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Mortality for the Life Insurance Industry in 2022

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The emergence of the Covid-19 pandemic in early 2020 contributed to record levels of mortality for the U.S. life insurance industry. Direct deaths due to Covid infections and complications played a significant role, especially given the newness of the virus, the lack of Covid-19 vaccines until early 2021, and therapeutics and other treatments that were either non-existent or of limited effectiveness. In addition, indirect effects of the Covid pandemic and response, especially government edicts that limited economic activities and social gatherings, a reduction in "normal" medical screenings and appointments, and isolation for many individuals contributed to the increase in deaths across the U.S. population.

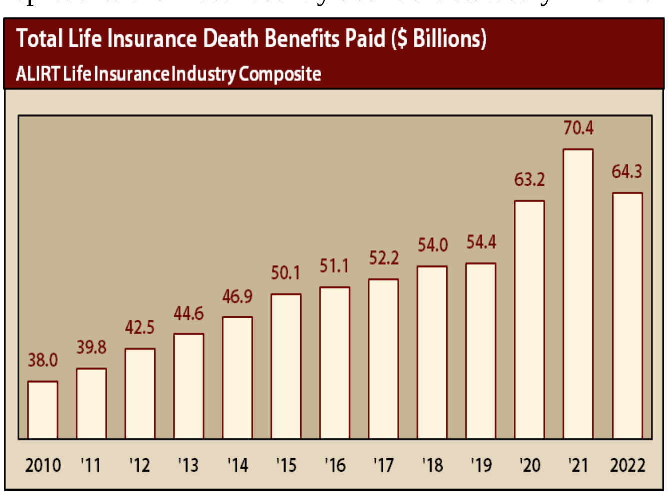
The higher mortality led to a significant increase in death benefits paid for both individual life and group life insurance, which contributed to the aggregate operating losses incurred for both business lines in 2021. However, the elevated mortality (though noticeable), did not have a material negative effect on industry capitalization, solvency, or financial performance. In fact, the sharp decline in interest rates in 2020 produced substantially greater effects on life insurance industry earnings (both total earnings and earnings for just the individual life insurance business line), as the worsening interest rate environment continued to put pressure on the profitability of existing blocks of guaranteed universal life insurance, as the rate guarantees for many products exceed current investment returns.

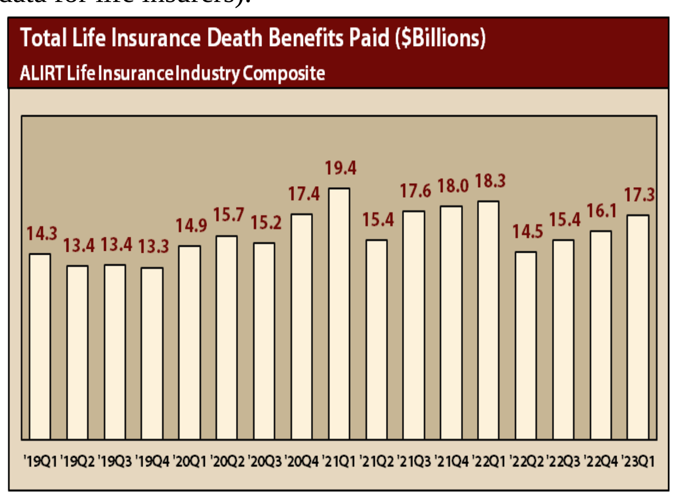
Mortality trends eased notably in 2022 for the U.S. life insurance industry, which was due in part to the decline in deaths directly related to Covid-19. However, death benefits paid by U.S. life insurers in 2022 remained elevated vs. pre-2020 levels and continued to dampen life insurance operating earnings (albeit offset in part by higher interest rates in 2022).

In this review we highlight the increase in mortality and its continued impact on the U.S. life insurance industry.

Mortality in 2022

The accompanying tables shows total death benefits paid for the ALIRT Life Industry Composite[1] for the last 13 years, as well as quarterly death benefits paid from the first quarter of 2019 until the first quarter of 2023 (which represents the most recently available statutory financial data for life insurers).

