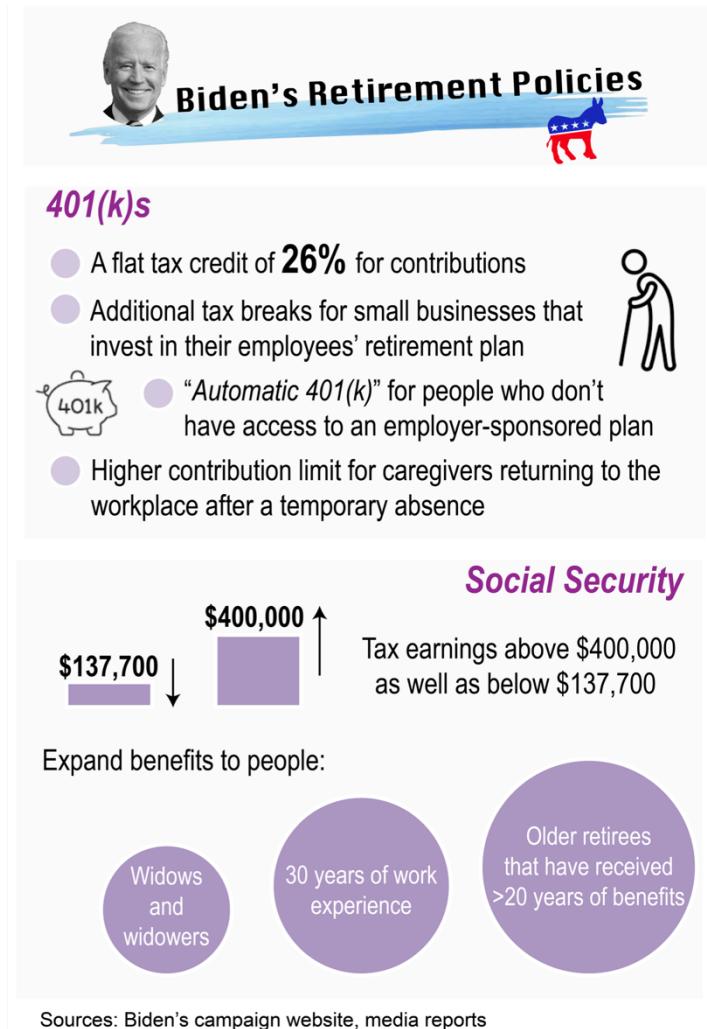


Ming Li_Portfolio

The following are some of my published data pieces at Financial Times:
More interactive works from my portfolio website: <https://mingligráficas.github.io>

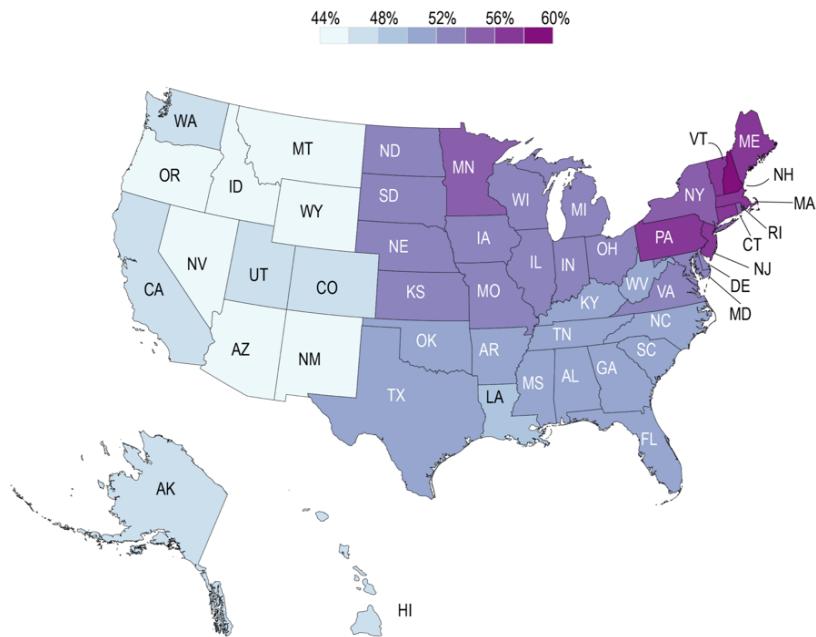
01.



02.

The Divide

Geographical patterns of life insurance ownership are striking on a map of the U.S.
The 2019 data reflect ownership rates of individual life insurance by households.



Individual Life Coverage in States

NH	NJ	CT	MA	VT	PA	ME	RI	NY	MN	MD	IL	IA
58.1%	57.9%	57.8%	57.0%	56.6%	56.3%	56.1%	55.3%	55.1%	54.3%	53.8%	53.3%	53.2%
MI	WI	DE	KS	NE	IN	VA	SD	MO	OH	ND	TX	GA
53.1%	53.0%	52.9%	52.8%	52.8%	52.7%	52.7%	52.6%	52.4%	52.3%	52.3%	51.4%	51.1%
SC	NC	TN	OK	AL	WV	KY	MS	AR	LA	DC	UT	HI
51.1%	50.8%	50.7%	50.5%	50.5%	50.3%	50.2%	50.1%	50.0%	50.0%	47.7%	47.6%	47.3%
AK	CA	WA	CO	WY	ID	AZ	OR	MT	NM	NV		
47.0%	46.4%	46.3%	46.1%	45.7%	45.6%	45.5%	45.3%	45.0%	44.8%	44.8%		

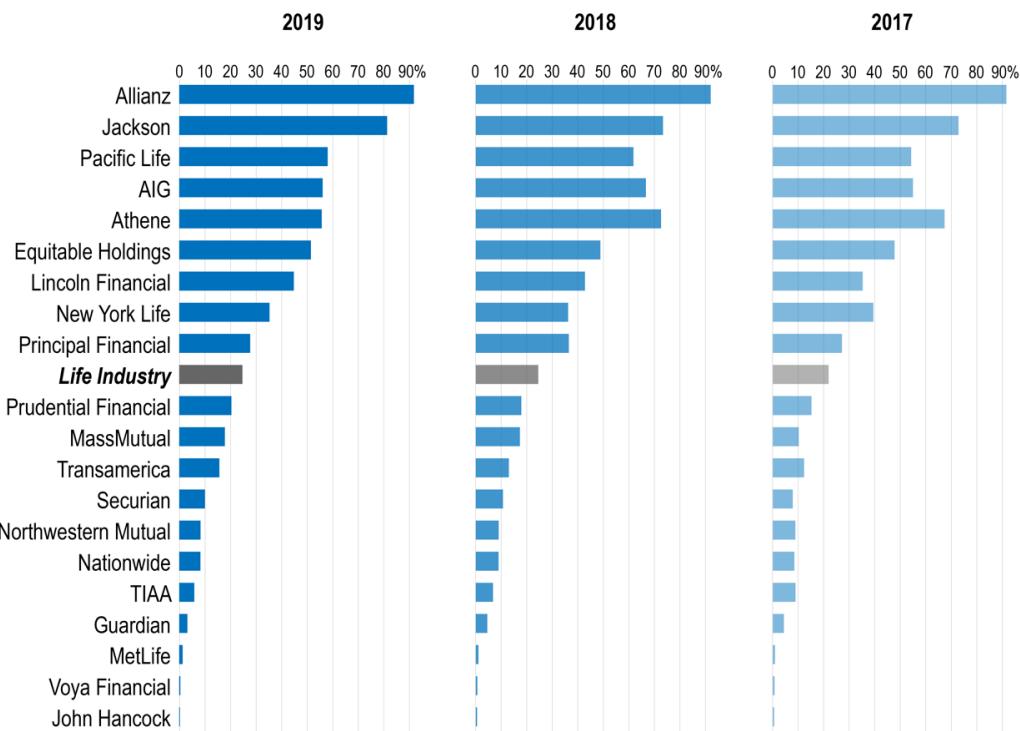
Source: S&P Global Market Intelligence

03.

