

Conversations with CANNEX Q&A: Tim Paris of Ruark Consulting

Cannex’s Tamiko Toland discussed policyholder behavior with Tim Paris, CEO of [Ruark Consulting](#). Tim is an actuary who leads the actuarial consulting firm and has established the firm as a key source of detailed longitudinal studies on the behavior of people who own annuities. Even though annuities are contracts, “policyholder behavior” broadly refers to the effect of decisions made by those who own any kind of insurance. Better understanding of annuity owners’ elective actions have become crucial to the profitability and design of these products.

Summary results of the most recent FIA and VA studies are available on the company’s website:

[2021 FIA industry study](#)

[2020 VA industry study](#)

You can also check out this [video](#) of Ruark’s advisory council meeting for the 2020 VA industry study.

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What is policyholder behavior?

Traditionally, insurance covers risks that are outside of the control of the owner, like death. Over the past 25 years, we've seen the emergence of insurance products that provide benefits that are not triggered by death or another event. Instead, Tim noted that annuities now offer features that the buyer holds while alive and then has a choice in when to use it, such as commencing income.

“There are a lot of elective choices that annuity owners can make that make the risks a whole lot different than what most insurance companies and people are acclimated to from centuries of traditional life insurance providing mortality protection.”

How did the industry move away from traditional insurance?

Insurers already recognized that prospective annuity buyers were attracted to death benefit guarantees, which are “very much akin to traditional life insurance.” In the early 1990s, insurers began to expand their offerings to include benefits that could be used while they were alive. This includes benefits that guaranteed the account value and moved into those that guaranteed a minimum income stream from annuitization.

“The thought process as we got into the early 90s was, ‘Wow, can we as an insurance industry offer benefits that don’t require people to die to get it?’”

How does policyholder behavior change risk management for insurers?

Traditional life insurance and annuity risk is relatively easy to understand and price. In fact, when most people think about insurance products, they “tend to think about the most familiar things that have been around for a long time” like life insurance.

A variable annuity offers the basic economic proposition of mutual funds within a tax deferral wrapper where there are no tax consequences to reallocating those investments. This is very straightforward for insurance companies to offer, but it gets more complicated “when you start overlaying these guaranteed features” on top.

Lifetime income riders add risk that is very long-term, as people may buy them in their 50s or 60s while the income guarantees can extend 30 or 40 years. In addition to managing risks associated with equities and interest rates, insurers must make assumptions about how many people will keep their contracts and potentially claim these benefits. This accentuates the analytical challenge since the long period of these guarantees compounds these risks.

“With large numbers of policyholders, the math for traditional life insurance companies to understand the risks and potential costs is pretty straightforward.”

Does it matter that these guarantees are relatively new?

There isn't sufficient history to confidently predict future performance; in 2021, many of the most popular features haven't actually been around for very long. The most popular features today, like lifetime withdrawal (income) benefits, have only been sold for 15 to 20 years, giving actuaries and insurers very little experience.

This means companies work hard to use "a relatively short period of data" to create reasonable estimates for their pricing and product management for products that have obligations that extend far into the future. Tim commented that it therefore becomes that much more important to track how emerging experience each year compares to these estimates.

"Now with each year's emerging experience, companies are looking more closely at policyholder behavior experience data, whether it's surrender rates or income utilization rates."

Have insurers made bad guesses about policyholder behavior?

Unintentionally, it has certainly happened. For example, a feature in the late 1990s allowed the policyholder to withdraw money but still retain a rich death benefit guarantee. This affected an early generation of product design that became “an expensive problem for a few companies” but had an obvious fix.

After the credit crisis, Tim explained that the industry experienced more widespread problems with policyholder behavior that were “different and more adverse than what the insurance companies were expecting.” It’s difficult to predict how people will respond to a crisis until it happens, in this case a significant equity market drop with extreme movements in volatility and interest rates.

Companies had already anticipated behavioral changes during times of market stress and attempted to price their products accordingly, but even this did not accommodate the real experience in that period after the credit crisis. In fact, several insurers ended up disclosing “hundreds of millions of dollars” of increases in reserving directly because their assumptions were so different from their experience.

