EXHIBIT 12(a)

Annual Report of AEL Holdco for the Year-End 2022

AEL™

Annual Report

2022

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2022

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission File Number: 001-31911

American Equity Investment Life Holding Company

(Exact name of registrant as specified in its charter)

Iowa	**42-1447959**
(State or other jurisdiction of Incorporation)	(I.R.S. Employer Identification No.)

6000 Westown Parkway
West Des Moines, Iowa 50266
(Address of principal executive offices, including zip code)

(515) 221-0002
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value $1	AEL	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a share of 5.95% Fixed-Rate Reset Non-Cumulative Preferred Stock, Series A	AELPRA	New York Stock Exchange
Depositary Shares, each representing a 1/1,000th interest in a share of 6.625% Fixed-Rate Reset Non-Cumulative Preferred Stock, Series B	AELPRB	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: Common Stock, par value $1

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act.) Yes ☐ No ☒

Aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was $3,270,357,970 based on the closing price of $36.57 per share, the closing price of the common stock on the New York Stock Exchange on June 30, 2022.

Shares of common stock outstanding as of February 22, 2023: 84,780,391

Documents incorporated by reference: Portions of the registrant's subsequent disclosure to be filed within 120 days after December 31, 2022, are incorporated by reference into Part III of this report.

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY
FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2022
TABLE OF CONTENTS

PART I.		
Item 1.	Business	1
Item 1A.	Risk Factors	13
Item 1B.	Unresolved Staff Comments	17
Item 2.	Properties	17
Item 3.	Legal Proceedings	17
Item 4.	Mine Safety Disclosures	17
PART II.		
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	18
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	20
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	50
Item 8.	Consolidated Financial Statements and Supplementary Data	51
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	51
Item 9A.	Controls and Procedures	51
Item 9B.	Other Information	52
Item 9C.	Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	52
PART III.		
	The information required by Items 10 through 14 is incorporated by reference from our subsequent disclosure to be filed with the Commission within 120 days after December 31, 2022.	52
PART IV.		
Item 15.	Exhibits and Financial Statement Schedules	52
Item 16.	Form 10-K Summary	55
SIGNATURES		56
Index to Consolidated Financial Statements and Schedules		F-1
Exhibit 21.2	Subsidiaries of American Equity Investment Life Holding Company	
Exhibit 23.1	Consent of Independent Registered Public Accounting Firm	
Exhibit 31.1	Certification	
Exhibit 31.2	Certification	
Exhibit 32.1	Certification	
Exhibit 32.2	Certification	

PART I

Item 1. Business

Introduction

We are a leader in the development and sale of fixed index and fixed rate annuity products. We were incorporated in the state of Iowa on December 15, 1995. We issue fixed annuity products through our wholly-owned life insurance subsidiaries, American Equity Investment Life Insurance Company ("American Equity Life"), American Equity Investment Life Insurance Company of New York ("American Equity Life of New York") and Eagle Life Insurance Company ("Eagle Life"). We have one business segment which represents our core business comprised of the sale of fixed index and fixed rate annuities. We are licensed to sell our products in 50 states and the District of Columbia. Throughout this report, unless otherwise specified or the context otherwise requires, all references to "American Equity", the "Company", "we", "our" and similar references are to American Equity Investment Life Holding Company and its consolidated subsidiaries.

Investor related information, including periodic reports filed on Forms 10-K, 10-Q and 8-K and any amendments may be found on our website at *www.american-equity.com* as soon as reasonably practicable after such reports are filed with the Securities and Exchange Commission ("SEC"). In addition, we have available on our website our: (i) code of business conduct and ethics; (ii) audit and risk committee charter; (iii) compensation and talent management committee charter; (iv) nominating and corporate governance committee charter and (v) corporate governance guidelines. The information incorporated herein by reference is also electronically accessible from the SEC's website at *www.sec.gov*.

Annuity Market Overview

Our target market includes individuals, typically ages 40 or older, who are seeking to accumulate tax-deferred savings or create guaranteed lifetime income. We believe that significant growth opportunities exist for annuity products because of favorable demographic and economic trends. According to the U.S. Census Bureau, there were approximately 54 million Americans age 65 and older in 2019, representing approximately 16.5% of the U.S. population, up from 14% in 2015. This group is expected to continue to grow and is expected to be over 20% of the total U.S. population during the next decade. We expect our fixed index and fixed rate annuity products to be particularly attractive to this group due to their principal protection, competitive rates of credited interest, tax-deferred growth, guaranteed lifetime income and alternative payout options. We expect our competitive fixed index and fixed rate annuity products to enable us to enjoy favorable growth in client assets.

According to Secure Retirement Institute, with preliminary data for 4Q2022, total U.S. annuity sales in 2022 were $310.6 billion, up 21.9% compared to $254.8 billion in 2021. Fixed annuity sales totaled $208.0 billion in 2022, up 61% compared to $129.2 billion in 2021. This market is directly comparable to the target market for our products. Fixed index annuity sales totaled $79.4 billion in 2022, up 24.6% compared to $63.7 billion in 2021. Fixed rate deferred annuity sales were $112.1 billion in 2022, up 109.9% compared to $53.4 billion in 2021. Outside of fixed annuities, the other growing part of the U.S. annuity market was the registered index-linked annuity market. Sales in this market were $40.9 billion in 2022, up 4.6% compared to $39.1 billion in 2021.

Strategy

While the business looks considerably different today than it did when it was started back in 1995, the themes have been consistent. We offer our customers simple fixed and fixed index annuity products, which we primarily sell through independent insurance agents in the independent marketing organization ("IMO") distribution channel. We have consistently been a leader in the IMO market. We will benefit from two secular trends: the demographic trends of people retiring or getting close to retirement who want to accumulate wealth through index based investing while protecting their principal and the need of retirees and pre-retirees to have a way to deaccumulate their wealth into income for life. A traditional brokerage based equity bond portfolio can't really meet these unique needs, but a fixed index annuity can as part of holistic financial plan. Finally, there is a scarcity value to what we do: that is originating billions of dollars of annuity funding each year at scale from the IMO channel, which is generally longer term funding than that achieved through sales in the bank and broker dealer channel.