Ming Li_Portfolio

New Individual Annuity Sales

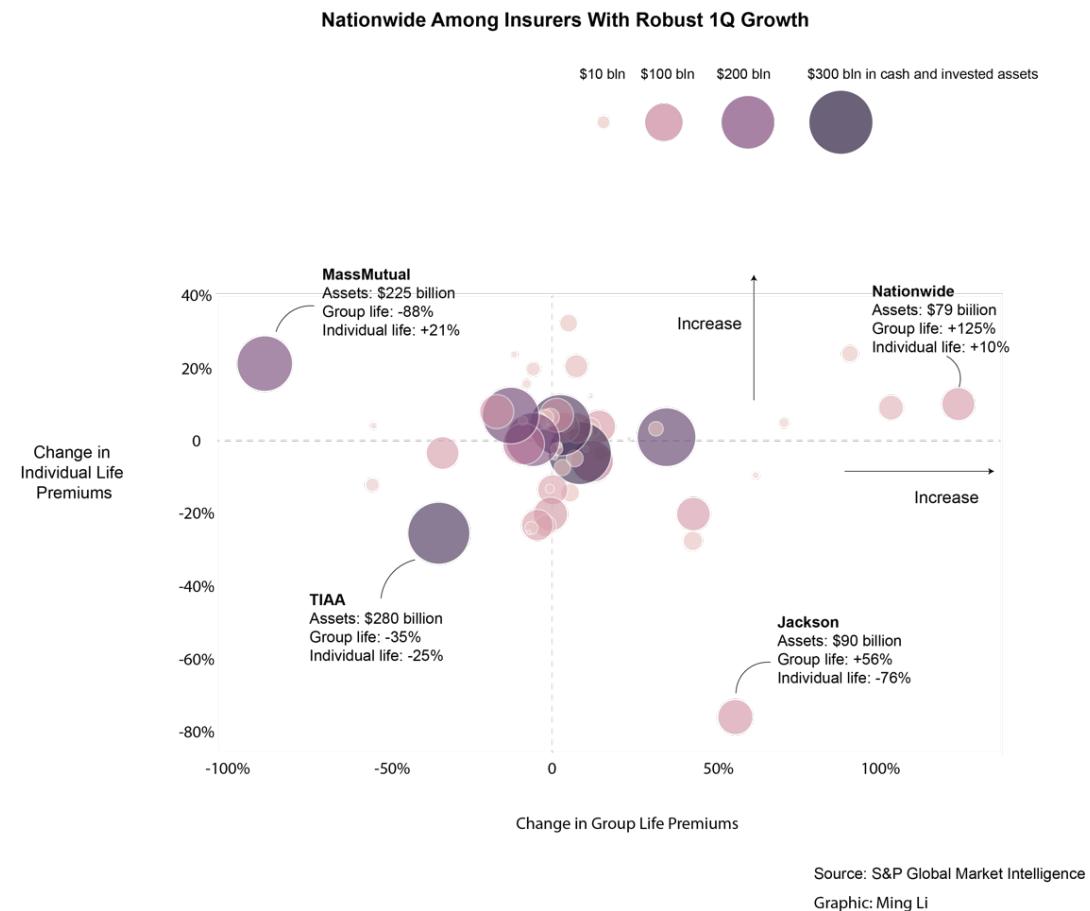
For the 20 largest life insurers in the U.S. (as measured in total sales in 2019), here is the percentage of total sales from new individual annuity sales from 2017 to 2019.



Source: S&P Global Market Intelligence

04.

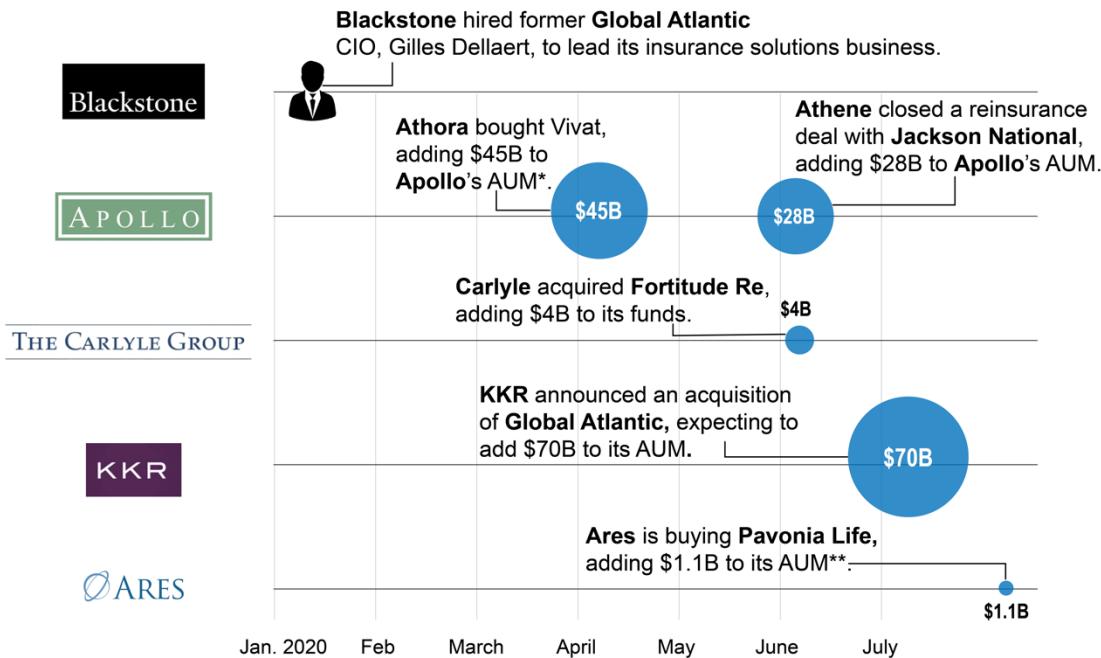
Ming Li_Portfolio



05.

Big Bet

Major private equity firms are increasingly interested in investing in insurers or their assets, with many buying blocks of business or entire companies outright in 2020.

