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A Qualitative History of Previous Challenging Environments for the Life Insurance Industry

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The current economic environment of low interest rates, market instability and regulatory uncertainty dominates actuarial thinking in life insurance companies today. For many young actuaries, these bleak circumstances have persisted for the entirety of their careers, making it difficult to imagine a more favorable climate. Seeing light at the end of the tunnel feels a lot different when your trip began inside the tunnel, as many have in the past few years. But the crisis of this generation follows a long history of such periods, all of which have frustrated, challenged, and eventually succumbed to the resilience of our industry. These periods include the Great Depression, the Great Inflation of the 1970s, and the influenza pandemic of 1918. These past events should be studied to learn the effect of economic conditions on life insurer solvency, as well as to identify the actions that helped firms navigate these conditions. For young actuaries, these events should offer hope, and serve as a lesson in accepting and overcoming adversity.

Beginning with the stock market crash of October 1929, the U.S. economy entered a period of severe stagnation and deflationary pressure. Although these conditions resulted in spiking unemployment and low profits across most industries, the life insurance sector was relatively resilient. Between 1929 and 1938, failing insurers accounted for only 2 percent of total industry assets. This positive performance can be explained by a number of factors. First, major life insurers in this period were generally not heavily invested in public equity, which allowed them to avoid significant portfolio losses. Instead, insurers held high concentrations of real estate and high-quality bonds. Some evidence shows that equity assets held by insurers experienced low turnover during this time, suggesting prudent managers did not panic-sell along with other market participants. Second, regulatory forces played a role in protecting the industry from adverse economic conditions. In addition to investment restrictions that applied to insurers and not banks, legislation was passed in 1933 that prevented payment of cash value and policy loans. The purpose of this regulation was to insulate insurers from excessive use as financial intermediaries by the public while the banking system was under strain, and this objective was achieved.

However, certain pressures on the industry during this time are worth noting. First, cash disbursements such as cash value surrender and policy loan activity spiked up. In 1932, aggregate insurance in force fell from $108.8 billion in January to $103.7 billion in December. The reason behind this behavior was an increase in need for cash, rather than savings, which could not be provided by the banking system. Policyholders drew down their investments in life insurance in order to pay for day-to-day needs. This action contributed to strain on insurers' reserves and resulted in some liquidation of assets at a loss, until regulators intervened to provide some relief. Most likely, the existence of Federal Deposit Insurance Corporation (FDIC) insurance and the Federal Reserve as lender of last resort should reduce this pressure in future crises. Second, although life insurance sales remained low in 1931 to 1933, contributing to the effects described above, an initial increase in insurance sales took place by individuals attempting to preserve their estates after the stock market collapsed. This behavior produced an untimely surplus strain in early 1930. But despite these adverse effects, the life insurance industry remained stable throughout the Great Depression, contributing to the recovery that followed.

In the late 1970s and early 1980s, a crisis with a different source tested the life insurance industry. A combination of oil price volatility and loose monetary policy resulted in an increase in inflation from 4 percent in the early 1970s to 13 percent in 1980. This fueled nominal interest rates to rise to a record high 15 percent in 1981, presenting several challenges for the life insurance industry unlike any before. First, the large existing block of assets held by insurers to fund policyholder benefits could not compete with the new money rates offered elsewhere in the market. With average portfolio rates in 1980 at 8 percent and average new money rates at 12 percent, a mass exodus of policyholder funds through cash value surrender ensued. During the 20-year period ending in 1985, life reserves fell from 7 percent to 3 percent of total household assets. In addition, guaranteed fixed rates on policy loans, which were mandated by regulation, resulted in an increase in loan utilization from 4 percent to 22 percent of general account assets. Both of these effects caused reserve strain, liquidity pressure and realized capital losses across the life sector. A second issue arising from this interest rate environment was an increasing relative tax rate. The 1959 Life Insurance Company Tax Act prescribed a tax rate which was a function of the difference between the portfolio rate and promised rate on policies (known as the Menge formula). This formula allowed investment income to avoid heavy taxation for almost two decades. But as the difference between portfolio rates (lifted by high new money rates) and promised rates (fixed in existing contracts) grew, so did the tax outflow, producing further pressure on insurers' earnings at this time.

