

Innovations and Trends in Annuities: Qualifying Longevity Annuity Contracts (QLACs)

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SUMMARY

The recent shift from defined benefit (DB) to defined contribution (DC) pensions reduced lifelong guaranteed income for many American workers. Qualifying Longevity Annuity Contracts (QLACs) offer a potential way to secure income for older ages while limiting retirees' exposure to investment risks. QLACs are deferred longevity annuities, i.e., contracts between individuals and insurance companies in which the insurance company promises lifelong monthly benefits starting at a future date in exchange for a lump sum premium payment. The Internal Revenue Service (IRS) defined QLACs and made them eligible for certain fiscal benefits in 2014. The market for QLACs is therefore still in its infancy.

This document first explains QLACs and similar financial products. To qualify as a QLAC, the interest rate must be fixed for the entire accumulation period, benefit payments must start at or before age 85, the premium must be paid from an Individual Retirement Account (IRA) or defined contribution (DC) plan, and the premium must not exceed the lesser of \$125,000 or 25% of the source balance. An advantage of QLACs over other longevity annuities is that the premium is disregarded for the purpose of required minimum distribution (RMD) rules, which stipulate that individuals must start withdrawing at least certain minimum amounts starting at age 70½.

We document sales of various types of annuities since 2001 as a baseline to gauge future adoption of QLACs and similar products. We also present QLAC prices for a number of scenarios. Separately, we point out that household surveys collect only limited information on annuity holdings and suggest survey questions to learn about the adoption of QLACs.

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1. INTRODUCTION

Annuities have been, and continue to be, an important part of the economic well-being of retired workers. In 2014, the Internal Revenue Service (IRS) and the Department of Treasury finalized rules that facilitated the use of certain types of annuities in 401(k) and other employer-sponsored retirement plans (IRS 2014). Of particular interest for this report is the use of longevity annuities such as Qualifying Longevity Annuity Contracts (QLACs). The Department of Treasury notes that these products “provide a cost-effective solution for retirees willing to use part of their savings to protect against outliving the rest of their assets, and can also help them avoid overcompensating by unnecessarily limiting their spending in retirement.”¹ The primary goal of this study is to create a detailed overview of QLACs and other deferred annuities. The first QLAC products have recently been introduced to the market and it is hoped that this study will establish a baseline against which future developments around deferred annuities can be measured.

The remainder of this report is organized as follows. Section 2 explains the features of the various types of annuities, the differences among them, and commonly purchased optional features. Section 3 quantifies the size of the market for annuity products over the past several decades, including on number of policies, annual contributions, and annual pay-outs. Section 4 lists QLAC price quotes for various scenarios of policyholder age and sex, and for several features of QLAC products. Section 5 reviews information on annuities as collected in household surveys. Section 6 concludes and offers language for consideration by household surveys to collect information on QLACs.

2. BACKGROUND ON INDIVIDUAL ANNUITIES

The defining feature of all annuities is that they provide payments to the policyholder for a period of time, often the life of the policyholder (NAIC 2013). Beyond this commonality, the term annuity describes a variety of financial products, each with its own set of investment and insurance features. Generally, annuities may be viewed as investment vehicles with embedded insurance against both investment and longevity risks.

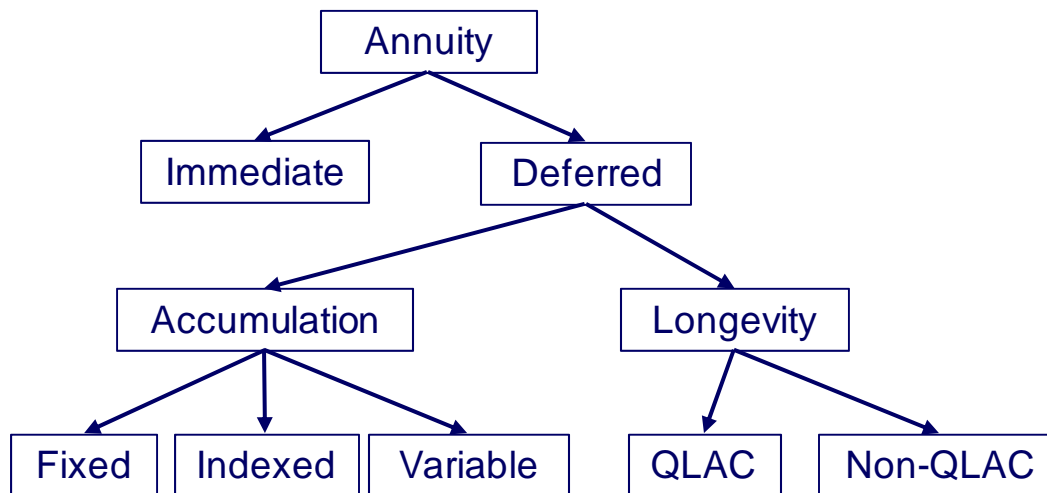
For the purpose of this discussion, we distinguish the following types of annuities:

- Immediate annuity: regular payments begin shortly after the purchase;
- Deferred annuity: payments begin at a future date (or the account is cashed out prior to the start of payments);
- Longevity annuity and QLAC: payments begin at a future date and the account may not be cashed out. A QLAC is a longevity annuity that meets certain requirements of the IRS.