We will continue to implement an updated strategy, referred to as AEL 2.0, after having undertaken a thorough review of our business in 2020. AEL 2.0 is designed to capitalize on the scarcity value of our annuity origination and couple it with an "open architecture" investment management platform for investing the annuity assets. Our approach to investment management is to partner with best in class investment management firms across a wide array of asset classes and capture part of the asset management value chain economics for our shareholders. This will enable us to operate at the intersection of both asset management and insurance. Our updated strategy focuses on four key pillars: Go-to-Market, Investment Management, Capital Structure and Foundational Capabilities.

The Go-to-Market pillar focuses on how we generate long-term client assets, referred to as policyholder funds under management, through annuity product sales. We consider our marketing capabilities and franchise to be one of our core competitive strengths. The liabilities we originate can result in stable, long-term attractive funding, which is invested to earn a spread and return over the prudent level of risk capital. American Equity Life has become one of the leading insurance companies in the IMO distribution channel over our 25-year history and can tap into a core set of loyal independent producers to originate new annuity product sales. We are focused on growing our loyal producers with one million dollars or greater of annuity product sales each year and to otherwise build our partnerships with key IMOs. We plan to increase our share of annuity product sales generated by IMOs and accelerate our expansion into bank, broker dealer and registered investment advisor distribution through our subsidiary, Eagle Life. Our strategy is to improve sales execution and enhance producer loyalty

with product solutions, focused marketing campaigns, distribution analytics to enhance both sales productivity and producer engagement and new client engagement models that complement traditional physical face-to-face interactions. We plan to increase our reinsurable sales, continue to enhance our flexibility to adjust to market changes quickly, expand our product suite, and grow our ability to sell registered products. We also see potential long-term opportunities in international markets.

The Investment Management pillar is focused on generating a strong return on assets which, in turn, will generate adequate spread income to support our liabilities, operations, and profitability. Our investment strategy is to supplement our core fixed income investment portfolio with opportunistic investments in alpha-producing specialty sub-sectors like middle market credit and sectors with contractually strong cash flows like real estate and infrastructure, including private equity assets. We execute on this strategy by forming partnerships with certain asset managers that will provide access to specific asset sectors, resulting in a sustainable supply of quality private investments, in addition to traditional fixed income securities. The partnerships with asset managers may include us taking an equity interest in the asset manager to create greater alignment or forming an alternate economic sharing arrangement so we benefit as our partners scale their platforms with third party assets under management, as we have begun to do.

The Capital Structure pillar is focused on greater use of reinsurance structuring to both optimize asset allocation for our balance sheet and enable American Equity Life to free up capital and become a capital-light company over time. The use of reinsurance will enable us to achieve three business outcomes over time: first, free up capital to potentially return to shareholders, second, redeploy capital into higher yielding alpha generating assets to grow investment income relative to new money yields in a traditional core fixed income portfolio and third, successfully demonstrating the first two outcomes will allow us to raise third-party capital into reinsurance vehicles ("side-cars") to provide risk capital to back a portion of our existing liabilities and future sales of annuity products. This will enable us to convert from an investment spread business with our own capital at risk into a combination spread based and fee based business with externally sourced risk capital. In combination, these three outcomes are likely to generate sustained, deployable capital for shareholders and significant accretion in return on equity ("ROE") over time. We also see potential long-term opportunities in reinsurance support to other insurers and outside the U.S..

The Foundational Capabilities pillar is focused on upgrading our operating platform to enhance the digital customer experience, create differentiation through data analytics to support the first three pillars, enhance core technology and align talent. We have maintained high quality personal service as one of our highest priorities since our inception and continue to strive for an unprecedented level of timely and accurate service to both our agents and policyholders. Examples of our high quality service include a live person answering phone calls and issuing policies within 24 hours of receiving the application if the paperwork is in good order. We believe high quality service is one of our strongest competitive advantages and the foundational capabilities pillar will look to continue to enhance our high quality service.

The combination of differentiated investment strategies and increased capital efficiency improves annuity product competitiveness, thereby enhancing new business growth potential and further strengthening the operating platform. This completes the virtuous cycle of the AEL 2.0 business model, having started with a strong, at scale annuity originator, that is even further strengthened by the power of the investments and capital structure pillars.

During 2022, we continued to advance our AEL 2.0 strategy as we executed against the four key pillars. Key areas of advancement included the following:

- In our Investment Management pillar, we originated $5 billion of privately sourced assets at an expected return greater than 6% and expanded our primary focus from residential real estate in 2021 to a more diversified portfolio in 2022 covering a variety of sectors, including infrastructure, middle market credit and commercial real estate equity. Across sectors, we will continue to be disciplined and deliberate, focusing on underlying assets with resilient cash flows where the majority of the return is largely delivered by underlying operating performance and where there is an advantage for an insurance balance sheet to own the assets. In addition, with fixed income spreads widening throughout most of the year, we seized this additional optionality to increase exposure in core fixed income while being more selective in our private asset strategy.

- In our Go-To-Market pillar, we substantially revamped our pricing procedures, affording us optionality to re-price product quickly as markets change. Historically, we have repriced new products once or twice per year. Due to the changes we have made to improve these processes, we successfully delivered in excess of 50 product and rate changes during 2022. Our pricing has become more nimble, targeted and responsive to market changes which is important to generate growing sales while maintaining attractive double-digit internal rates of return (IRRs) on total sales volumes. We also refreshed our distribution incentive and loyalty programs and continue to assess ways to further differentiate our service offerings to producers, building on our number one ranking for customer satisfaction for annuity producers by J.D. Powers and Associates.

- In our Capital Structure pillar, we achieved $9.6 billion of fee generating reinsured balances and generated over $50 million in revenues in 2022. This included new business ceded during the year of $1.3 billion to Brookfield and $3.8 billion of in-force to AeBe ISA LTD ("AeBe"), which is affiliated with 26North Holdings LP ("26North") effective October 3rd. Additionally, the new reinsurance agreement with AeBe resulted in a capital release of approximately $260 million to fund the growth in excess capital that supports the continued migration to privately sourced assets and capital return to shareholders. See *Note 8 - Reinsurance and Policy Provisions* for more information.