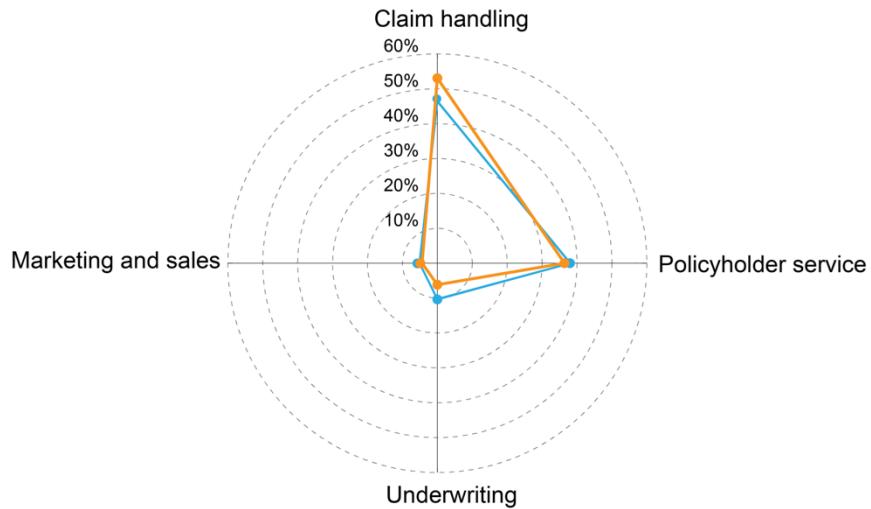


*AUM: assets under management

**Ares's deal to buy Pavonia Life is delayed.
Sources: PitchBook, company statements

Unhappy Customers

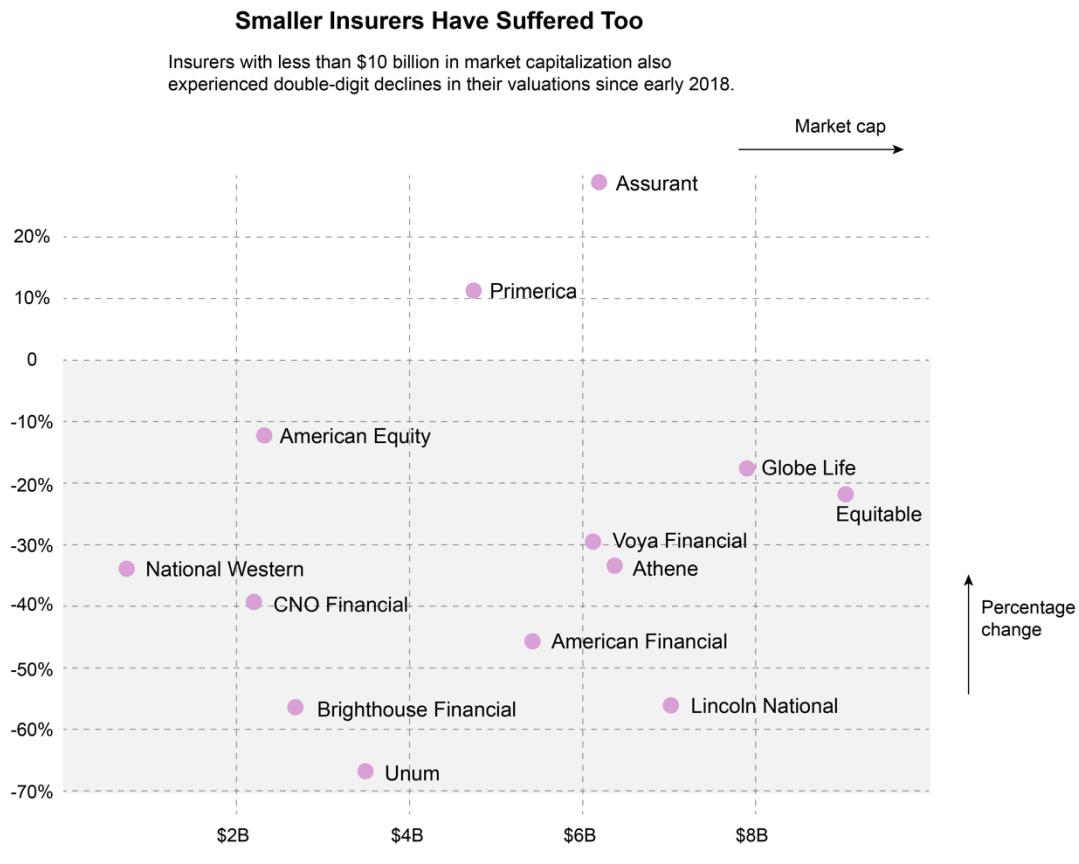
Complaints for life insurers were mainly in claim handling and policyholder service in both **2018** and **2019**.



Note: Companies included in the analysis are **MetLife, TIAA, Prudential, Northwestern Mutual, MassMutual, Lincoln National, Jackson National, John Hancock, Equitable and Principal.**

Source: NAIC

Data as of Aug. 10



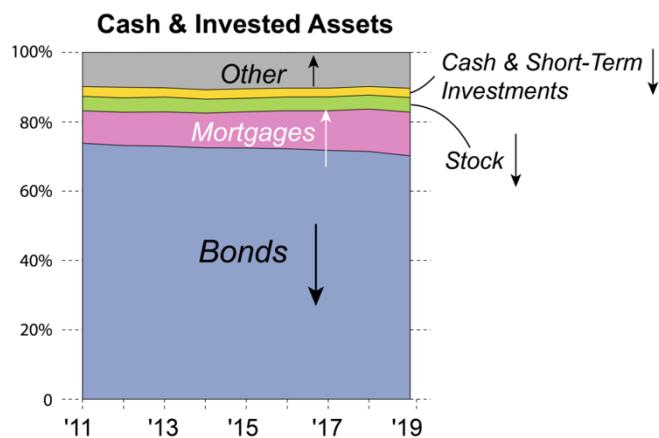
Source: YCharts

Data as of July 20

08.

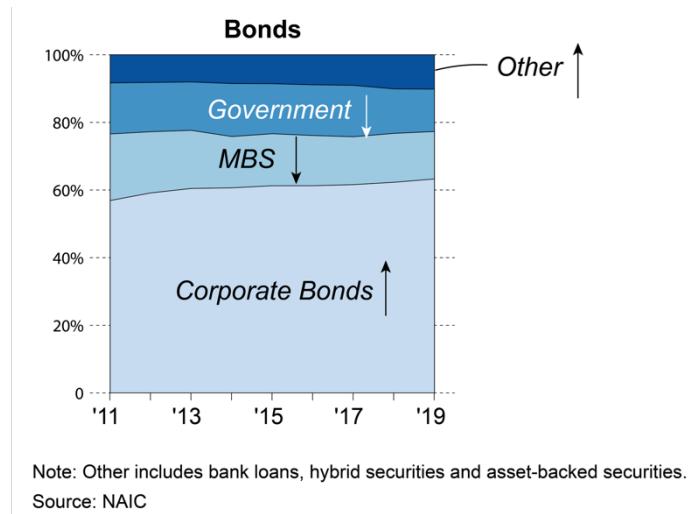
Declining Share

Insurer bond assets have been declining as a percentage of the total.