Figure 1 shows the main types of annuities and how they are related to each other. We now discuss each category in turn.

¹ <https://www.treasury.gov/press-center/press-releases/Pages/jl2448.aspx>.

Figure 1. Taxonomy of Annuities



Immediate Annuity

The first main division of annuities is between immediate and deferred. When a policyholder buys an immediate annuity, he or she pays a lump sum to the insurance company in exchange for monthly payments that begin soon after the premium is paid. The payments are typically fixed in nominal terms, but may be adjusted for inflation. These payments can last for the life of the annuitant, the longer of the life of the annuitant and that of his or her spouse, or the longer of a fixed number of payments or the life of the annuitant or spouse (Poterba 1997).² For example, payments may continue for 5 years or the life of the annuitant, whichever is longer.

Contracts for immediate annuities are generally relatively easy to understand and compare with one another, because both the premium and the payments by the insurance company are clearly specified. This type of annuity is usually most attractive to those who are already retired and want to ensure a certain amount of lifetime income (Lankford 2010).

Deferred Annuity

In contrast to immediate annuities, when a policyholder buys a deferred annuity, he or she makes one or more premium payments and, in exchange, the insurance company agrees to make a stream of payments that commences at some future date. The period before payments are made to the annuitant is called the “accumulation phase” and the subsequent period is referred to as the “pay-out

² As described, this is a “life annuity.” In contrast, an “annuity certain” (also known as a “structured settlement”) provides periodic payments for a fixed number of years. For example, a lottery may enter into a structured settlement for the benefit of winners who take their prize in a fixed number of annual payments, or a life insurance benefit may be paid out in a fixed number of installments. This document focuses primarily on life annuities.

phase.” During the accumulation phase, the premium payment(s) are invested on behalf of the policyholder. At the end of the accumulation phase, the account balance is converted into a benefit flow and the pay-out phase starts. During the pay-out phase, a deferred annuity is similar to an immediate annuity. Some deferred annuities offer a return-of-premium feature which guarantees that the annuity payments will at least be equal to premium payments.

Deferred annuities are distinguished in (deferred) accumulation and (deferred) income annuities. They serve different investment objectives and differ in their pooling of mortality risks.

Accumulation Annuity

Deferred annuities may offer certain tax benefits (discussed below) and protection against market risks. Some investors purchase a deferred annuity for those benefits without necessarily the intent to hold the annuity beyond the accumulation phase. Deferred accumulation annuities may be suitable for such investors, since they can be cashed out during the accumulation phase.

There are three major types of deferred accumulation annuities—fixed, indexed, and variable. The type of annuity determines how the annuity account balance changes value (NAIC 2013).

In a *fixed deferred annuity*, the account balance earns interest at a fixed rate. This rate is set by the insurance company, generally every year, and can increase or decrease from year to year. Typically, these contracts are guaranteed to not decline in value, i.e., they specify a minimum guaranteed interest rate of at least 0% (NAIC 2013).

The account balance in an *indexed annuity* (also known as an equity-indexed or fixed indexed annuity) changes based on the value of a market index, such as the S&P 500. Like a fixed annuity, the indexed annuity usually offers a guaranteed minimum interest rate of at least 0%. The formulas used to determine the credit to the annuity account balance can be complicated. The insurance company generally credits only a portion of the gain in the index to the annuity account, in part to cover its costs to provide a minimum guaranteed credit. It may limit the credit in several ways. First, the credit is based on an index, but need not be equal to the change of an index. For example, the credit may be the average monthly value of the S&P 500 compared to its value as of January 1. If the index were rising linearly, the average monthly value is approximately equal to the index value on July 1 and the credit would be about one-half of the gain of the index. Second, the insurance company may calculate a partial credit using a “participation rate.” For instance, if the participation rate were 75%, then only 75% of the index gains would be credited to the account. Third, the insurance company may use a “spread rate” (also known as a “margin” or “asset fees”) which is a percentage deducted from the index gain before the annuity account is credited. For example, if the spread rate is 2% and the index gain is 5%, then the gain credited to the account would be 3% (5% minus 2%). Finally, indexed annuities may also have an “interest rate cap,” or an upper limit on possible returns regardless of the performance of the index (FINRA 2012, NAIC 2013).

A *variable annuity* offers the annuitant the ability to allocate his or her account balance to a number of investment options known as “subaccounts” during the

accumulation phase (NAIC 2013). These investment options are typically mutual funds. Additionally, many variable annuities allow the annuitant to allocate a portion of his or her account balance to a fixed account which earns a fixed interest rate. The value of a variable annuity changes based on the performance of the underlying investments and can go up or down (SEC 2011). Unlike other types of deferred annuities, variable annuities are securities registered with the Securities and Exchange Commission (FINRA 2012).

Regardless of the type, deferred annuities have several common features. One of these is the ability to withdraw some or all of the account balance during the accumulation phase. The contract typically stipulates a penalty for withdrawals before a certain period has passed. This “surrender charge” or “withdrawal charge” usually starts at around 7% of the value of the withdrawal (but can reach as high as 20%) and declines yearly until it reaches zero, typically around seven or eight years after the date of purchase. However, many annuities allow the owner to annually withdraw a small amount, typically up to 10%, without penalty (CNN Money 2016).