- In our Foundational Capabilities pillar, we continued to invest in enhancing our foundational capabilities by implementing new investment accounting and investment management systems. We are also in process of implementing a new general ledger system.

Products

Annuities offer our policyholders a tax-deferred means of accumulating retirement savings, as well as a reliable source of income during the payout period. When our policyholders deposit cash for an annuity, we account for these receipts as policy benefit reserves in the liability section of our consolidated balance sheet. The annuity deposits collected, by product type, during the three most recent fiscal years are as follows:

	Year Ended December 31,					
	2022		2021		2020	
Product Type	Deposits Collected	Deposits as a % of Total	Deposits Collected	Deposits as a % of Total	Deposits Collected	Deposits as a % of Total
	(Dollars in thousands)					
Fixed index annuities	$ 3,171,420	95 %	$ 3,450,547	58 %	$ 2,337,578	64 %
Annual reset fixed rate annuities	5,709	— %	6,483	— %	8,225	— %
Multi-year fixed rate annuities	139,092	4 %	2,452,994	41 %	1,303,133	35 %
Single premium immediate annuities	18,935	1 %	59,816	1 %	33,461	1 %
	$ 3,335,156	100 %	$ 5,969,840	100 %	$ 3,682,397	100 %

Fixed Index Annuities

Fixed index annuities allow policyholders to earn index credits based on the performance of a particular index without the risk of loss of their account value. Most of these products allow policyholders to transfer funds once a year among several different crediting strategies, including one or more index based strategies and a traditional fixed rate strategy. Bonus products represented 63%, 65% and 75% of our net annuity account values at December 31, 2022, 2021 and 2020, respectively. The initial annuity deposit on these policies is increased at issuance by a specified premium bonus ranging from 5% to 10%. Generally, the surrender charge and bonus vesting provisions of our policies are structured such that we have comparable protection from early termination between bonus and non-bonus products.

The annuity contract value is equal to the sum of premiums paid, premium bonuses and interest credited ("index credits" for funds allocated to an index based strategy), which is based upon an overall limit (or "cap") or a percentage (the "participation rate") of the appreciation (based in certain situations on monthly averages or monthly point-to-point calculations) in a recognized index or benchmark. Caps and participation rates limit the amount of interest the policyholder may earn in any one contract year and may be adjusted by us annually subject to stated minimums. Caps generally range from 1% to 14% and participation rates range from 10% to 180%. In addition, some products have a spread or "asset fee" generally ranging from 1% to 5.25%, which is deducted from interest to be credited. For products with asset fees, if the appreciation in the index does not exceed the asset fee, the policyholder's index credit is zero. The minimum guaranteed surrender values are equal to no less than 87.5% of the premium collected plus interest credited at an annual rate ranging from 0.5% to 3%.

The initial caps and participation rates are largely a function of the cost of the call options we purchase to fund the index credits, the interest rate we can earn on invested assets acquired with new annuity deposits and the rates offered on similar products by our competitors. For subsequent adjustments to caps and participation rates, we take into account the cost of the call options we purchase to fund the index credits, yield on our investment portfolio, annuity surrender and withdrawal assumptions and crediting rate history for particular groups of annuity policies with similar characteristics.

Fixed Rate Annuities

Fixed rate deferred annuities include annual, multi-year rate guaranteed products ("MYGAs") and single premium deferred annuities ("SPDAs") . Our annual reset fixed rate annuities have an annual interest rate (the "crediting rate") that is guaranteed for the first policy year. After the first policy year, we have the discretionary ability to change the crediting rate once annually to any rate at or above a guaranteed minimum rate. Our MYGAs and SPDAs are similar to our annual reset products except that the initial crediting rate on MYGAs is guaranteed for up to seven years before it may be changed at our discretion while the initial crediting rate on SPDAs is guaranteed for either three or five years. The minimum guaranteed rate on our annual reset fixed rate deferred annuities ranges from 1.00% to 4.00%, the initial guaranteed rate on our multi-year rate guaranteed deferred annuities and SPDAs range from 1.40% to 5.25%.

The initial crediting rate is largely a function of the interest rate we can earn on invested assets acquired with new annuity deposits and the rates offered on similar products by our competitors. For subsequent adjustments to crediting rates, we take into account the yield on our investment portfolio, experience factors and crediting rate history for particular groups of annuity policies with similar characteristics. As of December 31, 2022, crediting rates on our outstanding fixed rate deferred annuities generally ranged from 1.0% to 5.25%. The average crediting rates on our outstanding annual reset and multi-year rate guaranteed fixed rate deferred annuities at December 31, 2022 were 1.61% and 2.38%, respectively.

We also sell single premium immediate annuities ("SPIAs"). Our SPIAs provide a series of periodic payments for a fixed period of time or for life, according to the policyholder's choice at the time of issue. The amounts, frequency and length of time of the payments are fixed at the outset of the annuity contract. SPIAs are often purchased by persons at or near retirement age who desire a steady stream of payments over a future period of years.

Withdrawal Options - Fixed Index and Fixed Rate Annuities

Policyholders are typically permitted penalty-free withdrawals up to 10% of the contract value in each year after the first year, subject to limitations. Withdrawals in excess of allowable penalty-free amounts are assessed a surrender charge during a penalty period which ranges from 5 to 17 years for fixed index annuities and 3 to 15 years for fixed rate annuities from the date the policy is issued. This surrender charge initially ranges from 5% to 20% for fixed index annuities and 8% to 20% for fixed rate annuities of the contract value and generally decreases by approximately one-half to two percentage points per year during the surrender charge period. For certain policies, the premium bonus is considered in the establishment of the surrender charge percentages. For other policies, there is a vesting schedule ranging from 9 to 14 years that applies to the premium bonus and any interest earned on that premium bonus. Surrender charges and bonus vesting are set at levels aimed at protecting us from loss on early terminations and reducing the likelihood of policyholders terminating their policies during periods of increasing interest rates. This practice enhances our ability to maintain profitability on such policies. Policyholders may elect to take the proceeds of the annuity either in a single payment or in a series of payments for life, for a fixed number of years or a combination of these payment options.