Note: Other includes derivatives, contract loans and a mix of investments, from private equity to aircraft leases, that are listed on Schedule BA.

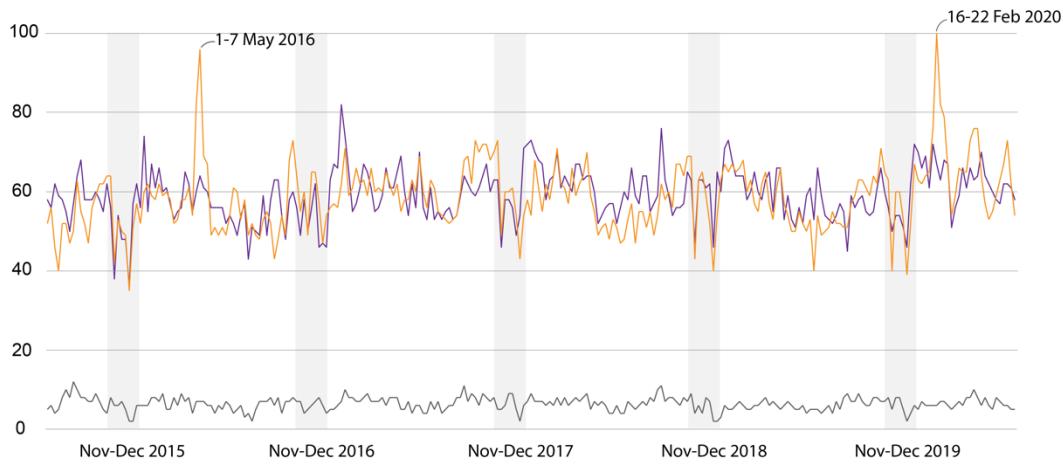
Ming Li_Portfolio



09.

Seasonal Effects

Americans' interest in searching for the phrases **term life**, **whole life** and **variable life** has fluctuated since 2015, but has typically dropped near the end of each year.



Source: Google Trends
Data as of July 16

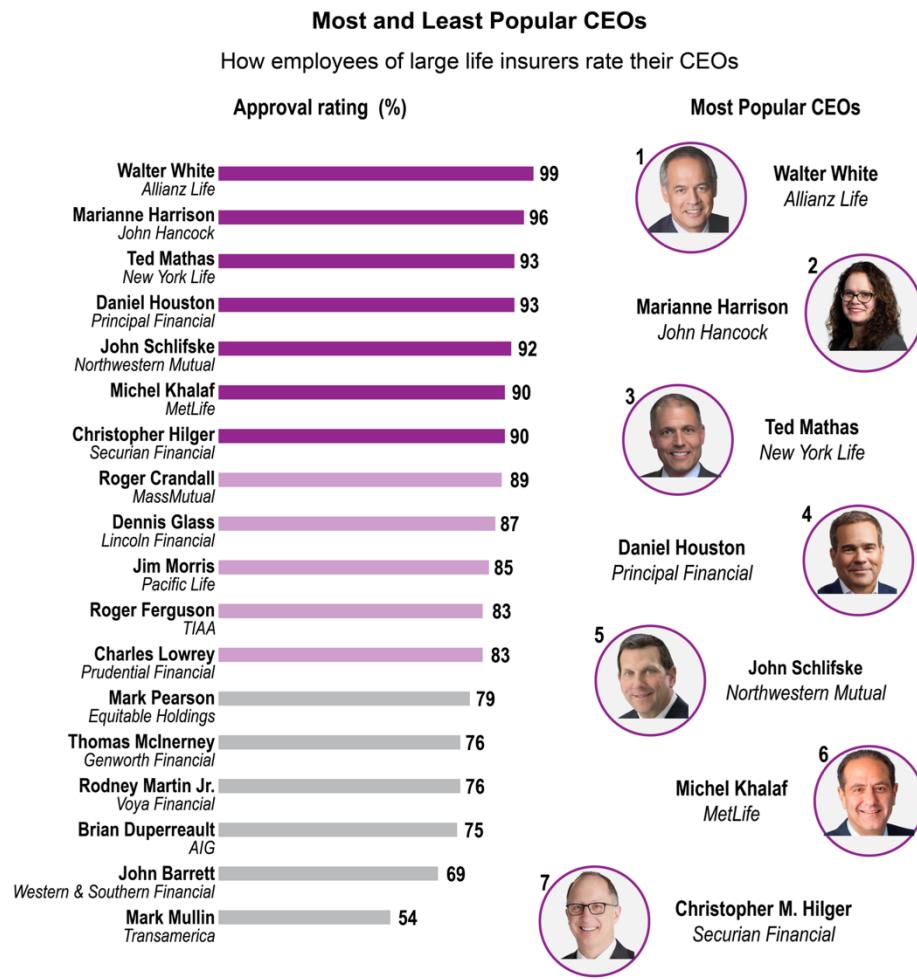
10.

Ming Li_Portfolio



11.

Ming Li_Portfolio

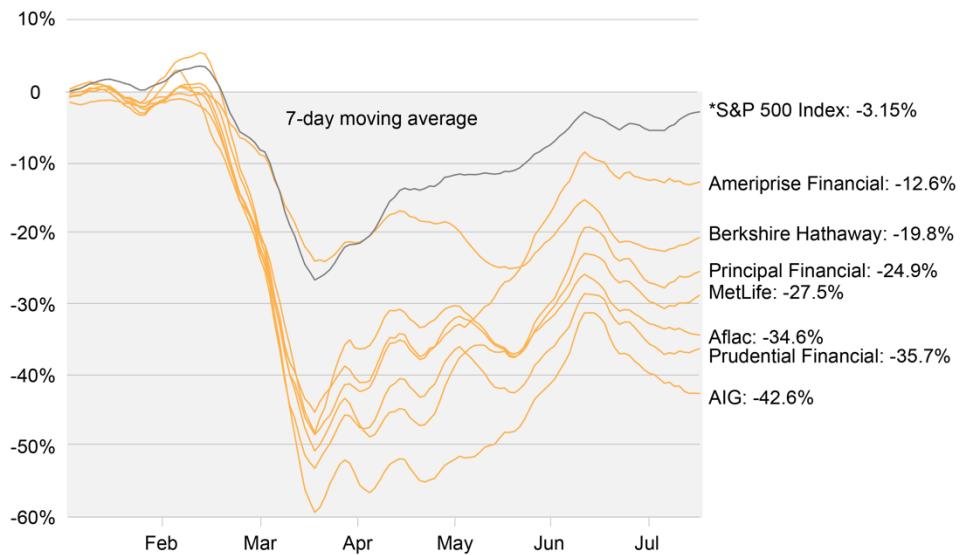


12.

Ming Li_Portfolio

Beaten Up

All life insurers with a market cap of more than \$10 billion have suffered double-digit declines in their share prices.