Another common feature is that deferred annuities offer a guaranteed death benefit. That is, if the annuitant dies during the accumulation phase his or her survivors receive some or all of the value of the annuity (NAIC 2013).

Many deferred annuities offer optional features or guarantees (“riders”) at an extra cost. We already mentioned the return-of-premium feature, which guarantees that (the estate of the annuitant) receives at least the premium payments. Separately, some riders allow the annuity owner to access some or all of the annuity’s value without penalties in the event of a terminal illness, nursing home entry, or long-term unemployment or disability (Townsend 2012). Others guarantee a certain level of income for life, regardless of the value of the underlying annuity account (NAIC 2013). Others provide for benefit payments that are adjusted for inflation. Insurance companies charge a fee for each rider.

Similar to immediate annuities, deferred annuities offer a number of choices when the owner decides to “annuitize” or begin receiving payments. These choices include receiving payments for the annuitant’s life, the longer of the annuitant’s or spouse’s life, a set time period, or the longer of a set time period or the annuitant’s lifetime.

Longevity Annuity

As noted above, deferred annuities may be attractive for their tax benefits and protection against market risks, even without the intent to hold the annuity beyond the accumulation phase. If the objective is to secure an income flow later in life, a (deferred) longevity annuity may be well suited.

A longevity annuity (also known as an income annuity) is very similar to an accumulation annuity—in exchange for one or more premium payments, the insurance company promises to pay out an income flow after a certain period. The pay-out phase typically starts at age 80 or 85. An important differentiating feature is that no withdrawals are permitted during the accumulation phase and that the contract has no value if the annuitant dies (CNN Money 2006).³ As a result, mortality

³ An exception exists for contracts with a return-of-premium feature.

risks are pooled across policy holders and the pay-out is typically greater than the pay-out on an accumulation annuity. For a typical retiree, allocating 10–15 percent of wealth to a longevity annuity creates spending benefits comparable to an allocation to an immediate annuity of 60 percent of wealth or more (Scott 2008).

A QLAC is a longevity annuity that meets certain IRS requirements that were published in 2014 (IRS 2014). The interest rate must be fixed for the entire accumulation period and the pay-out phase must begin at or before age 85 (adjustable for mortality changes). Premiums must be paid from a DC plan or IRA and must not exceed 25% of the source of funds. The total premium for an individual must not exceed \$125,000 (adjustable for inflation).⁴ The annuity may be payable for the life of the policy holder, a surviving spouse, or other designated beneficiary. The annuity may be fixed in nominal terms or adjusted for inflation. Optionally, a QLAC may offer a return-of-premium feature in the form of a single-sum death benefit paid to a beneficiary in an amount equal to the excess of the premium payments made with respect to the QLAC over the benefit payments made under the QLAC.

DC plan sponsors that include a QLAC option in their plan are subject to a fiduciary duty with respect to the choice of QLAC provider. In July 2015, the DOL clarified safe-harbor provisions related to the QLAC vendor selection process (DOL 2015).

IRAs and DC plan balances are tax-qualified, i.e., contributions were made from pre-tax income and investment returns have not yet been taxed. Normally, when an account holder or plan participant wishes to make a purchase with IRA or DC funds, the withdrawal is taxed. However, in the case of a QLAC purchase, the funds remain tax-qualified and taxes continue to be deferred.

QLACs offer several potential benefits over other longevity annuities. First and foremost, QLAC premium amounts are disregarded for the purpose of required minimum distribution (RMD) rules, which stipulate that individuals must start withdrawing at least certain minimum amounts starting at age 70½.⁵ The implication is that a QLAC extends tax deferrals beyond the time that withdrawals would be required under RMD rules in the absence of a QLAC.⁶ Second, the IRS (2014) regulation states that having a limited set of easy-to-understand QLAC options available for purchase enhances the ability of employees to compare the products of multiple providers. Third, since QLACs may be purchased with DC plan assets, they are expected to be marketed through employer pension plans, which may reduce adverse selection of policy holders and lower the price of QLACs.

⁴ Depending on the insurance company, policyholders may add premium to an existing QLAC, subject to the cap on total premium.

⁵ Industry experts indicated to us that many retail policies are sold to people who are nearing age 70½, shortly before the RMD rules apply. In the group market, purchases are expected to be made at a slightly younger age, because policies may be purchased only at distributable events such as retirement or job separation.

⁶ For example, suppose the balance of an IRA is \$500,000. Without a QLAC, the basis for calculating the RMD is \$500,000. If the IRA owner uses \$100,000 to purchase a QLAC, the IRA balance drops to \$400,000. As a result, the basis for calculating the RMD becomes \$400,000 and the RMD is lower than if the basis were \$500,000.

VanDerhei (2015) found that QLACs can provide a significant increase in retirement readiness for the longest-lived quartile, compared with only a small reduction for the general population.