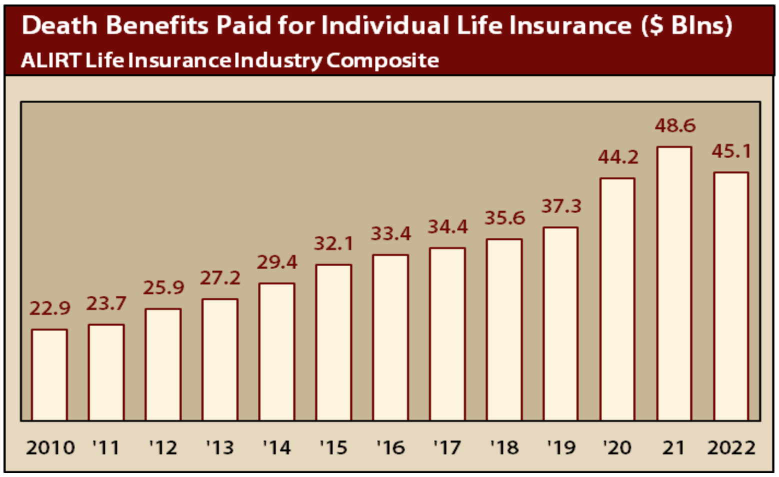




[1] The ALIRT Life Composite consists of 100 of the largest U.S. Life insurers (=88% of 2022 industry general account invested assets).

Death benefits rose 16.2% in 2020 and 11.4% in 2021, which totaled a combined $16.0 billion increase (almost equal to the entire aggregate increase in death benefits from 2010-2019). However, total death benefits paid fell 8.7% in 2022 (or $6.1 billion). While quarterly death benefits remained elevated (vs. pre-Covid levels) in 2022, death benefits for each of the four quarters in 2022 were lower compared to their respective quarter in 2021. Quarterly death benefits paid rose for each of the last three quarters from a recent low in the second quarter of 2022 until the first quarter of 2023, though this trend was also present in the latter quarters of 2021 (and first quarter 2022) as the first and fourth quarters of the last three years have generally seen the largest upticks in mortality.

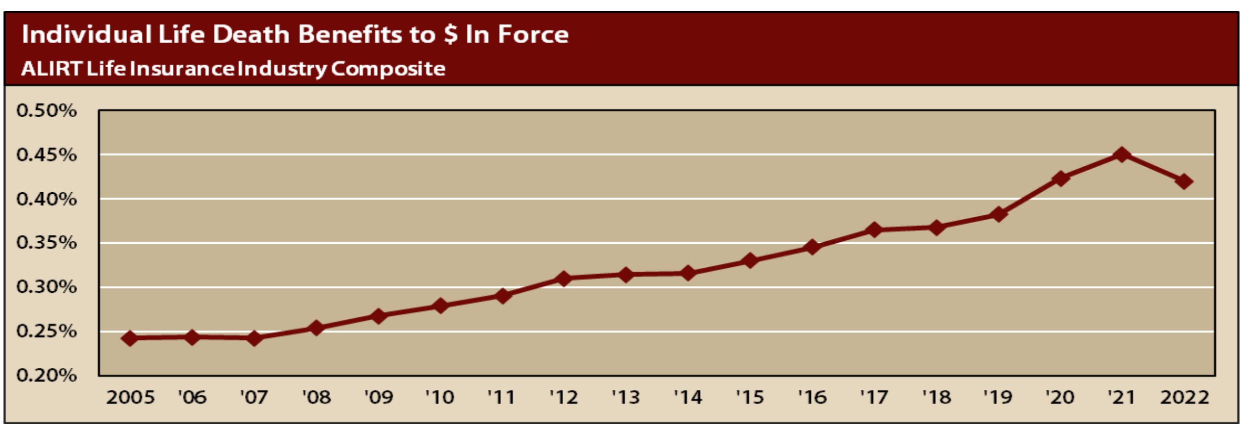
As was the case in 2020 and 2021, the higher mortality affected both individual life insurance and group life insurance in 2022. However, both individual life and group life insurance showed a decline in death benefits paid in 2022 as compared to the record levels of 2021 and were closer to 2020 levels.