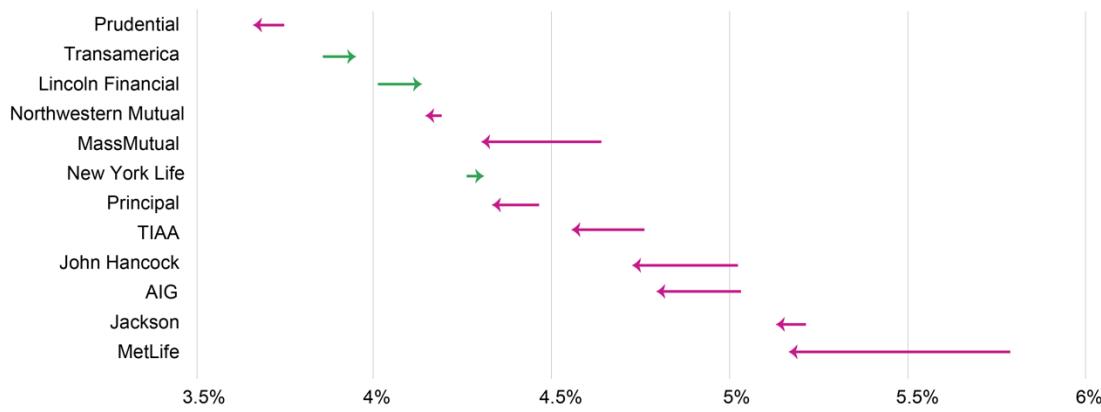
Source: Yahoo Finance

*Data as of July 13

13.

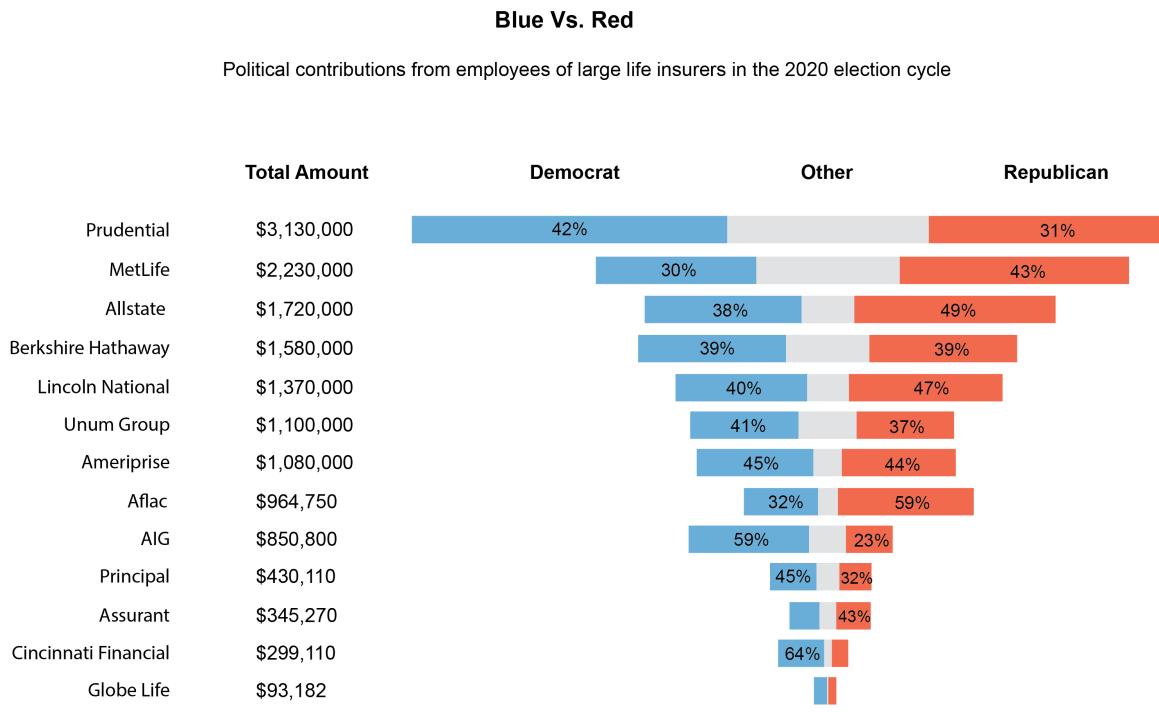
Sinking Returns

Most large insurers had **lower** yields on investments in 2019 compared with 2018.
In the few cases where yields were **higher**, they rose little.



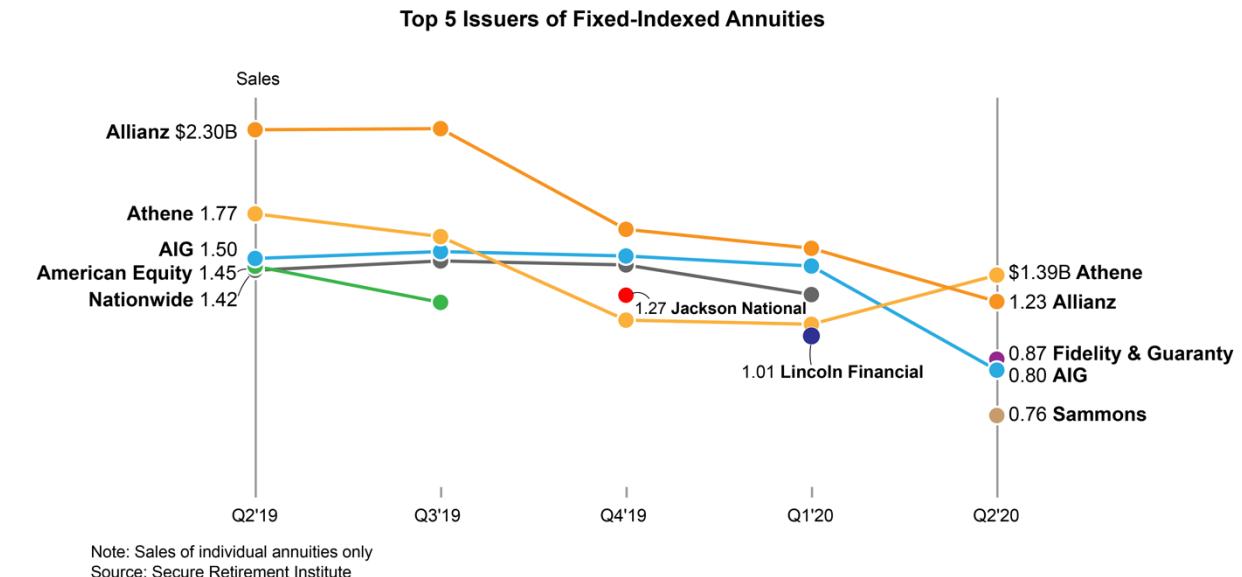
14.

Ming Li_Portfolio



Source: Floodlight

15.