Tax Treatment

Investment gains of deferred annuities and longevity annuities are tax-deferred until withdrawals or regular payments are made. DC plans and IRAs also operate under a tax-deferral principle, so an annuity that was purchased with DC plan or IRA assets (“qualified annuity”) generally does not confer additional tax benefits with respect to investment gains. However, if the RMD is binding, a QLAC postpones the time at which taxes will be due.⁷

Consider the after-tax market. Tax benefits apply to annuities purchased with after-tax assets (“non-qualified annuity”), because investment returns are tax-deferred until the time benefits are paid. That said, when money is withdrawn from a non-qualified annuity the gains are taxed at the owner’s normal income tax rate, not the capital gains rate. Furthermore, withdrawals are subject to a 10% federal tax penalty if money is withdrawn before the annuitant has reached age 59½. A potential advantage of a non-qualified annuity is that unlike in a qualified retirement plan, minimum distributions are not required once the owner reaches age 70½ (IRI 2013).

Credit Risk

Annuity payments should be made for the life of the beneficiary, but could be terminated in case the insurance company becomes insolvent. The risk of bankruptcy of the insurance company is a form of credit risk. It is particularly relevant for annuity products, which can be in force for several decades.

All 50 states and the District of Columbia operate guaranty funds to help pay the claims of financially impaired insurance companies. State laws specify the lines of insurance covered by these funds and the dollar limits payable. At this time, the maximum liability for the present value of annuity contracts ranges from \$100,000 to \$500,000, and the most common limit (in 31 states) is \$250,000.⁸

3. THE MARKET FOR ANNUITIES

Annuities became widely available in the United States in the 1930s and remain widespread today (Poterba 1997, ACLI 2015). This section presents estimates of the aggregate market for annuities in the United States. Some figures are not directly

⁷ As discussed above, the premium of a QLAC is disregarded for RMD calculations. The same generally holds for a qualified immediate annuity (IRS 2004). However, an immediate annuity starts paying benefits shortly after the purchase, and those benefits are therefore immediately taxable. In contrast, a QLAC starts paying benefits after a certain period, and taxes are deferred until benefits are paid. The account value of a qualified deferred accumulation annuity is included in the basis for RMD calculations.

⁸ For details see <http://www.annuityadvantage.com/stateguarantee.htm> and <http://www.nolhga.com/factsandfigures/main.cfm/location/lawdetail/docid/8>.

comparable because of different sources or different treatment of certain types of annuities.

Table 1 shows total annual premiums (or “considerations”), benefit payments, withdrawals and surrenders, and policy reserves for the past 30 years, converted into 2015 dollars. The table relates to immediate, deferred, and longevity annuities, but excludes annuities certain. In 2014, premiums on new or existing policies amounted to \$362 billion; \$74 billion was paid in benefits, \$257 billion was withdrawn during deferred annuities’ accumulation phase, and total policy reserves were \$3.3 trillion. In recent history, sales of annuities generally increased through 2000, reached a recent low in 2009, and rebounded in more recent years.

**Table 1. Annuity Premiums, Payments, Withdrawals, and Policy Reserves
(billions of 2015 dollars)**

Year	Premiums	Payments		Reserves		
		Benefits	Withdrawals	Individual	Group	Total
1985	118.7	46.8	NA	213.6	667.5	881.1
1986	181.0	49.0	NA	262.0	769.3	1,031.3
1987	185.0	50.7	NA	325.8	819.0	1,144.8
1988	206.9	51.4	NA	388.3	869.3	1,257.6
1989	219.8	56.2	NA	458.0	905.9	1,363.9
1990	234.1	59.1	NA	511.6	935.4	1,447.0
1991	215.1	63.7	NA	571.4	954.0	1,525.3
1992	224.1	63.4	NA	643.1	945.7	1,588.8
1993	256.6	66.1	NA	720.7	987.2	1,707.9
1994	244.7	64.6	148.4	771.1	979.4	1,750.5
1995	246.3	75.4	164.0	924.0	962.2	1,886.2
1996	269.5	77.1	174.9	939.6	1,043.1	1,982.7
1997	291.7	81.3	208.0	1,023.4	1,125.2	2,148.6
1998	333.7	87.8	224.6	1,110.0	1,228.9	2,338.9
1999	384.4	88.9	282.1	1,242.7	1,290.6	2,533.4
2000	422.1	94.5	294.5	1,212.4	1,321.5	2,534.0
2001	336.3	73.9	202.5	1,264.7	764.8	2,029.4
2002	354.8	72.4	188.3	1,291.2	750.8	2,042.0
2003	345.9	73.6	180.7	1,510.5	853.4	2,363.9
2004	347.2	76.7	204.4	1,645.6	893.5	2,539.2
2005	336.3	77.6	231.0	1,717.4	920.5	2,637.9
2006	355.9	83.6	279.6	1,788.3	948.7	2,737.0
2007	359.2	82.7	299.9	1,846.5	963.8	2,810.3
2008	361.2	76.7	260.5	1,565.0	787.8	2,352.7
2009	255.8	74.1	201.8	1,793.9	881.6	2,675.5
2010	319.2	76.2	200.1	1,934.7	938.2	2,872.9
2011	352.9	78.5	217.2	1,939.0	917.9	2,856.9
2012	359.3	76.4	223.9	2,005.3	989.1	2,994.4
2013	292.7	80.1	226.7	2,174.6	1,046.7	3,221.3
2014	362.0	73.9	257.0	2,230.5	1,051.1	3,281.6