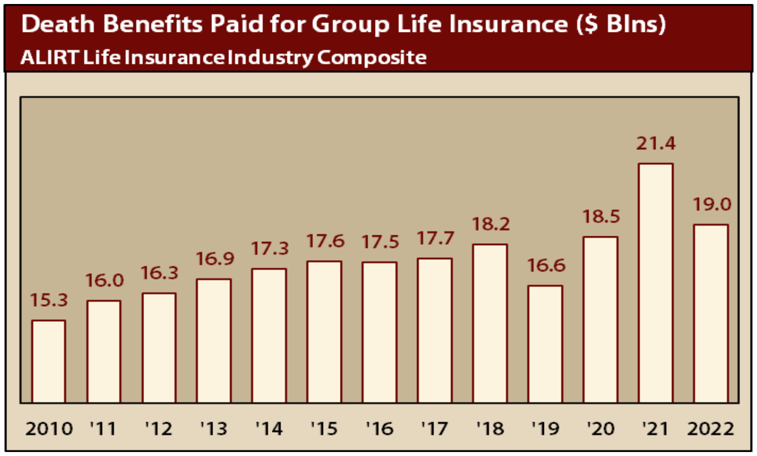
Death benefits paid for individual life insurance declined 7.2% in 2022, which followed an 18.5% and 10.0% increase in death benefits paid in 2020 and 2021, respectively.

The reduced death benefits paid for individual life insurance in 2022 was also reflected as a lower percent of total life insurance in force, which fell to 0.42% in 2022 and was down from a historical high of 0.45% in 2021 (see chart below), though this remained high compared to pre-2020 levels.

This measure rose consistently (though slowly) over the past 15 years, which was a result in part of the aging population of individual life insurance policyholders. This ratio was also affected by low sales levels for new life insurance over the last decade, high persistency of existing contracts given the relative attractiveness of in force products as compared to new industry offerings, and the rise of the life settlement industry. That said, the higher death benefits relative to in force life insurance was much more pronounced in 2020 and 2021, as this measure rose at faster rate for these years than at any point since 2005.



Group life insurance death benefits also declined in 2022 (down 11.2%), which followed increases of 11.6% and 15.4% in 2020 and 2021, respectively. Group life death benefits paid rose sharply in 2021 to 0.24% of total group life insurance in force (=the highest point since 2001) but dipped somewhat to 0.22% in 2022.



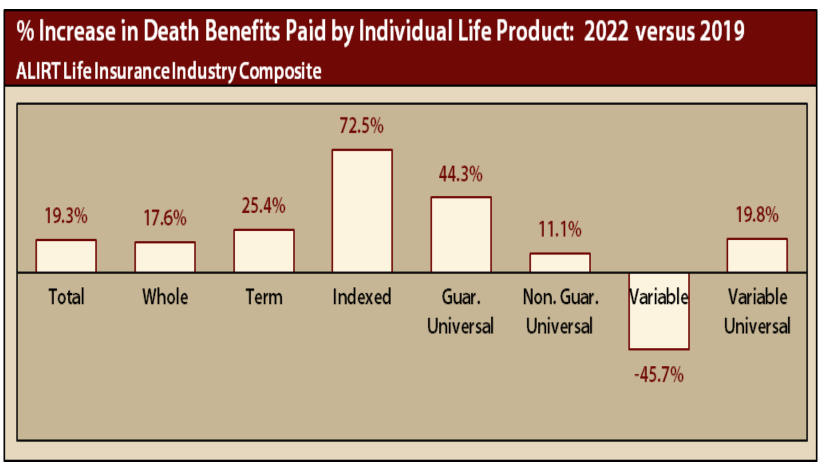
The higher death benefits paid in 2021 for the industry as a whole and for both individual life insurance and group life insurance reflected broad based mortality across multiple age groups and demographics. It also encompassed the peak in aggregate deaths reached in early 2021, as well as a secondary peak in the summer and autumn of 2021.

However, mortality as a whole in 2021 had a greater impact on younger populations than was the case in 2020, and as younger individuals are more likely to participate in group life insurance offered through their employers (or unions or other associations). This was likely a cause of the substantial rise in death benefits paid for group life insurance in 2021. In addition, younger people are less likely to have individual life insurance, and those that have such coverage often do not have especially high face amounts, as large face amount life insurance is often utilized by wealthy and/or often older individuals for estate planning purposes, and/or to provide bequests to spouses, children, or grandchildren. This may have eased the growth rate in individual life death benefits paid in 2021.