Information on surrender charge protection and net account values are as follows:

	December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Annuity Surrender Charges:			
Average years at issue	11.6	11.8	12.4
Average years remaining	4.6	5.5	6.1
Average surrender charge percentage remaining	7.9 %	9.1 %	9.9 %
Annuity Account Value (net of coinsurance)	$ 47,504,615	$ 53,191,277	$ 54,056,725

A significant amount of our fixed index annuity policies and many of our annual reset fixed rate deferred annuities have been issued with a lifetime income benefit rider. This rider provides an additional liquidity option to policyholders. With the lifetime income benefit rider, a policyholder can elect to receive guaranteed payments for life from their contract without requiring them to annuitize their contract value. The amount of the lifetime income benefit available is determined by the growth in the policy's income account value and the policyholder's age at the time the policyholder elects to begin receiving lifetime income benefit payments. The growth in the policy's income account value is based on the growth rate specified in the policy which ranges from 3.0% to 9.25% and the time period over which that growth rate is applied which ranges from 5 to 20 years for the majority of these policies. Generally, the time period consists of an initial period of up to 10 years and the policyholder has the option to elect to continue the time period for an additional period of up to 10 years. We have the option to either increase the rider fee or decrease the specified growth rate, depending on the specifics of the policy, at the time the policyholder elects to continue the time period. Lifetime income benefit payments may be stopped and restarted at the election of the policyholder. Policyholders have the choice of selecting a rider with a base level of benefit for no explicit fee or paying a fee for a rider that has a higher level of benefits, and since 2013 we have issued products where the addition of a rider to the policy is completely optional. Rider fees range from 0.15% to 1.60% of either the policy's account value or the policy's income account value. The additional value to the policyholder provided by these riders through the lifetime income benefit base is not transferable to other contracts, and we believe the riders will improve the persistency of the contract.

Investments/Spread Management

Investment activities are an integral part of our business, and net investment income is a significant component of our total revenues. Profitability of our annuity products is significantly affected by spreads between interest yields on investments, the cost of options to fund the index credits on our fixed index annuities and rates credited on our fixed rate annuities and the fixed rate strategy in our fixed index annuities. We manage the index-based risk component of our fixed index annuities by purchasing call options on the applicable indices to fund the index credits on these annuities and by adjusting the caps, participation rates and asset fees on policy anniversary dates to reflect the change in the cost of such options which varies based on market conditions. All options are purchased on the respective policy anniversary dates, and new options are purchased on each of the anniversary dates to fund the next index credits. All credited rates on annual reset fixed rate deferred annuities and the fixed rate strategy in fixed index annuities may be changed annually, subject to minimum guarantees. Changes in caps, participation rates and asset fees on fixed index annuities and crediting rates on fixed rate and fixed index annuities may not be sufficient to maintain targeted investment spreads in all economic and market environments. In addition, competition and other factors, including the potential for increases in surrenders and withdrawals, may limit our ability to adjust or to maintain caps, participation rates, asset fees and crediting rates at levels necessary to avoid narrowing of spreads under certain market conditions.

For additional information regarding the composition of our investment portfolio and our interest rate risk management, see Management's Discussion and Analysis of Financial Condition and Results of Operations—Financial Condition—Investments, Quantitative and Qualitative Disclosures About Market Risk and *Note 3 - Investments* to our audited consolidated financial statements.

Marketing/Distribution

We market our products through a variable cost distribution network, including independent agents through IMOs, broker/dealers, banks and registered investment advisors. We emphasize high quality service to our agents, distribution partners and policyholders along with the prompt payment of commissions to our agents and distribution partners. We believe this has been significant in building excellent relationships with our distribution network.

Our independent agents and agencies range in profile from national sales organizations to personal producing general agents. A value proposition that we emphasize with agents is they have direct access to our senior leadership, giving us an edge over larger and foreign-owned competitors. We also emphasize our products, service and our focused fixed annuity expertise. We also have favorable relationships with our IMOs, which have enabled us to efficiently sell through an expanded number of independent agents.

The independent agent distribution system is comprised of insurance brokers and marketing organizations. We are pursuing a strategy to increase the efficiency of our independent agent distribution network by strengthening our relationships with key IMOs and are alert for opportunities to establish relationships with organizations not presently associated with us. These organizations typically recruit agents for us by advertising our products and our commission structure through direct mail advertising or seminars for insurance agents and brokers. We monitor agent activity and will terminate those who have not produced business for us in recent periods and are unlikely to sell our products in the future. The IMOs bear most of the cost incurred in marketing our products. We compensate marketing organizations by paying them a percentage of the commissions earned on new annuity policy sales generated by the agents recruited by such organizations. American Equity Life has relationships with 50 national marketing organizations, through which nearly 28,638 independent agents are under contract. We generally do not enter into exclusive arrangements with these marketing organizations.

Agents contracted with us through four national marketing organizations accounted for approximately 58% of the annuity deposits and insurance premiums collected during 2022, and we expect these organizations to continue as marketers for American Equity Life with a focus on selling our products. The states with the largest share of direct premium collected during 2022 were: Florida (8.5%), Texas (8.2%), California (4.9%), Illinois (4.9%), and Pennsylvania (4.9%).

Eagle Life's fixed index and fixed rate annuities are distributed pursuant to selling agreements with broker/dealers, banks and registered investment advisors. Eagle Life has 102 broker-dealer/firm selling agreements, through which nearly 12,050 representatives are appointed. Twenty-six of these agreements are with broker/dealers affiliated with banks. Relationships with certain of these firms are facilitated by third party wholesalers who promote Eagle Life and are compensated based upon the sales of the firms they have contracted with Eagle Life. We have been developing our employee wholesaling force, which will be a key to our success at Eagle Life. Beginning in 2020, the majority of our third-party wholesaling partners no longer market Eagle Life products to new accounts as new account acquisition is handled almost entirely on an internal basis. American Equity Life to a lesser extent also sells through broker/dealers and we have introduced products specifically for this distribution channel.