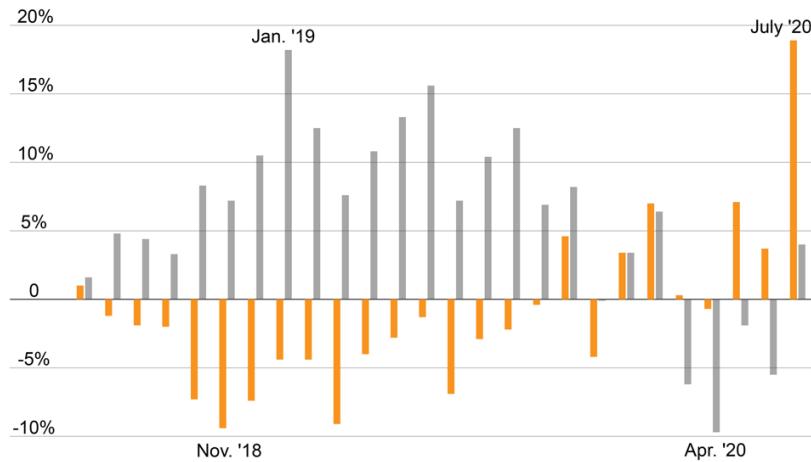


16.

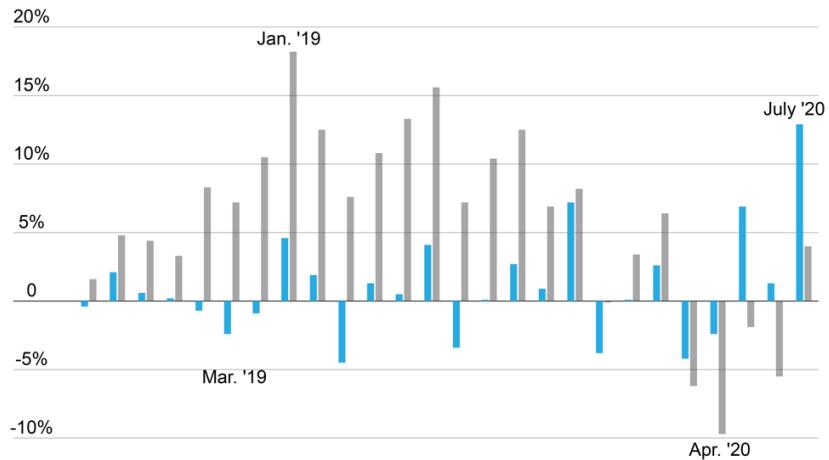
Rise of the Young

This year, the main growth in life insurance applications has come from the young (age 0-44) and middle-aged (44-60), not older Americans (age 60 or over). Figures show year-over-year changes in applications.

Young vs. Old



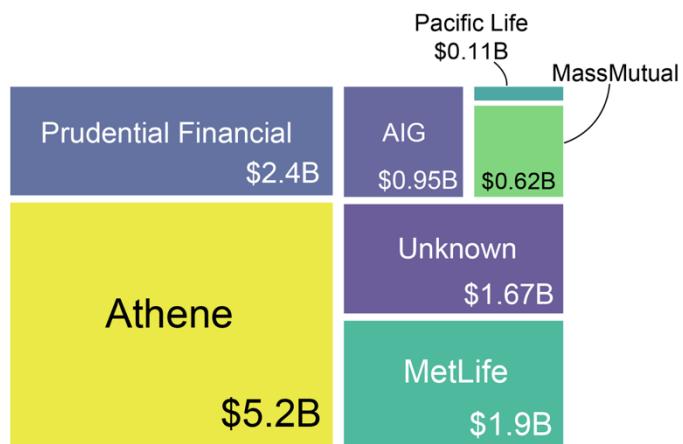
Middle-aged vs. Old



Source: MIB Group

Ming Li_Portfolio

Pension Buyouts in 2019



Includes disclosed deals. "Unknown" includes deals in which the insurers weren't specified.

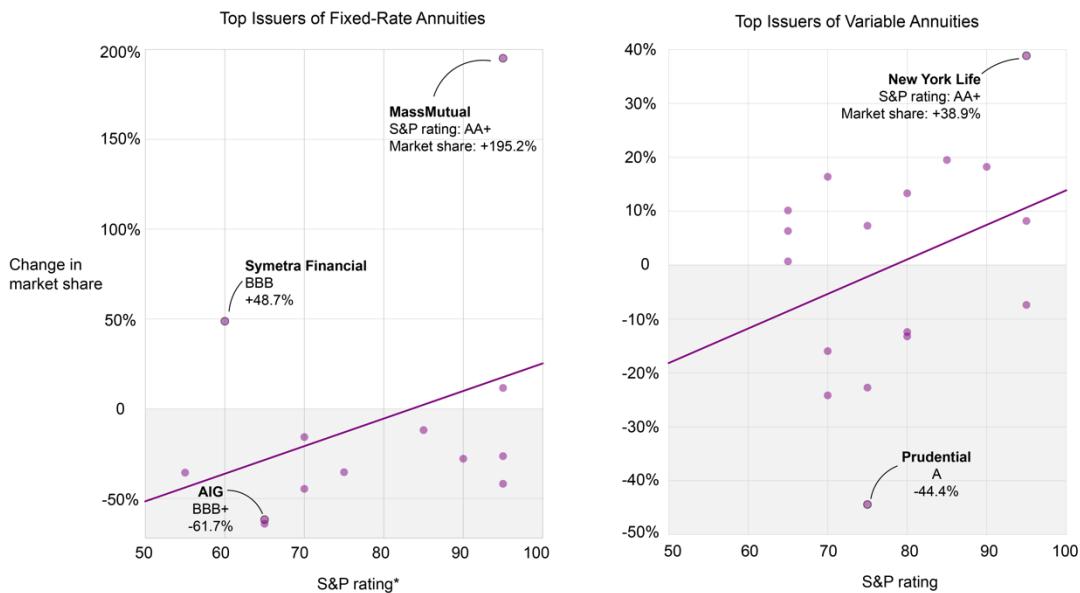
Note: Deals shown are limited to obligations transferred to U.S. insurers and compiled by S&P on a best-efforts basis. Excludes U.K. longevity reinsurance deals.

Source: S&P Global Market Intelligence

18.

Gimme Shelter

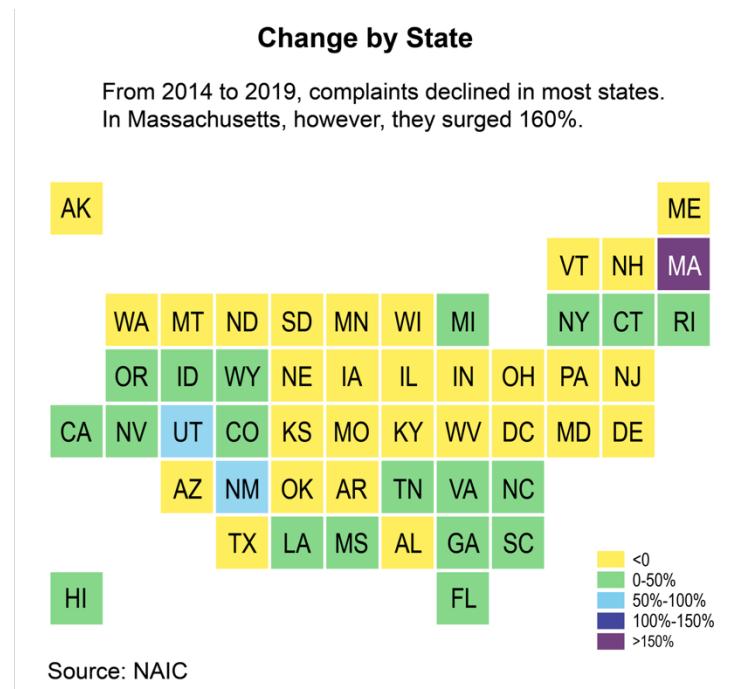
When the S&P rating moves up one category (+5), the trendlines predict that an insurer's market share will rise 7.7% for fixed-rate annuities and 3.2% for variable. Market share changes are for the second quarter of 2020 compared with a year earlier.