The reduced death benefits paid in 2022 for both individual life and group life segments appeared to reflect a decline in Covid-19 related deaths as well as somewhat improved overall U.S. mortality. This is backed up by provisional data from the Centers for Disease Control and Prevention, which showed that overall U.S. deaths declined 5.5% in 2022, while Covid-related deaths fell nearly 50% from 2021.[2]

Product Line Breakdown

The accompanying chart provides the percent change in death benefits paid in 2022 versus 2019 (pre-Covid), and each product line incurred a considerable increase. The rapid growth in indexed life insurance over the last several years led to that business line being somewhat of an outlier, given the rather low base of indexed life insurance in force in 2019. To this point, indexed life insurance was the only product line, among those shown below, to report higher death benefits paid in 2022. Aside from indexed life, guaranteed universal life showed the largest increase in death benefits paid, which may reflect the high persistency levels associated with this product and possibly an older cohort of individuals holding onto these products which are no longer offered by many carriers.



Group life insurance is less diversified by product type, as 65% of total 2022 net group life insurance premiums were in term life products. This is not surprising when considering the basic death protection that is the core of most group life contracts.

[2] Source: https://www.cdc.gov/mmwr/volumes/72/wr/pdfs/mm7218a3-H.pdf

Earnings Impact

Individual Life

The table below shows the development of pretax statutory operating earnings by product line for individual life insurance over the last three years 2020-2022. Operating performance improved sharply in 2022 which was driven in large part by the decline in death benefits paid as highlighted earlier in this report. The improved results also benefited from significantly lower reserve additions for indexed life insurance, which was in part the result of weaker equity market performance in 2022. The overall results for 2022 were a marked reversal from the operating losses in 2020 and 2021.

INDIVIDUAL LIFE INSURANCE: Pretax Earnings by Business Line ($ Mns.)
ALIRT Life Insurance Industry Composite

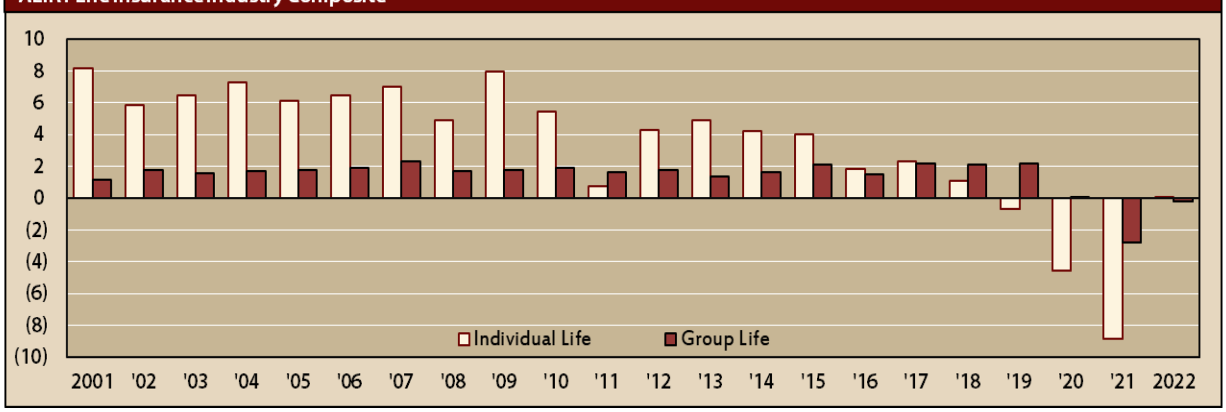
			Universal Life					Variable	
Year	Total	Whole	w/Guar.	w/o Guar.	Indexed	Term	Variable	Universal	Other
2020	(4,563.1)	514.3	(6,818.4)	3,477.3	(2,033.2)	(579.6)	503.5	135.5	237.5
2021	(8,870.3)	(865.1)	(3,723.9)	(1,757.5)	(2,204.1)	(1,100.7)	(15.5)	(75.3)	871.8
2022	83.3	(193.1)	(3,061.8)	(1,304.0)	3,734.5	129.8	(25.3)	(306.6)	1,109.8

A material portion of the worsening operating performance for individual life insurance in 2020 and 2021, and the still subpar results in 2022, was the higher levels of mortality reported in these years (as compared to pre-Covid levels). However, as guaranteed universal life insurance was one of the most affected product lines, it should be noted that there are other longstanding factors that are impacting operating performance for individual life insurance.