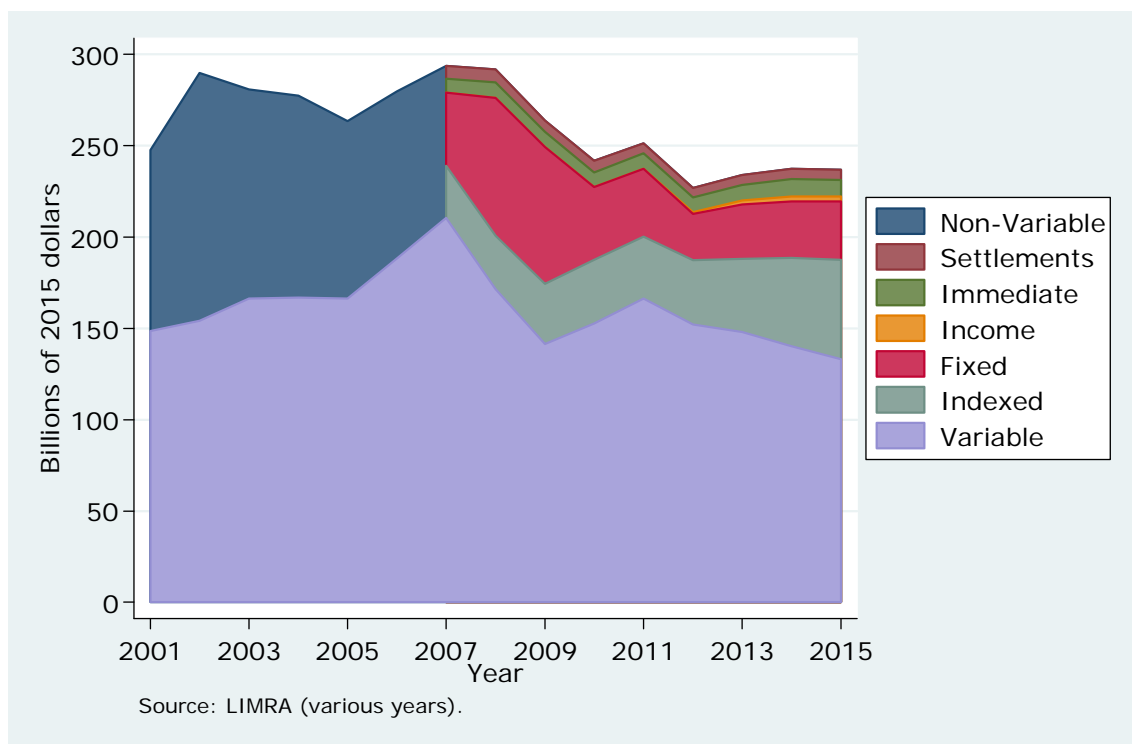
Source: ACLI (2015).

In 2014, far more deferred annuities were outstanding than immediate annuities. According to data from the National Association of Insurance Commissioners, the individual market included 2.7 million active immediate annuities and 50.3 million

deferred annuities. The group market included an additional 21.7 million annuities (NAIC 2015).⁹

Figure 2 shows annual sales of annuities, by detailed type and year. (Table 2 contains the underlying figures.) This figure is based on LIMRA Secure Retirement Institute's U.S. Individual Annuities Sales Surveys, which cover 94%-97% of the market (LIMRA, various years).¹⁰ It captures the individual market only, i.e., it excludes the group market. All sales are converted into billions of 2015 dollars. LIMRA published details on non-variable annuities starting in 2007.

Figure 2. Individual Annuity Sales Estimates, by Type and Year



According to LIMRA (various years), the sale of variable deferred annuities in the individual market peaked at \$210 billion in 2007 and has since declined to \$133 billion in 2015. In contrast, indexed annuities grew over this period, from \$29 billion in 2007 to \$55 billion in 2015. Fixed deferred annuities sold strongly in 2008 and 2009, shortly after the equity market downturn, and accounted for \$32 billion in 2015. Deferred income annuities (longevity annuities) are relatively new and accounted for less than \$3 billion in 2015. Sales of immediate annuities and structured settlements summed to \$9 billion and \$6 billion, respectively.¹¹

⁹ In the group market, a contract may cover multiple "certificates," which we label "annuities" here.

¹⁰ The LIMRA website provides more detail about 2007 and later than for earlier years.

¹¹ A structured settlement is an agreement allowing a person who is responsible for making payments to a claimant to assign to a third party the obligation of making those payments (ACLI 2015). An annuity contract is often used to make structured

**Table 2. Individual Annuity Sales Estimates, by Type and Year
(billions of 2015 dollars)**

Year	Deferred			Income	Immediate	Structured settlements	Total non-variable	Total
	Variable	Fixed	Indexed					
2001	149						99	248
2002	154						136	290
2003	166						115	281
2004	167						110	277
2005	166						97	263
2006	188						92	280
2007	210.3	40.1	28.6		7.4	7.1	83.2	293.6
2008	171.4	75.2	29.4		8.7	7.0	120.3	291.7
2009	141.4	74.7	33.0		8.3	6.2	122.2	263.6
2010	152.7	39.6	34.9		8.3	6.3	89.0	241.7
2011	166.4	37.0	33.9		8.5	5.4	84.8	251.2
2012	152.2	25.5	35.0	1.0	7.9	5.2	74.6	226.8
2013	147.9	29.8	40.0	2.2	8.4	5.4	85.9	233.8
2014	140.3	30.8	48.3	2.7	9.7	5.4	96.9	237.2
2015	133.0	31.9	54.5	2.7	9.1	5.5	103.7	236.7

Source: LIMRA (various years). Details on the components of non-variable annuities (fixed, indexed, income, immediate, and structured settlements) were not available prior to 2007, but the "total non-variable" sales are comparable before and after 2007.