Competition and Ratings

We operate in a highly competitive industry. Our annuity products compete with fixed index, fixed rate and variable annuities sold by other insurance companies and also with mutual fund products, traditional bank products and other investment and retirement funding alternatives offered by asset managers, banks, and broker/dealers. Our insurance products compete with products of other insurance companies, financial intermediaries and other institutions based on a number of features, including crediting rates, index options, policy terms and conditions, service provided to distribution channels and policyholders, ratings, reputation and distributor compensation.

The sales agents for our products use the ratings assigned to an insurer by independent rating agencies as one factor in determining which insurer's annuity to market. The degree to which ratings adjustments have affected and will affect our sales and persistency is unknown. Following is a summary of American Equity Life's financial strength ratings:

	Financial Strength Rating	Outlook Statement
A.M. Best Company, Inc.		
January 2011 - current	A-	Stable
S&P Global		
August 2020 - current	A-	Stable
March 2020 - August 2020	A-	Negative
August 2015 - March 2020	A-	Stable
June 2013 - August 2015	BBB+	Positive
October 2011 - June 2013	BBB+	Stable
Fitch Ratings Ltd.		
April 2021 - current	A-	Stable
April 2020 - April 2021	A-	Negative
August 2019 - April 2020	A-	Stable
September 2018 - August 2019	BBB+	Positive
May 2013 - September 2018	BBB+	Stable

Financial strength ratings generally involve quantitative and qualitative evaluations by rating agencies of a company's financial condition and operating performance. Generally, rating agencies base their ratings upon information furnished to them by the insurer and upon their own investigations, studies and assumptions. Ratings are based upon factors of concern to policyholders, agents and intermediaries and are not directed toward the protection of investors and are not recommendations to buy, sell or hold securities.

In addition to the financial strength ratings, rating agencies use an "outlook statement" to indicate a medium or long-term trend which, if continued, may lead to a rating change. A positive outlook indicates a rating may be raised and a negative outlook indicates a rating may be lowered. A stable outlook is assigned when ratings are not likely to be changed. Outlook statements should not be confused with expected stability of the insurer's financial or economic performance. A rating may have a "stable" outlook to indicate that the rating is not expected to change, but a "stable" outlook does not preclude a rating agency from changing a rating at any time without notice.

In November 2022, A.M. Best maintained its rating outlook on the U.S. life/annuity sector as ‘stable’, reflecting its view of high levels of capitalization and favorable earnings, strong liquidity profiles, improved risk management practices including product de-risking and regular stress testing, and pricing discipline. In December 2022, Fitch maintained its rating outlook on the U.S. life insurance sector as 'stable', reflecting the anticipated benefit from the material uptick in interest rates over the past year, somewhat offset by continued macroeconomic volatility and an expected mild recession during 2023. In January 2023, S&P affirmed its rating outlook on the U.S. life insurance sector as 'stable', reflecting its expectation that conflicting forces, such as higher interest rates, lower equity markets, and a potential recession, will likely balance each other out without a significant positive impact on life insurers' credit quality.

A.M. Best financial strength ratings currently range from "A++" (superior) to "F" (in liquidation), and include 16 separate ratings categories. Within these categories, "A++" (superior) and "A+" (superior) are the highest, followed by "A" (excellent) and "A-" (excellent) then followed by "B++" (good) and "B+" (good). Publications of A.M. Best indicate that the "A-" rating is assigned to those companies that, in A.M. Best's opinion, have demonstrated an excellent ability to meet their ongoing obligations to policyholders.

S&P financial strength ratings currently range from "AAA" (extremely strong) to "R" (under regulatory supervision), and include 21 separate ratings categories, while "NR" indicates that S&P has no opinion about the insurer's financial strength. Within these categories, "AAA" and "AA" are the highest, followed by "A" and "BBB". Publications of S&P indicate that an insurer rated "A-" is regarded as having strong financial security characteristics, but is somewhat more likely to be affected by adverse business conditions than are higher rated insurers.

Fitch financial strength ratings currently range from "AAA" (exceptionally strong) to "C" (distressed). Ratings of "BBB-" and higher are considered to be "secure," and those of "BB+" and lower are considered to be "vulnerable."

A.M. Best, S&P and Fitch review their ratings of insurance companies from time to time. There can be no assurance that any particular rating will continue for any given period of time or that it will not be changed or withdrawn entirely if, in their judgment, circumstances so warrant. If our ratings were to be negatively adjusted for any reason, we could experience a material decline in the sales of our products and the persistency of our existing business, as well as an increase in the cost of debt or equity financing.

Reinsurance

We follow the industry practice of reinsuring a portion of our annuity risks with third party reinsurers. Our reinsurance agreements play a part in managing our regulatory capital, risk and returns.

Coinsurance

American Equity Life has three coinsurance agreements with Athene Life Re Ltd. ("Athene"), an unauthorized life reinsurer domiciled in Bermuda. One agreement ceded 20% of certain of American Equity Life's fixed index annuities issued from January 1, 2009 through March 31, 2010. The second agreement ceded 80% of American Equity Life's multi-year rate guaranteed annuities issued from July 1, 2009 through December 31, 2013 and 80% of Eagle Life's multi-year rate guaranteed annuities issued from November 20, 2013 through December 31, 2013. The third agreement ceded 80% of certain of American Equity Life's and Eagle Life's multi-year rate guaranteed annuities issued on or after January 1, 2014, 80% of Eagle Life's fixed index annuities issued prior to January 1, 2017, 50% of certain of Eagle Life's fixed index annuities issued from January 1, 2017 through December 31, 2018, 20% of certain of Eagle Life's fixed index annuities issued on or after January 1, 2019 and 80% of certain of American Equity Life's fixed index annuities issued from August 1, 2016 through December 31, 2016. Effective January 1, 2021, no new business is being ceded to Athene. The business reinsured under any of the Athene agreements may not be recaptured. American Equity Life is an intermediary for reinsurance of Eagle Life's business ceded to Athene. American Equity Life and Eagle Life remain liable to policyholders with respect to the policy liabilities ceded to Athene should Athene fail to meet the obligations it has coinsured. The annuity deposits that have been ceded to Athene are secured by assets held in trusts and American Equity Life is the sole beneficiary of the trusts. The assets in the trusts are required to remain at a value that is sufficient to support the current balance of policy benefit liabilities of the ceded business on a statutory basis. If the value of the trust accounts would ever be less than the amount of the ceded policy benefit liabilities on a statutory basis, Athene is required to either establish a letter of credit or deposit securities in the trusts for the amount of any shortfall. Athene has received a financial strength rating of "A" (Excellent) with a stable outlook from A.M. Best.