The table below shows pretax statutory accounting earnings for individual life and group life insurance over the last 22 years and shows the long-term decline in individual life insurance operating performance (group life earnings were relatively steady prior to 2020). Annual operating earnings exceeded $6 billion for the ALIRT Life Composite for most of the 2000s and exceeded $4 billion as recently as 2015.

However, the protracted decline in interest rates depressed insurer investment income (a trend that started in the 1990s and worsened in the 2000s-2010s) as the proceeds from renewal premiums and maturing assets were reinvested at lower yields. Given weaker industry investment performance, interest rates promised with guaranteed universal life products often exceed current portfolio investment yields and lead to the need for higher policy reserves, which can reduce earnings. The longer ago the policy contract was issued, the more pronounced this effect. Finally, the aging of the industry's life insurance policy contracts (and policyholders) also contributes to the need for higher policy reserves.

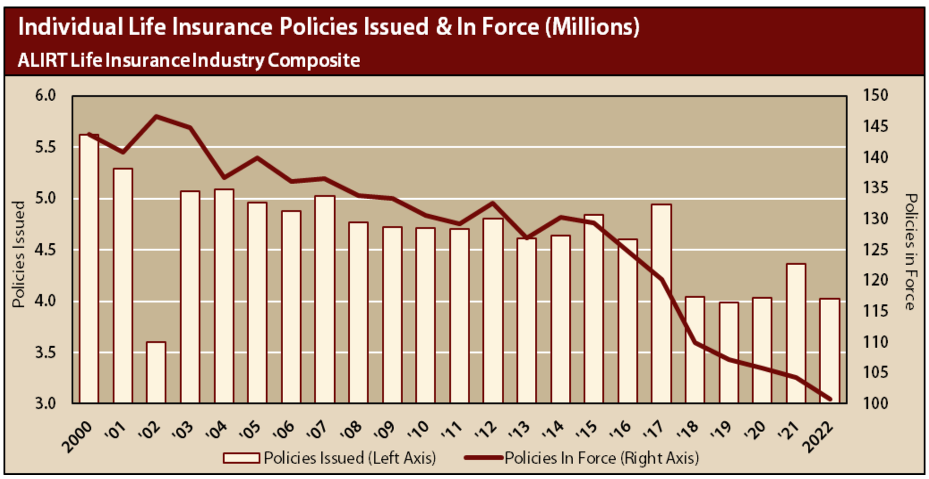
Pretax Statutory Earnings for Life Insurance ($ Billions)
ALIRT Life Insurance Industry Composite



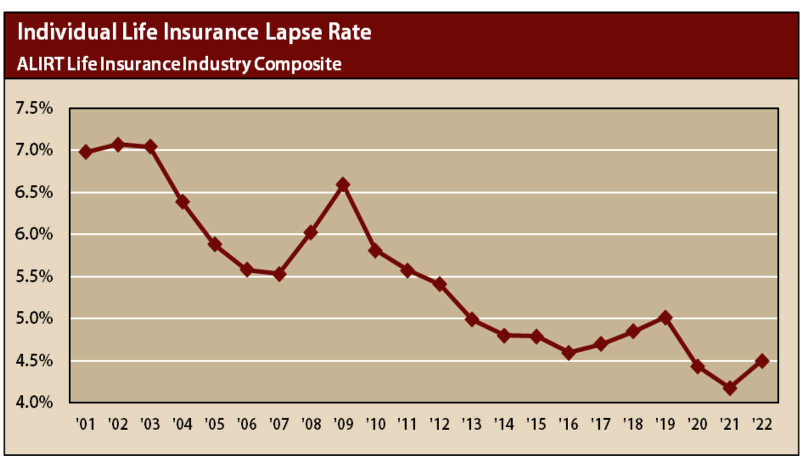
For guaranteed universal life, the insurer does not have a great deal of options to improve profitability. In some cases, the insurer may be able to increase the cost of insurance to its policyholders, but often an increase is permitted only for mortality fluctuations and not for lower interest rates or investment yield. Any attempt to increase COIs could also lead to litigation and/or dislocation in distribution/sales efforts.