As is evident from Figure 2 and Table 2, sales of longevity (income) annuities are small compared to those of other annuities, making up about 1% of the market for individual annuities. QLACs are a subset of longevity annuities, and they are still in their infancy. As of December 2015, 11 insurance companies offered QLACs to individual IRA investors and only one offered QLACs to DC plans (Iacurci 2015). Of particular interest in future years will be the sales trend in QLACs.

4. ILLUSTRATIVE QLAC PRICES

The IRS (2014) regulation that sets out QLAC requirements argued in favor of only a limited set of easy-to-understand QLAC options, so that the products of multiple providers can be readily compared. Table 3 shows monthly benefit quotes for several policyholder scenarios and QLAC options. We retrieved these quotes from www.immediateannuities.com. The base scenario, listed first, is for a 65-year-old male resident of California who contracts to receive monthly benefits upon reaching age 85. The benefits would continue for the life of the policyholder, be fixed in nominal terms, and there would be no pay-out if the policyholder dies before reaching age 85.¹² The quotes are for a one-time premium of \$125,000 in the retail

settlement payments. For example, a lottery may enter into a structured settlement for the benefit of winners who take their prize in a fixed number of annual payments.

¹² To be precise, the policyholder's date of birth is 8/18/1951 and benefits will commence on 8/18/2036. The quotes were retrieved on 8/19/2016.

market.¹³ The median quote for this baseline scenario is a benefit of \$4,253 per month (about \$51,000 per year).

Table 3. Monthly Benefit Quotes for Illustrative \$125,000 Retail QLAC Policies

Scenario	Monthly benefit			Difference at median from first scenario
	Median	Minimum	Maximum	
Baseline: 65-year-old male, benefits start at age 85, no COLA, Life Only, California	\$4,253	\$3,450	\$5,614	-
Baseline scenario, except:				
Female	\$3,449	\$2,908	\$4,399	-18.9%
55-year-old male	\$5,624	\$4,762	\$7,757	32.2%
60-year-old male	\$4,996	\$4,159	\$6,914	17.5%
70-year-old male	\$3,473	\$2,674	\$4,007	-18.3%
Benefits start at age 80	\$2,265	\$1,906	\$2,673	-46.7%
Resident of Texas	\$4,274	\$3,474	\$5,614	0.5%
Joint annuity (wife also age 65)	\$2,467	\$2,162	\$2,645	-42.0%
Benefit to increase 2% annually	\$3,930	\$3,784	\$4,060	-7.6%
Return of Premium	\$2,931	\$2,446	\$3,862	-31.1%

Source: www.immediateannuities.com (retrieved on 8/19/2016).

The second and subsequent rows of Table 3 show quotes for other scenarios. Unless noted below, each scenario generated quotes from eight insurance companies. Each row changes one aspect relative to the baseline scenario:

- The median quote for a 65-year-old woman (otherwise similarly situated as the baseline man) is \$3,449 per month. As shown in the final column, this benefit is 19% lower than that for a 65-year-old man, reflecting a longer life expectancy for women than for men.¹⁴
- Holding the commencement of benefits constant, the younger the policyholder upon purchase, the longer the accumulation period and the greater the monthly benefits. The median quote for a 55-year-old is 32% higher than for a 65-year-old. At age 60 the quoted benefit is 17% higher and at age 70 it is 18% lower than at age 65.
- Quoted benefits that start five years earlier, at age 80, are 47% lower than at age 85. The difference reflects a shorter accumulation period, a longer pay-out period, and substantial mortality risks between age 80 and 85.
- Quotes differ slightly by state of residence. We compared California and Texas only; the median quoted benefit was 0.5% higher in Texas than in California.

¹³ The retail (or individual) market contrasts with the group market. As noted earlier, only one insurance company currently offers a group QLAC, i.e., a QLAC as part of a defined contribution retirement plan. Group prices may vary depending on the expected mortality experiences of the group among other factors.

¹⁴ Following legal precedent and EEOC (2010), QLAC prices do not differ by sex in the group market. While unisex pricing could diminish demand from men, industry experts pointed out to us that group plans face lower marketing and administrative costs, so that unisex prices can be competitive with retail prices for men. Also, group prices may be affected by the group's life expectancy.