American Equity Life has two coinsurance agreements with EquiTrust Life Insurance Company ("EquiTrust"), covering 70% of certain of American Equity Life's fixed index and fixed rate annuities issued from August 1, 2001 through December 31, 2001, 40% of those contracts issued during 2002 and 2003, and 20% of those contracts issued from January 1, 2004 to July 31, 2004. The business reinsured under these agreements may not be recaptured. We remain liable to policyholders with respect to the policy liabilities ceded to EquiTrust should EquiTrust fail to meet the obligations it has coinsured. EquiTrust has received a financial strength rating of "B++" (Good) with a stable outlook from A.M. Best.

Effective July 1, 2021 American Equity Life entered into a reinsurance agreement with North End Re ("North End Re reinsurance treaty"), a wholly owned subsidiary of Brookfield Reinsurance to reinsure certain in-force fixed indexed annuity product liabilities as of the effective date of the reinsurance agreement, 70% on a modified coinsurance ("modco") basis and 30% on a coinsurance basis. The liabilities reinsured on a coinsurance basis are secured by assets held in trusts with American Equity Life as the beneficiary. The liabilities reinsured on a modco basis are secured by assets held by American Equity Life in a segregated modco account. American Equity Life will receive an annual ceding commission equal to 49 basis points and the Company will receive an annual asset liability management fee equal to 30 basis points calculated based on the initial cash surrender value of liabilities ceded. Such fees are fixed and contractually guaranteed for six years with the additional and final seventh year payment partially contingent on certain performance obligations for both parties.

As part of the North End Re reinsurance treaty, American Equity Life is also ceding 75% of certain fixed index annuities issued after the effective date of the agreement, 70% on a modco basis and 30% on a coinsurance basis to North End Re. Effective July 1, 2022, the North End Re reinsurance treaty was amended to include additional fixed index annuity products. As part of this amendment, 75% of an additional block of in-force fixed indexed annuity product liabilities issued after July 1, 2021 was ceded, 70% on a modco basis and 30% on a coinsurance basis. On sales subsequent to the effective date of the North End Re reinsurance treaty, American Equity Life will receive an annual ceding commission equal to 140 basis points and the Company will receive an annual asset liability management fee equal to 30 basis points calculated based on the initial cash surrender value of liabilities ceded. Such fees are fixed and contractually guaranteed for six years with the additional and final seventh year payment being contingent on certain performance obligations for both parties.

Although American Equity Life remains liable to policyholders with respect to the policy liabilities ceded to North End Re, should North End Re fail to meet the obligations it has reinsured the assets in the trusts and modco account are required to remain at a value that is sufficient to support the current balance of policy benefit liabilities of the ceded business on a statutory basis. The assets in the trusts and modco account are subject to investment management agreements between American Equity Life and North End Re.

Effective October 1, 2022 American Equity Life entered into a reinsurance agreement with an unaffiliated reinsurer AeBe ISA LTD ("AeBe"), a Bermuda exempted company affiliated with 26North Holdings LP ("26North"), that is an incorporated segregated account licensed as a Class E reinsurer. Under the agreement, American Equity Life ceded $4.3 billion of certain in-force fixed indexed and fixed rate annuity product liabilities and has the option in the future to cede liabilities of certain single premium fixed deferred annuities, or policies as otherwise agreed to by parties issued after the treaty effective date, at risk adjusted pricing terms that may be acceptable to American Equity Life at that time. Under the agreement, these liabilities will be ceded 75% on a funds withheld coinsurance basis and 25% on a coinsurance basis. The liabilities reinsured on a coinsurance basis are secured by assets held in both a statutory and supplemental trust (collectively referred to as the "trusts"). The liabilities reinsured on a funds withheld basis are secured by a segregated funds withheld account in which the assets are maintained by American Equity Life. American Equity Life transferred cash and investments with a fair value of $3.0 billion to the segregated funds withheld account and $1.0 billion to the statutory trust at close of this reinsurance agreement on October 3, 2022. At the close of the reinsurance agreement, American Equity Life received a closing ceding commission of $70 million. For flow business ceded, American Equity Life will receive an annual ceding commission over the term of the policy of up to 0.50% of the premium received.

American Equity Life remains liable to policyholders with respect to the policy liabilities ceded to AeBe should AeBe fail to meet the obligations it has reinsured. The assets in the trusts and funds withheld account are required to remain at a value that is sufficient to support the current balance of policy benefit liabilities of the ceded business on a statutory basis. The assets in the trusts and funds withheld account are subject to investment management agreements between American Equity Life and 26North.

Intercompany Reinsurance Agreements

Effective October 1, 2021, American Equity Life entered into a coinsurance agreement with AEL Re Vermont Inc., a wholly-owned captive reinsurance company, to cede a portion of lifetime income benefit rider payments in excess of policy fund values on a funds withheld basis ("the AEL Re Vermont Agreement"). In connection with the agreement, AEL Re Vermont entered into an excess of loss reinsurance agreement (the "XOL treaty") with Hannover, to retrocede the lifetime income benefit rider payments in excess of the policy fund values ceded under the AEL Re Vermont Agreement upon exhaustion of the funds withheld account balance under the AEL Re Vermont Agreement.