“The main thing we saw during and after the credit crisis is that termination rates for annuities turned out to be much lower than what folks would have expected ahead of time.”

What effects do you expect to see from COVID?

The onset of COVID has created a situation very similar to the credit crisis. Many policyholders are holding a guarantee that is attractive and difficult to replicate elsewhere, so we would expect them to keep their contracts in force longer. However, Tim expects that mortality among older policyholders in 2020 may be somewhat higher due to COVID, similar to the general population.

Particularly in the second quarter of 2020, any action on an annuity “that required a specific election was slowed.” Tim commented that it appeared there was a chill on actions that may have taken place if financial advisors and agents were able to meet with clients as usual to make these decisions. This may shift as older adults adapt to technology and virtual meetings.

The annuity behavior changes in 2020 were quite significant, and it is too soon to know whether these were brief anomalies or changes in trends as we saw in the years following the credit crisis. With so much money at stake, the industry will be monitoring this closely.

“It will be interesting to see if [policyholder behavior trends] persist like we saw following the credit crisis 10 years ago, in which case it could be a very expensive proposition for annuity companies.”

How do you think policyholder behavior does or will affect product design?

The experience we have gained over the last 10 or 15 years can inform product design today rather than relying on “best guess and cross your fingers.” Our understanding of the difference in behavior extends to many factors, such as: product types or subtypes, distribution channel, age, and contract size.

For example, when it comes to contract size, there are significant differences in behavior when it comes to the extremes, say under \$50,000 or over \$1 million. Tim speculated that this could be influenced by various factors, including buyer age and the relative engagement and guidance from a financial professional. Because this can greatly affect the cost of providing guarantees, new business limits are a serious consideration for product design.

“On the one hand it would be nice to treat everyone the same way. On the other, when the data shows you that there are certain segments of this market that behave differently, probably for good reason, how can you do anything but factor that into your product design and pricing?”

What is the relationship between delays in income and the income amount?

Many people know that a delay in starting Social Security can increase lifetime income payments because fewer payments will be made for the same life expectancy. Similarly, it makes sense that living benefits on annuities would also offer higher income payments for policyholders who delay the start of that income.

Generally, you would expect the actuarial value of income to be equivalent regardless of what the delay is, but this depends on each product design. Annuity features are not all identical and “it warrants some very careful analysis” for each policyholder to consider when it makes sense to start income. It may be best to start in year one or wait several years depending on the product design and the individual’s financial planning objectives.

In addition to individual considerations, the specific product design may “incentivize people to start earlier or start later,” Tim explained. The inclusion of features that incentivize delay has raised questions as to how policyholders were using their benefits: “Were people utilizing at low rates because they didn’t understand the product and were very inefficient or were they quite smart and were waiting to start something later for a higher benefit?”

However, now that there is enough data, we know that many people opt to initiate income early and that many wait until the end of deferral bonuses. In the intervening years, elections are dramatically less. Accurately quantifying these differences is critical for annuity companies’ pricing and risk management.

“The commencement rates for income on these types of guarantees are quite high in the first year that folks can take them and they’re quite high in the year right after these bonuses kick in.”

How does policyholder behavior change when the benefit is worth more than the account value?

“Moneyiness” describes the relative difference between the benefit and the account value and is particularly important when markets decline. When this is the case, policyholders are more likely to hold onto their contracts. One outstanding question revolved around whether they would also be more likely to start taking income from their benefits.

It turns out that this does not seem to induce policyholders to start taking income until after the deferral bonuses have taken full effect, which can be after ten years or more. However, after that point, people are significantly more likely to initiate withdrawals if the equity markets have dropped.

Tim pointed out that the decision to use a benefit is not entirely linked to the markets because the policyholder may have always intended to wait longer before starting income.

“There is actually very strong sensitivity on moneyiness for income, but you don’t really see it until after those deferral incentives and bonuses kick in.”

Cannex supports pricing, analysis, and presentation of annuities for industry partners. Contact us for more information on our platform or custom services.

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