The operating performance for guaranteed universal life has suffered given many of the above factors, and the impact of Covid and the sharply lower rates in 2020 and 2021 only exacerbated these trends. In two notable cases, Prudential Financial Inc. and Lincoln National Corp. both announced large reserve additions (both statutory and GAAP) for their guaranteed universal life business in 2022. The reserve increases followed assumption updates for both groups which had been prompted by an industry study that both groups participated and indicated a higher level of persistency and mortality in guaranteed universal life products post-2019. Statutory reserve increases for Pruco Life Insurance Company (AZ) and Lincoln National Life Insurance Company in 2022 reflected the impact from these assumption updates in each company's guaranteed universal life business and contributed to another year of poor results for the industry in this product line.

To a certain degree these trends also impact participating whole life insurance, but insurers that issue(d) whole life can adjust policyholder dividends in response to the performance of the block of business, which includes investment returns. That said, mutual companies may be reluctant to do so for marketing and future sales reasons and opt instead to keep dividends at elevated levels given their generally stronger capital positions. Nevertheless, virtually all major U.S. life insurers significantly reduced their aggregate policyholder dividends at least once if not more often in the years since the financial crisis, owing to reduced investment returns.



As mentioned earlier, another factor that reduced profitability for individual life insurance has been tepid new policy issuance for many years. As shown in the above chart, the total number of individual life insurance policies in force for the ALIRT Life Composite has been in steady decline from a 21st century peak of over 146 million in 2002 to a low of 101 million in 2022. Given low sales of individual life insurance, the mix of policies now skews somewhat older in terms of the insured population, and mortality rates relative to the face amount in force have crept higher over the last 18 years (see chart at bottom of page 2). Individual life insurance policies issued increased 8% in 2021 to 4.4 million, which was a four-year high and reflected the strongest annual growth in individual life insurance premiums in at least the last two decades (direct individual life



premiums rose 12% for the ALIRT Life Composite in 2021, while first year individual life insurance premiums rose 24%). However, individual life policies issued declined 8% in 2022 and volume returned to levels observed from 2018-2020. Individual life direct premiums and first year direct premiums both declined slightly in 2022 as well, though they remained 11% and 18% higher compared to 2020.

Finally, the lapse rate for individual life insurance policies has trended lower for over a generation and stood at 4.5% in 2022, which was within range of the historical low of 4.2% in 2021. As many of these policies were issued in a much different interest rate environment, the economics of this business is not especially favorable for the insurer and has contributed greatly to the reduction in profitability for individual life insurance. The growth in the life settlement market over this period also contributed to this trend.

Group Life

Group life insurance earnings exhibited much less in the way of a decline than individual life insurance for most the last 20 years, and thus the near break-even operating results in 2020 (while more favorable than the steep losses incurred in individual life) stood out in stark contrast to both recent and historical performance. As mortality experience worsened significantly in 2021 from the already historically high level of 2020 and increasingly affected a younger cohort of individuals, group life operating performance deteriorated to a greater degree and resulted a $2.8 billion pretax operating loss in 2021. Group life insurance posted yet another pretax operating loss in 2022, however, the loss was much narrower than 2022 and reflected more favorable mortality trends in the overall population (and working age individuals) in 2022 vs. 2021.

GROUP LIFE INSURANCE: Pretax Earnings by Business Line ($ Mns.)
ALIRT Life Insurance Industry Composite

Year	Total	Term	Whole	Universal	Variable	Variable Universal	Other
2020	14.4	(537.4)	(3.1)	301.8	49.2	186.0	17.9
2021	(2,766.6)	(3,224.0)	(23.1)	163.2	115.3	216.3	(14.3)
2022	(188.9)	(662.9)	(25.0)	179.1	55.5	191.0	73.4

Group life contracts can typically be repriced, and indeed some group life insurers have done this at various points, as a result in part of rising deaths owing to suicides, alcohol and drug abuse, and other causes that have been observed in the 2000s and 2010s. However, in the wake of the Covid pandemic group life direct premiums increased at their fastest annual rates since 2015, rising 10.3% in 2021 and 7.3% in 2022. These annual premium increases were especially pronounced as group life direct premium volume only rose an aggregate 11.5% from year end 2014-2019.

