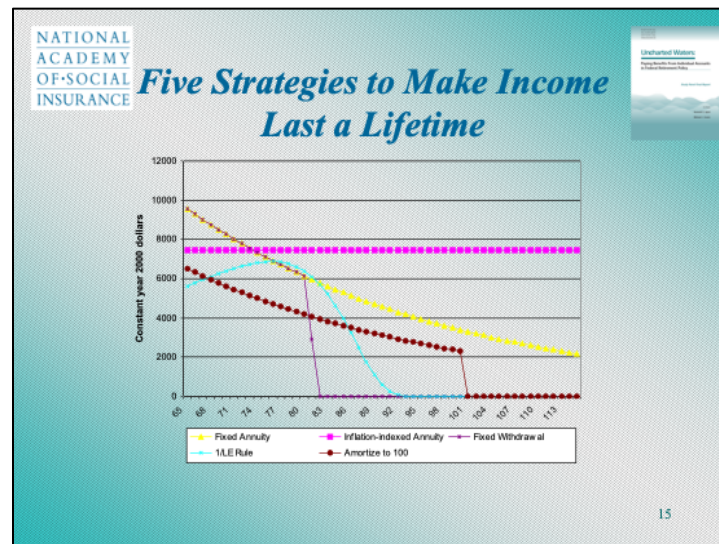
Retirees face at least four kinds of financial risk. They don't know how long they will live, how long their spouse might live, how prices might rise in the future, nor what returns they will earn on their savings

A life annuity is a financial product that can guarantee money will last for the rest of a retiree's life. From the buyer's perspective, the downside of a life annuity is that you pay the full price up front and you can't undo the purchase later.

When you buy a life annuity, the insurance company has a contractual obligation to pay you a guaranteed income for life. The annuity shifts your longevity risk and investment risk to the insurance company. Because the insurer pools many annuitants, the extra funds from those who die early are used to cover the annuity costs of those who live a long time.

Other strategies to spread your money over the rest of your life – such as taking phased withdrawals – do not guarantee the money will last as long as you live.

Consider a healthy 65-year-old who has a savings account of \$100,000 and who want to produce income for life. Let's compare 2 annuity options and 3 "do-it-yourself" strategies that this individual could employ.



Fixed Annuity. If a 65-year-old bought a *fixed annuity* with \$100,000, it would pay about \$9,700 a year, assuming unisex pricing. Given annual inflation of 3 percent, after 25 years the annuity would be worth just over \$4,630.

Inflation-Indexed Annuity. If the same person bought an *inflation-indexed (real) annuity*, the payments would start out lower, at about \$7,450 a year, but they would rise with inflation. The annuity would maintain its purchasing power for as long as the annuitant lived.

Fixed Withdrawal Strategy. If the annuitant followed a *fixed withdrawal* strategy, each year he or she would simply withdraw about \$9,700 from the account—the amount available from a fixed annuity. This person saves the upfront purchase price of an annuity, but would not be able to provide \$9,700 annually for life, since this approach lacks the annuity provider’s risk pooling advantage. If this individual continued to withdraw \$9,700 a year, the money would run out after about 16 years and the individual would have nothing left.

1/LE. A *one-over-life-expectancy* approach might make the money last longer. Each year the individual would divide the total account balance by remaining life expectancy and

withdraw the resulting amount. For example, if at 65 the individual expected to live 18.3 more years, he would withdraw $(1/18.3 \times \$100,000)$ from his savings and leave the rest to earn investment returns. The next year, he would divide his remaining resources by 17.3, and withdraw accordingly. While this strategy would make his money last longer than Strategy #3, withdrawals would decline to negligible amounts if this person lives much beyond age 90.

Amortize to 100. Finally, this individual could *amortize-to-age-100* and try to make the money last until he or she reaches 100 years of age. One would choose an investment with a secure return and then determine how much he could withdraw each year to make his money last until his 100th birthday. If he lived beyond that age, he would have no income.

As this figure indicates, an annuity would be an advantageous choice.

The slide features a teal background with a white border. In the top left corner is the logo for the National Academy of Social Insurance. The title "Should annuities be required?" is centered in a large, bold, italicized blue font. To the right of the title is a small thumbnail image of a report cover titled "Unconstrained Access". Below the title, there are two bullet points with teal diamond markers, followed by a paragraph of text. The number "16" is in the bottom right corner.

NATIONAL
ACADEMY
OF SOCIAL
INSURANCE

Should annuities be required?

- ❖ Pros: People can't outlive their money. Mandatory annuities cost less on average.
- ❖ Cons: Mandatory annuities would make some people (e.g. short-lived) worse off. Limits choice.

Report shows four options: (1) Broad access to retirement funds; (2) Mandatory annuities with special protections; (3) Option 2 as a default; (4) Option 2 only up to some level.

16

Should the purchase of annuities in an individual account program be mandatory?