AEL Re Vermont is permitted to carry the XOL treaty as an admitted asset on the AEL Re Vermont statutory balance sheet. The XOL treaty does not satisfy risk transfer and is treated as a financing agreement. The associated charges are recorded as risk charges that are included in other operating costs and expenses in the consolidated statements of operations.

Effective December 31, 2021, American Equity Life entered into a coinsurance agreement with AEL Re Bermuda, an affiliated Bermuda reinsurer wholly owned by American Equity Investment Life Holding Company, to reinsure a quota share of fixed index annuities issued from January 1, 1997 through December 31, 2007 on a funds withheld basis.

The impact of all intercompany reinsurance agreements and related intercompany balances have been eliminated in the preparation of the accompanying consolidated financial statements.

For more information regarding reinsurance, see *Note 8 - Reinsurance and Policy Provisions* to our audited consolidated financial statements. For risks involving reinsurance see "Item 1A. Risk Factors."

Regulation

General Scope of Insurance Regulation

Life insurance companies are subject to regulation and supervision by the states in which they transact business. State insurance laws establish supervisory agencies with broad regulatory authority, including the power to:

- grant and revoke licenses to transact business;
- regulate and supervise trade practices and market conduct;
- establish guaranty associations;
- license agents;
- approve policy forms;
- approve premium rates for some lines of business;
- establish reserve requirements;
- prescribe the form and content of required financial statements and reports;
- determine the reasonableness and adequacy of statutory capital and surplus;
- perform financial, market conduct and other examinations;
- define acceptable accounting principles for statutory reporting;
- regulate the type and amount of permitted investments;
- establish requirements for reinsurance credit;
- prescribe the terms of agreements between or among affiliates;
- approve changes in direct or indirect ownership above certain thresholds;
- review corporate governance practices; and
- limit the amount of dividends and surplus note payments that can be paid without obtaining regulatory approval.

Our life subsidiaries are subject to periodic examinations by state regulatory authorities. In 2020, the Iowa Insurance Division completed financial examinations of American Equity Life and Eagle Life for the five-year period ending December 31, 2018. There were no adjustments to American Equity Life's or Eagle Life's statutory financial statements as a result of these examinations. In 2020, the New York Department of Financial Services completed its financial examination of American Equity Life of New York for the five-year period ending December 31, 2018. There were no adjustments to American Equity Life of New York's statutory financial statements as a result of this examination.

State regulators also review matters related to us and our life subsidiaries in connection with requests for regulatory approval of transactions, including our successful applications for a variety of reinsurance arrangements and from transactions among us and our affiliates for intra-enterprise services and allocation of tax costs.

We established captive reinsurers in Vermont and in Bermuda in 2021, which required the approval of regulators in those jurisdictions and initiated our regulation by those authorities. Iowa regulators also approved the related reinsurance arrangements. Bermuda regulations address matters such as fitness and adequate knowledge and expertise to engage in insurance, and impose solvency, auditing, reporting, and governance requirements.

Dividends, Distributions, and Transactions Among Affiliates

The payment of dividends or distributions, including surplus note payments, by our life subsidiaries is subject to regulation by each subsidiary's state of domicile's insurance department. Currently, American Equity Life may pay dividends or make other distributions without the prior approval of the Iowa Insurance Commissioner, unless such payments, together with all other such payments within the preceding twelve months, exceed the greater of (1) American Equity Life's statutory net gain from operations for the preceding calendar year, or (2) 10% of American Equity Life's statutory surplus at the prior year-end. For 2023, up to $369.3 million can be distributed as dividends by American Equity Life without prior approval of the Iowa Insurance Commissioner. In addition, dividends and surplus note payments may be made only out of earned surplus, and all surplus note payments are subject to prior approval by regulatory authorities. American Equity Life had $2.0 billion of statutory earned surplus at December 31, 2022.

Most states have also enacted regulations on the activities of insurance holding company systems, including acquisitions, extraordinary dividends, the terms of surplus notes, the terms of affiliate transactions, corporate governance, risk management, and other related matters. We are registered pursuant to such legislation in Iowa. A number of state legislatures have also considered or have enacted legislative proposals that alter and, in many cases, increase the authority of state agencies to regulate insurance companies and holding company systems.

Acquisition and Exercise of Control

Most states, including Iowa and New York where our life subsidiaries are domiciled, have enacted legislation or adopted administrative regulations affecting the acquisition of control of insurance companies as well as transactions between insurance companies and persons controlling them. The nature and extent of such legislation and regulations currently in effect vary from state to state. However, most states require administrative approval of the direct or indirect acquisition of 10% or more of the outstanding voting securities of an insurance company incorporated in the state. The acquisition of 10% of such securities is generally deemed to be the acquisition of "control" for the purpose of the holding company statutes and requires not only the filing of detailed information concerning the acquiring parties and the plan of acquisition, but also administrative approval prior to the acquisition. In many states, the insurance authority may find that "control" in fact

does not exist in circumstances in which a person owns or controls more than 10% of the voting securities. In 2021, Brookfield Reinsurance received Iowa and New York regulatory approval to increase its ownership of our common stock, and chose to increase its ownership to 16%.

Risk-Based Capital Requirements

The National Association of Insurance Commissioners ("NAIC") risk-based capital ("RBC") requirements are intended as an early warning tool for regulators to identify deteriorating or weakly capitalized insurance companies for the purpose of initiating regulatory action. The RBC formula defines a minimum capital standard which supplements low, fixed minimum capital and surplus requirements previously implemented on a state-by-state basis. Such requirements are not designed as a ranking mechanism for adequately capitalized companies.

The NAIC's RBC requirements provide for four levels of regulatory attention depending on the ratio of a company's total adjusted capital to its RBC. Adjusted capital is defined as the total of statutory capital and surplus, adjusted for certain items including the asset valuation reserve. Calculations using the NAIC formula at December 31, 2022, indicated that American Equity Life's ratio of total adjusted capital to the highest level at which regulatory action might be initiated was 415%.