Though there is no doubt that at least some of the higher mortality relates directly or indirectly to Covid-19, other causes are also at play, especially considering the increase in mortality in 2022 when Covid-19 associated deaths are excluded. The combination of societal ills (suicide, substance abuse, isolation) as well as missed medical appointments and screenings since early 2020 could continue to boost mortality levels even if Covid-19 deaths continue to wane. This could lead to a longer period of price increases in group life insurance, though increased product pricing could be offset to some degree by group life customers seeking other insurance providers, reduce benefits offered, or eliminate the benefit altogether.

However, the higher group life direct premium in 2021 and 2022 seem to indicate that employers and employees still have solid demand for group life insurance which may be especially true given greater awareness of mortality from the pandemic as well as an emphasis amongst employers to offer competitive group benefits amid a tight labor market. Further highlighting this point is the sharp rise in first year direct premiums for group life in 2021 and 2022, which rose 32% and 159% in each year.

Life Insurance Operating Performance in Context

Operating performance in individual life insurance has deteriorated for some time, and group life insurance experienced the worst year in decades in 2021. However, though these are certainly not positive trends, it is important to view the operating results in life insurance with the appropriate context.

Reserve Release Offsets

Though death benefits rose sharply for individual and group life insurance in 2020 and 2021, and remained elevated vs. pre-Covid levels in 2022, the ultimate impact on life industry profitability and capitalization is substantially less than the total death benefits paid. First, when an insured passes away, the insurance company can release a portion of its policy reserves that relate to that specific policyholder's contract.

For 2020-2022, the increase in aggregate death benefits paid of $26.0 billion over 2019 levels were offset by reserve releases related to deaths of $11.7 billion. For group life insurance, the $9.1 billion increase in death benefits paid in for 2020-2022 over 2019 levels was offset by $1.9 billion of reserve releases related to deaths of group life insureds.

Repricing Group Policies

Insurers can generally reprice group life insurance annually and as highlighted in the previous section it appears that life insurers capitalized on this ability in 2021 and 2022. With group life profitability remaining below the levels seen in much of the 2010s and mortality remaining elevated, life insurers may look for further rate increases.

Other Product Offsets

The higher incidence of all-cause mortality for the U.S. population led to somewhat improved performance in traditional long-term care insurance, either as residents of long-term care facilities passed on, and/or a greater reticence on the part of insureds to enter traditional long-term care (or related) facilities. The ALIRT Life Composite posted pretax earnings of $1.7 billion in 2020 and $1.6 billion in 2021 and $1.5 billion in 2022, a reversal from operating losses of $579 million incurred in 2019.

Social distancing practices that contributed to deferred medical care also led a sharp increase in pretax earnings for dental, vision, and group medical products in 2020, though a rebound in medical utilization dented earnings in each of the business lines in 2021. Pretax earnings for these three products were all higher in 2022 as medical utilization among insureds may have eased from elevated levels in 2021.

Taxes

A reduction in pretax earnings (and/or wider pretax operating losses) can reduce tax liabilities, and as a result the ultimate impact to the insurer's capitalization and operating performance may decline from pretax levels. However, tax liabilities are also affected by timing mismatches, as well as differences between the statutory accounting rules that govern the regulatory financial statement and accounting for tax purposes. This was most evident in 2021, as ALIRT Life Composite operating losses for individual life widened $4.2 billion pretax, but "only" $1.2 billion after taxes, and group life operating performance worsened by $2.8 billion before taxes and "only" $2.0 billion after taxes.

