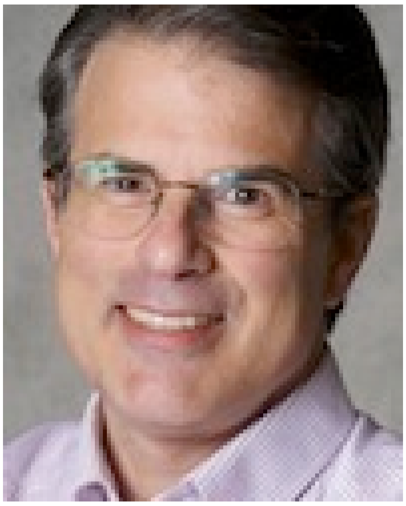
Tontines: A New Threat to Annuities?

By Kerry Pechter *Thu, Dec 14, 2017*

Life insurers like to say that they have a monopoly on longevity risk mediation. Digital tontines could prove them wrong.



Insurance companies "don't like the 't' word," one investment strategist told me. He meant tontines.

Just when life insurers and retirement providers thought they had weathered the interest rate nightmare, the robo nightmare, and the fiduciary nightmare, along comes a triple-edged nightmare: crypto-currencies, blockchain and tontines.

Just as global warming seems to bring stronger, more frequent hurricanes, the spread of digital technology seems to bring stronger, more frequent disruptions to the financial services industry.

The lead **story** in today's issue of *RIJ* describes a Gibraltar-based startup, TontineTrust. Its founder, Dean McClelland, claims to be close to launching a tontine. It will be financed by a cryptocurrency offering, record-kept by blockchain, managed by a "smart actuary," and represented on the web by one of those simple UX interfaces made famous by Betterment, et al.

First, what's a tontine? It's a fund that, like a life annuity, allows investors to pool their investment risk and longevity risk. In a life annuity, investors sell those risks outright to a life insurance company in return for a fixed guarantee lifetime income stream. In a tontine, investors retain some of the investment risk by accepting a variable income stream. And, by pooling instead of selling longevity risk, tontine participants can get bigger "mortality credits" for surviving.

Nothing is guaranteed, so no life insurer is needed. As York University finance professor and tontine historian Moshe Milevsky has written, that removes a lot of overhead and by itself significantly enhances the potential payout. Tontines can also hold riskier assets than an insurance company can, which implies bigger investment returns.

Opponents of conventional life annuities often claim that they're no good because "when you die, you forfeit your money to the insurance company." TontineTrust, in its whitepaper, says, "in a traditional annuity product, when a member passes away, their capital is in essence transferred to the shareholders of the life insurance company."

Life insurers could do a better job of neutralizing this accusation, because it's not exactly true. As Milevsky wrote to *RIJ* in an email:

"Any actuary will tell you that's ridiculous. Rather, an assumption is made about the expected number of deaths in a particular year and then those who survive (lucky) are subsidized by those who don't. Yes, there is some conservatism and profit baked-in into these assumptions, but it's simply incorrect to say that money forfeited by the unfortunate is retained by the annuity company."

If no annuity owner ever died, the life insurer's payments would still contain mortality credits. If no tontine participant ever died, the participants would only get their fair share of the returns of the pool of assets. (The fact that a tontine *requires* human deaths in order to pay off may help explain why they're not legal in the U.S.)

Sales of life annuities have always been low. If people don't buy annuities because the payouts are too low, then tontines could replace annuities as retirement income tools. But what if that's not the reason for low annuity sales? If Americans aren't buying life annuities because a) they already own big inflation-adjusted life annuities in the form of Social Security or b) they want to keep savings liquid, or c) they want their children to inherit their money, then tontines will face similar marketing hurdles.

But in the hands of the right entrepreneurs, cryptocurrencies and blockchain (along with the Internet itself and newfangled APIs) could make tontines—or "survivor funds," to use a less foreign and more upbeat term—a much bigger threat to insurance companies than they've been in the past.

Thanks to this year's bull market in bitcoin, everybody's talking about cryptocurrencies, smart contracts and blockchain, even if they don't really understand it. Whether that enthusiasm will last, or whether it's contagious enough to create enthusiasm for blockchain tontines, remains to be seen.

TontineTrust has an interesting marketing pitch. Imagine that you're a contestant in the Hunger Games, McClelland says. You're competing to stay alive, and the rewards for out-living everyone else are spectacular. (Tontines can be designed to make level payouts, but that would dilute the rewards for the few who live to 95 and beyond.)

Life insurers can take some comfort in believing that most older Americans will not hand over a big chunk of savings to a company they never heard of, especially one that uses a business model they don't understand. Are Boomers going to give their money to a new company in Gibraltar or to a familiar old brand name that advertises during NFL and college basketball games?

But complacency would be a mistake. Life insurers like to say that they have a monopoly on longevity risk mediation. Digital tontines could prove them wrong.