- Assuming both husband and wife are age 65, joint-life (100% survivor) benefits are 42% lower than single-life benefits for a man. Benefits for this scenario are based on seven quotes.
- Benefits may be fixed in nominal terms or they may increase annually. For example, the median quoted benefit that is scheduled to increase by 2% annually is 8% lower than a fixed benefit. Benefits for this scenario are based on four quotes; only one quote was available (and not shown here) for benefits that increase in tandem with the Consumer Price Index (CPI).
- Finally, the median quote for contracts with a Return-of-Premium feature is 31% lower than Life-Only contracts. As explained above, a Return-of-Premium feature promises benefit payments that are at least equal to the premium amount.¹⁵

In addition to median quotes, Table 3 shows minimum and maximum monthly benefit quotes. The range of quotes appears quite large—the maximum quote can be more than 50% higher than the minimum quote. In part, the differences appear to relate to credit ratings of the insurance companies. Companies with higher credit ratings tend to promise lower monthly benefits, and vice versa. We found a similar pattern in the market for immediate annuities; see Brien and Panis (2011). However, credit ratings alone do not explain all quote differences. It is possible that insurance companies differ markedly in their long-term assumptions over rates of return, mortality trends, or other factors. Industry experts suggested to us that they expect it can take more than five years for the market to settle down on appropriate prices.

5. EVIDENCE FROM SURVEY DATA

Several household surveys ask about income from annuities, but very little information is available about annuities in the accumulation stage. Among the exceptions are the following.

The *Panel Study of Income Dynamics* (PSID) asks about the disposition of DC pension rights if the respondent left a job. The balance may have transferred to a new employer, rolled over into an IRA, left to accumulate, or converted into an annuity. If the respondent reported converting the balance into an annuity, a follow-up question asks about the age at which benefits began or the age at which benefits will begin. We did not locate any questions about deferred annuity purchases that were not tied to a job separation.

The *Survey of Consumer Finances* (SCF) asks separately about IRAs and after-tax investments. For IRAs, the respondent is asked how the assets are invested, with an emphasis on uncovering the fraction that is invested in stocks or stock mutual funds. If the respondent indicates that the IRA is invested in “Annuities,” no follow-up questions are asked. For after-tax investments, the SCF asks whether the respondent owns an annuity, whether the annuity can be cashed out, how much the cash value would be, and how the annuities are invested (stocks or bonds).

¹⁵ As explained by www.immediateannuities.com: “If you die prior to the start date your beneficiaries receive a refund of the premium. If you die after payments have begun, your beneficiaries receive a cash refund of the remaining unpaid premium amount.”

The *Health and Retirement Study* (HRS) asks disposition questions about DC pension rights upon job separation that are similar to those in the PSID. In its section on IRAs, the HRS asks about the fraction invested in stocks or stock mutual funds but not whether any was invested in an annuity product. If a withdrawal was reported, the HRS asks whether any was used to purchase an annuity and how much the benefit payments are. Deferred annuities may be identified by zero benefit payments. The HRS thus asks about annuity purchases from IRA assets during the past two years, not about annuity contract holdings or cumulative purchases. Finally, it asks about ownership of other assets, which may include annuities, but without detail on the type of those other assets.

Unrelated to annuities, the HRS poses the following question to respondents who reported having made a withdrawal from an IRA:

“Did you [...] take out only the ‘minimum withdrawal option’, that is, the amount required to avoid a tax penalty?”

This question was asked up to three times, corresponding to up to three IRAs from which the respondent reported withdrawals. (The question was not asked for withdrawals from DC plans.) Table 4 tabulates the fraction of respondents who reported taking only the required minimum distribution in any of their IRAs, by respondent age.¹⁶ The table excludes respondents under age 72, i.e., IRS regulations with respect to required minimum distributions may be expected to apply to all respondents in the table.¹⁷

¹⁶ Questions on IRAs owned by household members are answered by the so-called financial respondent. For each IRA, the financial respondent indicated whether the IRA was owned by the financial respondent or his/her spouse, if any. We attributed each IRA to an individual and used that individual’s age and sampling weight to construct Table 4. The universe consists of respondents who reported taking a withdrawal from one or more of their IRAs. If a respondent reported owning multiple IRAs, his or her responses were consolidated. Surprisingly, 18% of IRA-owning respondents aged 72 or older reported making no withdrawals (not shown in the table), i.e., these are excluded from Table 4.

¹⁷ To explore whether respondents understood the question on minimum withdrawals, we also tabulated responses for respondents under age 70 and for whom RMD rules were irrelevant. Approximately 24% of such respondents reported taking minimum withdrawals—not zero, but well below the 82% reported by older respondents.

Table 4. Fraction of IRA-Owning Respondents for Whom the Required Minimum Distribution Was Binding

Age	Number of individuals who made an IRA withdrawal	Number who took only the minimum required	Weighted percent
72-74	3,641	2,862	79.2%
75-79	4,678	3,826	81.9%
80-84	2,614	2,204	84.4%
85-89	948	803	84.7%
90+	201	161	83.1%
Total	12,082	9,856	81.9%

Source: 1998-2014 HRS.

Note: Individual counts are raw; percentages are weighted by respondent sampling weights.

Table 4 shows that as much as 82% of respondents who withdrew funds from their IRA took only the minimum required. This suggests that the required minimum distribution rules are often binding and that exemption of QLAC premiums for the purpose of calculating minimum distributions can be an attractive feature to many IRA owners.