*S&P ratings have been converted into a numeric scale as follows:
AAA=100, AA+=95, AA=90, AA-=85, A+=80, A=75, BBB+=65, BBB=60, BBB-=55, BB+=50.

Sources: S&P Global Market Intelligence, company statements, Secure Retirement Institute

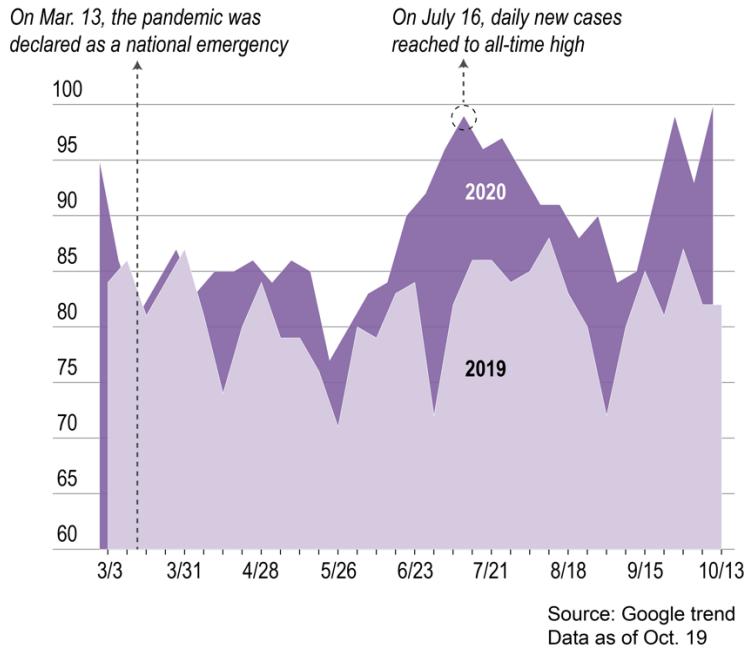
19.



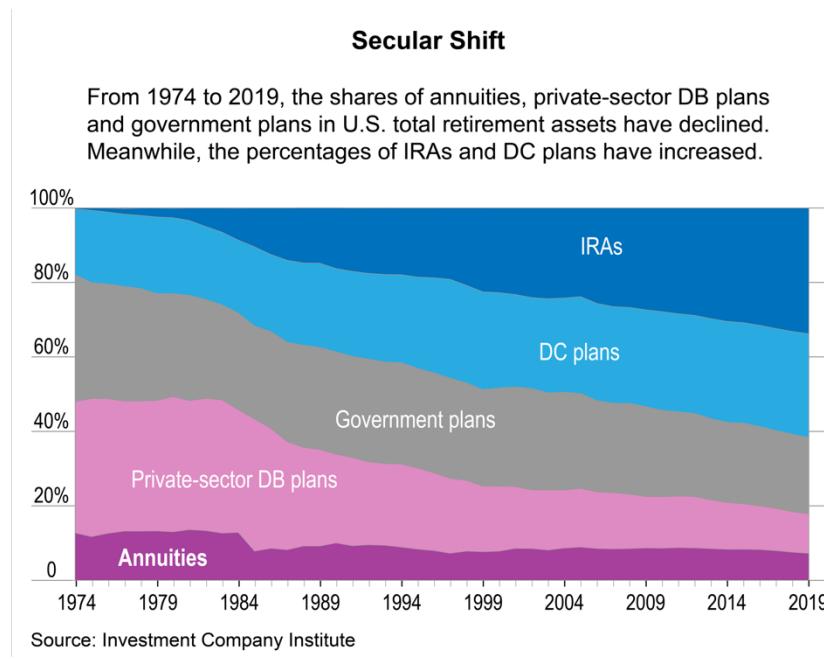
20.

Growing Interest

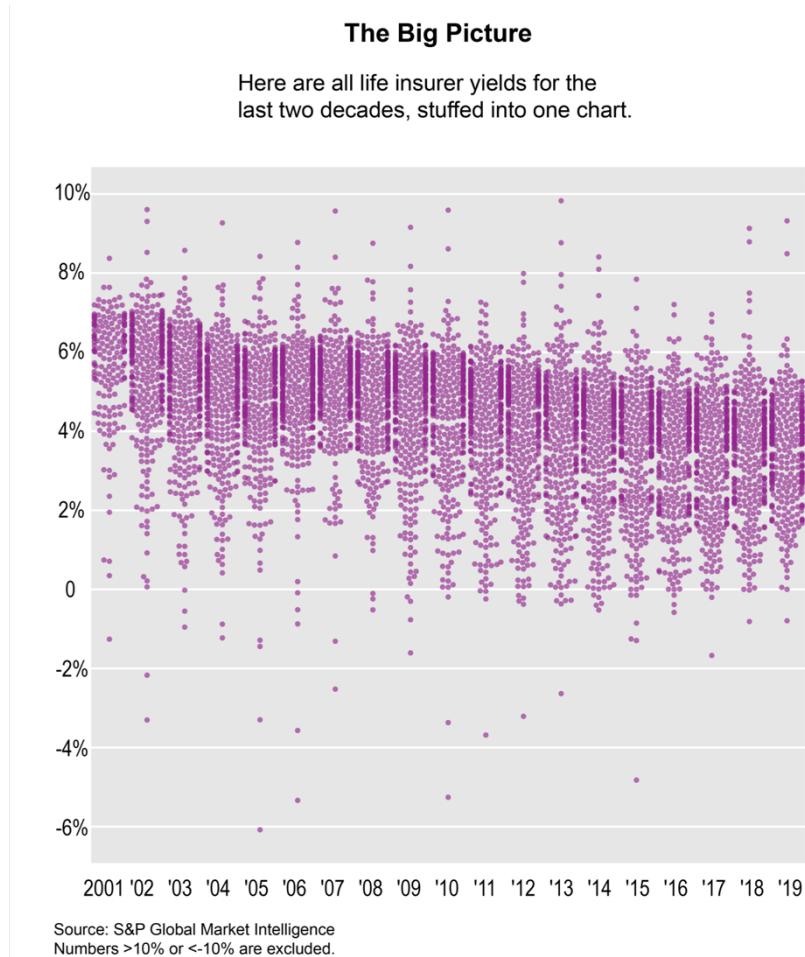
Weekly data has shown that Americans' interest in searching for the phrase **life insurance** has increased since March compared to the same time last year.



21.