The life industry responded to these challenges by developing innovative products and practices, as well as lobbying for equitable policy reform. The most noteworthy product shift resulting from this period was the growth of universal and variable life products. Both of these products had the ability to separate policyholder credited investment income from the portfolio earnings of the insurer, keeping insurance offerings competitive with new money options. As a share of new premium, these products expanded dramatically from 3 percent in 1981 to 42 percent in 1985, permanently altering the market for life insurance. Adaptation was taking place within the asset management side of the business during this time as well. Spiking interest and surrender rates resulted in realized asset losses from disintermediation, as well as liquidity pressures. As the traditional insurer practice of investing long and illiquid was proving inadequate for the circumstances, asset managers began purchasing higher quantities of lower duration, liquid, and secondary market traded securities. To illustrate this, from 1981 to 1985, the proportion of T-bills and commercial paper held in portfolios increased from 3 percent to 5 percent, and the proportion of intermediate and long U.S. government securities increased from 3 percent to 11 percent. This environment produced greater appreciation of the practice of asset liability management across the industry. Finally, policy relief helped the industry overcome the challenges presented in this period as well. First, tax reform in 1982 and 1984 eliminated the Menge formula described above, resulting in a more reasonable tax structure. Second, regulation prescribing fixed rate loans was removed, providing insurers flexibility in designing this element of their policies. Unlike other financial institutions, insurers were able to remain profitable throughout this period thanks to effective crisis management and innovative thinking.

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A catastrophe of a different nature occurred in the years following the World War I. An outbreak of the Spanish influenza affected a reported 28 percent of the U.S.

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population, taking the lives of 600,000 of these. A particularly devastating characteristic of this pandemic was its impact on middle-aged adults; about 50 percent of victims were between 16 and 40 years of age, in contrast to more conventional influenza strains which disproportionately affect children and the elderly. As middle-aged adults are the primary holders of life insurance, the severity and concentration of illness in this group caused significant losses for the industry. In total, $100 million of influenza-related benefits were paid out between 1918 and 1919. To illustrate the magnitude of loss, benefits paid in October 1918 were greater than the sum of all benefits paid throughout World War I. But although three-quarters of insurers cut dividends during this period, only the youngest and smallest firms failed or applied for state assistance. In fact, the greatest damage inflicted on the industry may have been employee work absence and other logistical problems arising from the pandemic.

Several explanations exist for the industry's overall resilience to the combination of challenges posed by the Spanish flu. First, financial loss was limited due to the overwhelming popularity of burial insurance at this time, which was characterized by low death benefits. The concept of life insurance as a replacement for lifetime earnings potential, carrying more substantial death benefits and thus greater mortality risk, was not yet an established driver of sales. Second, a large block of insurance in force at this time had been sold through a government agency called the War Risk Bureau. Approximately $36 billion of face had been issued by this organization, providing some support to the private sector during the influenza pandemic. Finally, the outbreak had a minimal impact on the investment portfolios of insurers. Default rates did not increase noticeably and the stock market remained steady, with the Dow Jones Industrial Average hovering above 80 throughout late 1918. With these supporting conditions, the insurance industry not only survived the influenza pandemic, but emerged with a strong reputation and enjoyed record sales in subsequent years.

While each event described above challenged the life insurance industry in a unique way, each event also stimulated an equally unique solution. Through market turmoil, mortality shocks, inflation, deflation or interest rate volatility, insurance professionals have consistently persevered through economic adversity. The crisis of our generation may one day approach these events in notoriety, and the solutions we propose as actuaries should rise to the same level. In this way, we fight to repeat history.

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