Compulsory annuities would eliminate the risk that people would outlive the money in their accounts, and they cost less, on average, because short-lived people are required to buy a product that might not be a good deal for them. Optional annuities cost more because people with short life expectancies tend not to buy them while people who expect to live a long time are more likely to annuitize.

The report considers four potential options for retirement payouts. One option gives retirees *Unconstrained Access* to their accounts. It is based on the federal employees' Thrift Savings Plan. A second option is at the other end of the spectrum; it requires the purchase of annuities that are indexed for inflation and that automatically provide survivor benefits for widowed spouses. A third option makes annuities the default, but would allow other payouts, while the last option requires annuities only up to some level. This policy decision is likely to be influenced by the purpose of the accounts, the level of Social Security defined benefits that go with the accounts, and whether people are required to have accounts. If the accounts are supposed to provide basic income security, policymakers might want mandatory, inflation-indexed annuities with spousal

protections. On the other hand, if the accounts are voluntary savings on top of traditional Social Security, policymakers might favor the broader choices of option one.

NATIONAL
ACADEMY
OF SOCIAL
INSURANCE

Annuity Features Affect Price

*Monthly annuity for \$10,000 premium, retiree age 65
with 65-year-old spouse*

Single-life

Flat monthly payment	\$80
Inflation indexed	\$62

Joint-Life, Inflation-Indexed Annuities

100 percent survivor benefit	\$50
Two-thirds survivor benefit	
Payment when both alive	\$57
Payment to survivor	\$38

17

A basic life annuity covers the risk of outliving one's income, but additional annuity features can help mitigate other retirement risks such as loss of purchasing power and the loss of a spouse's income.

Addition protection for inflation-indexing and survivor benefits lowers the size of the annuity a given account will buy. With \$10,000, a 65 year-old retiree could buy a life annuity of about \$80 a month. If the annuity is indexed to keep pace with inflation at 3 percent a year, it would start out lower, about \$62 a month. If it would continue inflation-indexed payments for as long as either the retiree or spouse lived, the annuity would start out lower still, about \$50 a month. This assumes the full annuity is paid to the widowed person.

If the annuity for the widowed person would drop to two-thirds of the prior amount, the initial annuity would be about \$57, while the payment to the widow or widower would be \$38.

[Assumptions underlying the annuity estimates are consistent with assumptions used in the 2003 report of the Social Security Trustees. It is assumed that the annuity buyer and

spouse are both age 65, purchase of annuities is mandatory, the federal government would provide the annuities, inflation is assumed to be 3.0 percent per year, and the real interest rate is 3.0 percent per year, such that the nominal interest rate is 6.1 percent.]

NATIONAL
ACADEMY
OF SOCIAL
INSURANCE

Guarantees and Heirs

- ❖ Ten-year certain annuity pays for 10 years even if annuitant dies before 10 years
- ❖ Refund-of-premium annuity pays at least as much as the purchase price.

Guarantees seem to be popular, though some experts believe they are not a wise buy.



18

Some annuity contracts guarantee a payment to a death beneficiary if the annuitant dies shortly after buying an annuity. A *ten-year-certain* annuity, for example, guarantees payments for ten years even if the annuitant dies in less than ten years. A *refund-of-premium* annuity guarantees that the annuity will pay out at least the nominal purchase price. For example, if the annuitant paid \$10,000 for a life annuity and died after receiving only \$1,000, then \$9,000 would be paid to the death beneficiary.

Guarantees lower the monthly annuity that a given premium will buy. For \$10,000, one could buy a single-life, inflation-indexed annuity of \$62 a month. Adding a 10-year certain feature would lower the monthly amount to about \$58, while a refund of premium annuity would lower the amount to about \$55 a month.

Many experts believe guarantee features are not a wise purchase on purely economic grounds. Yet annuity buyers often choose guarantees, perhaps because the guarantees help their heirs avoid disappointment and serious regret if the annuitant paid a large amount for a life annuity and died soon after.

NATIONAL
ACADEMY
OF SOCIAL
INSURANCE

***Timing of Annuity Purchase
and Heirs***

- ❖ Purchase of an annuity ends the chance to bequeath the money used to buy annuities (unless the annuity has guarantee features).
- ❖ Delaying annuity purchase lengthens the period when accounts can be left to heirs.

19

The interests of heirs could influence the question of whether and when to buy an annuity. From a strictly selfish perspective, named beneficiaries might want the account holder to delay buying an annuity so that the money remains inheritable. An unmarried account holder, for example, might name an adult child, friend or other relative as a death beneficiary. If the account holder died before buying an annuity, the entire balance would go to the heir. If the account was used to buy an annuity, the bequest is gone.

The timing tradeoff affects married retirees, too. If one spouse is expected to die relatively soon, the couple might be wise to delay or avoid buying joint-life annuities. The survivor's income in the form of a single-life annuity based on the balance in both accounts would be considerably higher than the survivor payment from joint-life annuities from both accounts. So, both single and married retirees might want flexibility in the timing of annuity purchase.