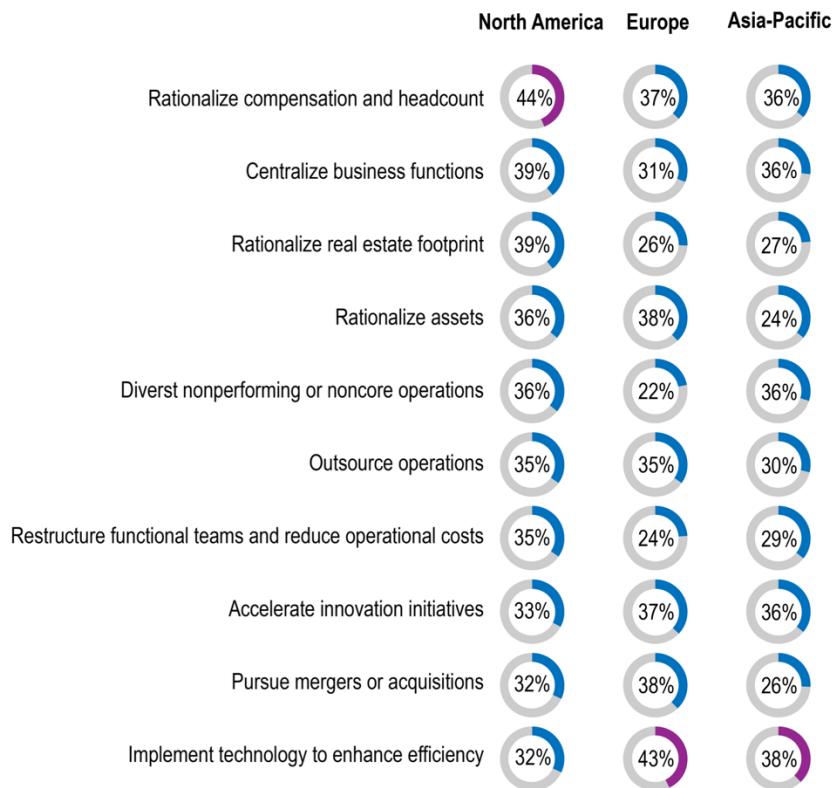
22.



23.

Firming Up Their Finances

Insurers say they will take the following actions to support financial stability.



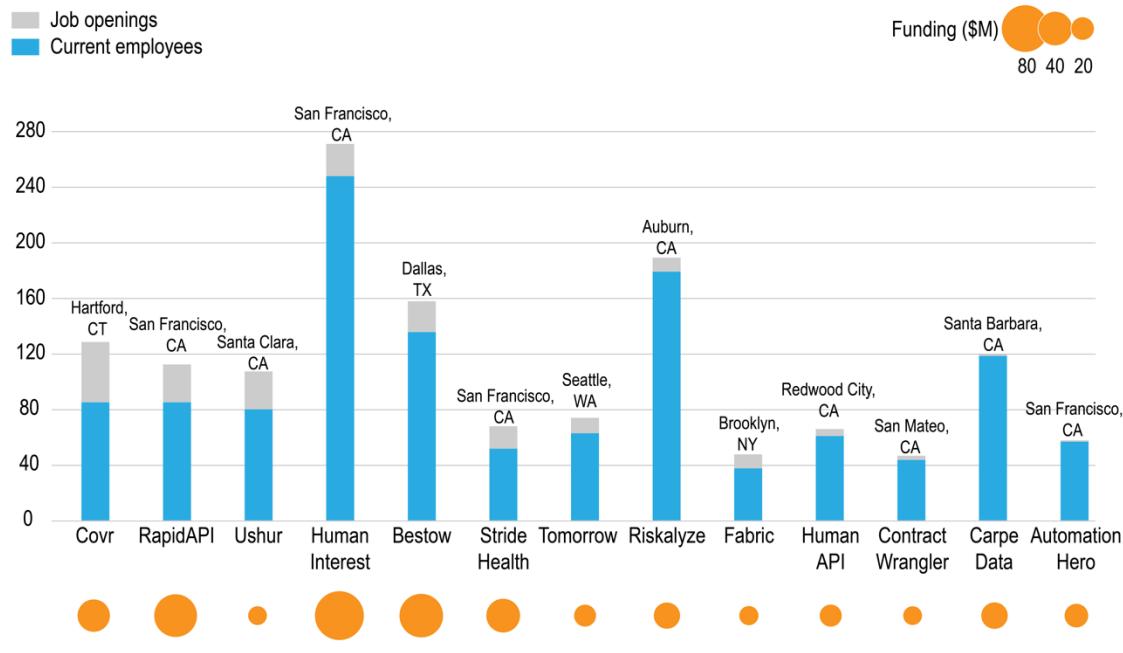
Source: Deloitte

24.

Ming Li_Portfolio

Help Wanted

Here are the large insurtech companies (with funding over \$10M) that are actively hiring. All have a business focus on life insurance and annuities.

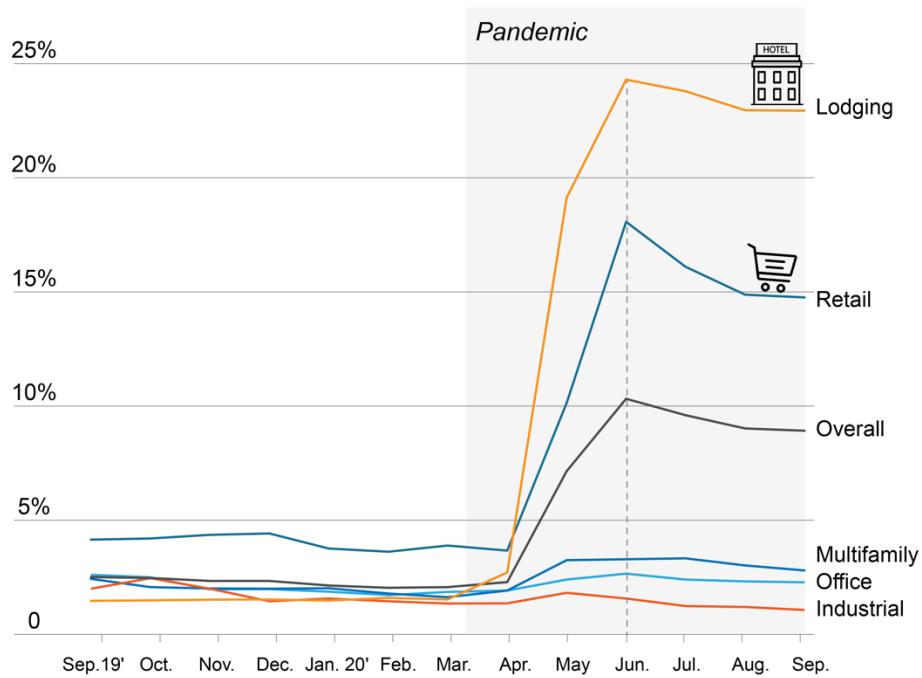


Sources: LinkedIn, Novarica

Ming Li_Portfolio

Alarmingly High

The overall delinquency rate for commercial mortgage-backed bonds jumped in May. Meanwhile, delinquencies in lodging and retail loans are much higher than for other property types.



Source: Trepp