Very little external evidence is available about whether the required minimum distribution rules are binding. Insofar we are aware, the only other evidence is from Brown, Poterba, and Richardson (2014), who found that 60% of retirees who were drawing down a DC balance from a single financial services provider elected minimum distributions in 2008.

Finally, the Gallup Organization (“Gallup”) periodically surveys owners of non-qualified annuity contracts for the Committee of Annuity Insurers. A total of 11 surveys were conducted between 1993 and 2013. As noted in Gallup (2013), the principal purpose of the survey was to obtain a profile of the demographic characteristics of owners of individual annuity contracts and to gain insight into their attitudes toward a variety of issues relating to retirement savings and security, including how they save for retirement, what they think about saving for retirement generally, what sources of funds they used to purchase their annuity contracts, the reasons they bought them, and how they plan to use them. Among others, Gallup (2013) found the following.

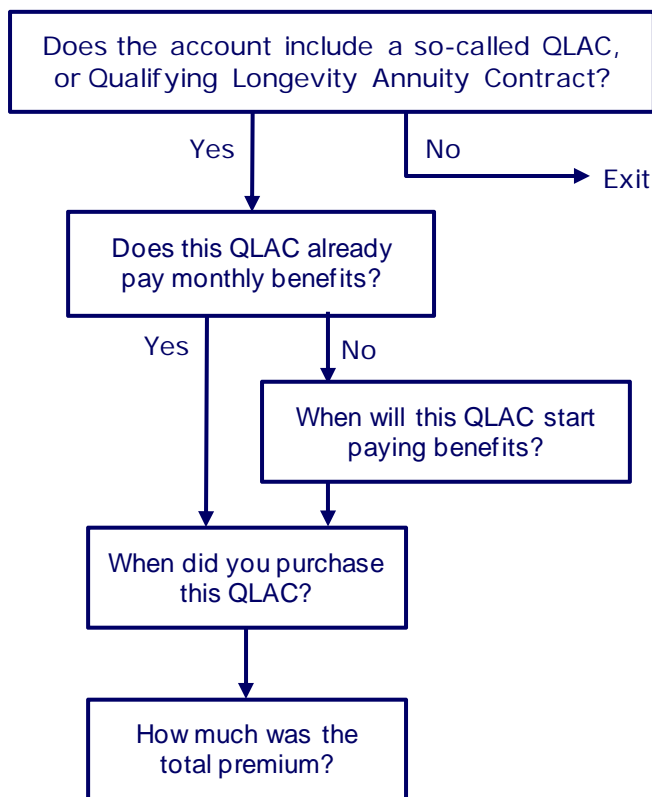
- The majority of individual annuity owners purchased their first annuity before age 65 (86%), including 47% who were between the ages of 50 and 64 years old.
- The majority (65%) of individual annuity owners are retired.
- The median annual household income of individual annuity owners is \$64,000 and 80% have total annual household incomes under \$100,000.
- The most common stated reason for purchasing an individual annuity is that it is perceived as a “safe purchase” (90% indicating this was very or somewhat important in their decision).
- Almost nine in 10 (86%) cite the tax treatment of individual annuities as important to their savings decision.
- Nearly nine in ten (87%) agree that insurance and investment guarantees are an important aspect of individual annuities.

- Variable annuities are more widely held than fixed annuities (75% vs. 25%). The mix has fluctuated over time. In 1995, 33% were variable and 67% fixed.
- When asked how they expect to withdraw most of their money from their annuities, almost half of annuity owners (49%) intend to receive most of their annuity contract values in some form of periodic payment. In particular, one-quarter intend to commence a series of payments guaranteed to last the longer of their lifetime or some stated period of years, while nearly a quarter (24%) plan to withdraw funds through periodic payments for a set number of years. Four in ten assert they do not anticipate taking money out except in case of emergency.

To our knowledge, the microdata of the Gallup annuity surveys are not publicly available.

6. CONCLUSION

At present, household surveys collect only limited or no information on deferred annuities in the accumulation stage. Given the potential for QLACs to play a significant role in meeting demand for retirement security in old age, it may be meaningful for such surveys as the PSID, SCF, and HRS to incorporate questions on QLACs. We suggest testing a few questions around IRAs. (It may be too early to include questions on QLACs in surveys' DC pension plans sections because only a single insurance company currently markets QLACs to such plans.) For example, several surveys ask about IRA balances and the percentage that is invested in stocks or mutual funds. The following could be worthwhile subsequent questions:



The market for annuities has played an important role in retirement planning for many years, with different products created to serve varying investment planning purposes. The market for QLACs is in its earliest years of development, but it has the potential to grow in light of the decline of DB pensions, uncertainty over the Social Security program, a nod of approval from the IRS, and QLACs' tax deferral benefits. Industry experts also expect a boost in demand once lifetime income disclosures become widely available to DC plan participants. Finally, since QLACs and other annuities pool mortality risks and use premiums from policyholders who die relatively young to support the oldest-old, their expected benefits exceed the amounts that retirees could prudently withdraw from savings. Put differently, QLACs and other annuities reduce leakage of assets from the retirement system. The coming years will tell whether QLACs gain meaningful traction and enhance American workers' retirement security.

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