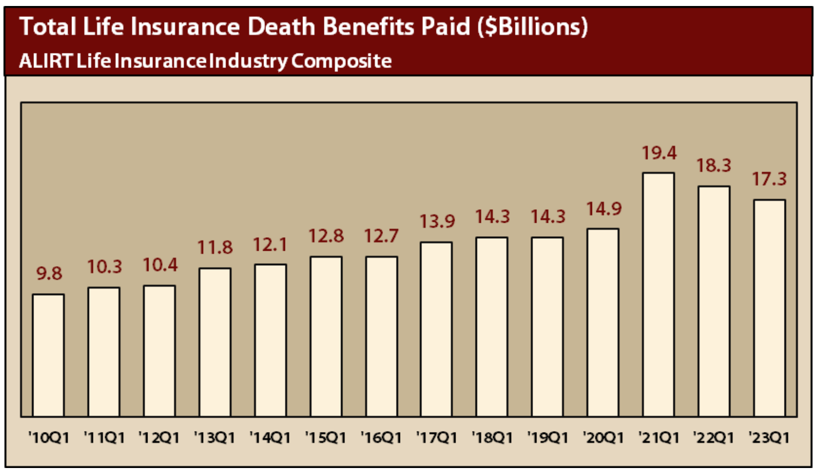
Losses in Relation to Surplus

While the industry reported large operating losses for individual life and group life in 2021, (with pretax operating losses of $8.8 billion for individual life insurance and $2.8 billion for group life insurance in 2021) the weaker performance was offset by strong earnings from other business lines, and the industry composite reported total statutory pretax earnings of over $46 billion for the year. This was up from $31 billion in 2020 and helped to produce a 13% increase in total surplus in 2021. Additionally, as operating losses narrowed in group life and individual life returned to profitability in 2022, overall pretax earnings remained higher than 2020 levels, though surplus fell 5% given large net capital losses incurred by many insurers in 2022.

In other words, though the effect on life industry financial performance from the higher mortality of the last two years was noticeable, it has not had a material effect on industry solvency or capitalization, and this is even more the case given the improvement in life insurance operating performance in 2022. In addition, the reduction in total industry earnings was significantly less than what occurred in other years from changes in stock market returns, interest rates, and/or investment impairments and losses.

Outlook for 2023

As shown in the graph below, death benefits paid in the first quarter of 2023 represented a second consecutive annual decline from the first quarter of 2021, which stands as a historical high watermark, but remained elevated vs. pre-2021 levels. At the very least the reduced death benefits paid is a positive trend and may signal another year of lower total death benefits paid out for the life industry in 2023.



However, the continued elevated mortality (versus 2020 and especially levels reported in the 2010s) may continue to weigh on industry operating earnings and returns and could contribute to the further rationalization of businesses by many life insurance groups, which has been ongoing for over the last decade.

The higher interest rate environment of the last eighteen months may provide some relief to life insurers and the existing blocks of business they hold, though it remains to be seen if rates will continue to stay at these levels. These factors are not limited to the life insurance business (they also include annuities and other business lines) and may result in product changes, the exit from certain business lines or the entire industry for some insurers, and the sales (and/or reinsurance) of blocks of businesses and/or entire insurance companies.

Conclusion

The U.S. life insurance industry experienced a significant rise in mortality in both 2020 and 2021, as death benefits for the ALIRT Life Composite paid rose 16% in 2020 and 11% in 2021. The higher death benefits led to wider operating losses incurred for individual life insurance, while group life insurance also incurred operating losses, a reversal from near break-even results in 2020 and solid earnings on an annual basis for most of preceding 20 years.

In a positive development for the industry, mortality claims eased in 2022 and resulted in a 6% decline in death benefits paid out. Death benefits paid also fell 6% in the first quarter of 2023 as well (versus the first quarter of 2022). The decline in mortality has appeared to reflect a waning impact from Covid-19, which many now believe is entering an endemic phase.

However, the level of death benefits paid out in 2022 (and the first quarter of 2023) still remained notably higher than pre-Covid levels and contributed to subpar operating results in individual life and group life.

This is indicative of higher all-cause mortality which could depress life insurance profitability even as Covid abates.

With that said, industry capitalization levels remain strong and the impact from the pandemic has largely not been a solvency event for the vast majority of life insurers. Additionally, the higher interest rate environment may ease the pressure on older blocks of life insurance, as long as this continues, and the still strong job market through the middle of 2023 may allow for further group life premium growth. Solid operating earnings for the annuity and health insurance segments have also bolstered overall profitability levels in 2021 and 2022.

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