Reserves Adequacy

Our life subsidiaries, and our affiliated captive reinsurers, must annually analyze their statutory reserves adequacy. In each case, a qualified actuary must submit an opinion that states that the statutory reserves make adequate provision, according to accepted actuarial standards of practice, for the anticipated cash flows required by the contractual obligations and related expenses of the subsidiary. The actuary considers the adequacy of the statutory reserves in light of the assets held by the insurer with respect to such reserves and related actuarial items, such as the investment earnings on such assets and the consideration the insurer anticipates receiving and retaining under the related policies and contracts. We may increase reserves in order to submit such an opinion without qualification. Our subsidiaries that must provide these opinions did so in 2022 without qualifications.

Investments Regulation

State laws and regulations limit the amount of investments that our U.S. insurance subsidiaries may have in certain asset categories, such as below investment grade fixed income securities, real estate equity, other equity investments, and derivatives, and require diversification of investment portfolios. Investments exceeding regulatory limitations may not qualify as reserve assets and may potentially be excluded from admitted assets for purposes of measuring surplus. The Iowa Insurance Division has proposed changes to Iowa law on admitted assets to conform Iowa law more closely to NAIC models in some respects. For example, it would change the amount of some assets an insurer could include as admitted. If the legislature enacts these changes, we would review and reconfigure our investments in light of the new requirements and the challenges and opportunities they pose.

Derivatives Regulation

We use derivatives, primarily call options, to provide the income needed to fund the annual index credits on our fixed index annuity products. We may also use derivatives to hedge interest rate, foreign currency and additional equity market exposure. As such, we and our counterparties are subject to Dodd-Frank Act regulation of collateral posting, clearing, and reporting of over-the-counter derivatives transactions.

Financial Strength Ratings

Financial strength ratings issued by Nationally Recognized Statistical Rating Organizations ("NRSRO's") are measures of an insurance company's ability to meet policyholder obligations and generally involve quantitative and qualitative evaluations by rating agencies of a company's financial condition and operating performance. While not enforced by law, ratings are based upon factors of concern to agents, policyholders and intermediaries and strongly influence an insurer's competitiveness. Factors that could negatively influence financial strength ratings include:

- Sustained reductions in new sales of insurance products;
- Unfavorable operational and/or financial trends;
- Significant losses and/or ratings deterioration in our investment portfolio;
- Changes in equity market levels, interest rates, and market volatility;
- Inability to access capital markets to provide reserve relief;
- Changes in statutory accounting or reserve requirements applicable to our insurance subsidiaries;
- Inability to sustain senior management or other key personnel;
- Rapid or excessive growth; and
- Ineffective enterprise risk management.

Long-Duration Targeted Improvements

The Financial Accounting Standards Board ("FASB") has revised aspects of the measurement models and disclosure requirements for long duration insurance and investment contracts. The revisions include updating cash flow assumptions in the calculation of the liability for traditional life products, introducing the term 'market risk benefit' ("MRB") and requiring all contract features meeting the definition of an MRB to be measured at fair value and simplifying the method used to amortize deferred policy acquisition costs and deferred sales inducements to a constant basis over the expected term of the related contracts rather than based on actual and estimated gross profits and enhancing disclosure requirements. While this revised guidance is effective for us on January 1, 2023, the transition date (the remeasurement date) is January 1, 2021. Early adoption is permitted. See *Note 1 - Significant Accounting Policies* for further discussion on the impact of this guidance.

Privacy and Cybersecurity

Various U.S. federal and state government agencies protect the privacy and security of personal information. These laws and rules vary significantly from jurisdiction to jurisdiction. Insurance and other regulators are also increasingly focused on cybersecurity. The NAIC's Insurance Data Security Model Law (the "Cybersecurity Model Law") established standards for data security and for the investigation of and notification to insurance commissioners of cybersecurity events involving unauthorized access to, or the misuse of, certain nonpublic information. The Cybersecurity Model Law imposes regulatory requirements intended to protect the confidentiality, integrity, and availability of information systems. Recent regulations with a significant impact on our operations include the New York Department of Financial Services cybersecurity requirements for financial services companies and the California Consumer Privacy Act. The California Consumer Privacy Act contains protections for individuals, such as notification requirements for data breaches, the right to access personal data and the right to be forgotten. The SEC has proposed new cybersecurity disclosure rules for public companies. Under the proposed rule, registrants would have to disclose information about material cybersecurity incidents on a Current Report on Form 8-K within four days of concluding that the incident is material, and update that disclosure as its analysis and response to the incident progresses. Registrants would also have to disclose aspects of cybersecurity risk management annually, including governance processes and Board and management responsibilities, and director cybersecurity expertise.

ERISA

We provide products and services to certain employee benefit plans that are subject to the Employee Retirement Income Security Act ("ERISA") and the Internal Revenue Code of 1986, as amended (the "Code"). ERISA and the Code impose restrictions, including fiduciary duties to perform solely in the interests of ERISA plan participants and beneficiaries, and to avoid certain prohibited transactions. The applicable provisions of ERISA and the Code are subject to enforcement by the U.S. Department of Labor ("DOL"), the Internal Revenue Service ("IRS") and the Pension Benefit Guaranty Corporation.

The prohibited transaction rules of ERISA and the Code generally restrict the provision of investment advice to ERISA plans and participants and IRAs if the investment recommendation results in fees paid to an individual advisor, the firm that employs the advisor or their affiliates that vary according to the investment recommendation chosen, unless an exemption or exception is available. Similarly, without an exemption or exception, fiduciary advisors are prohibited from receiving compensation from third parties in connection with their advice. ERISA also affects certain of our in-force insurance policies and annuity contracts, as well as insurance policies and annuity contracts we may sell in the future.

Heightened standards of conduct as a result of a fiduciary or best interest standard or other similar rules or regulations could increase the compliance and regulatory burdens on our sales representatives. On February 16, 2021, the DOL's new fiduciary regulation and interpretative guidance regarding the provision of investment advice in retirement accounts became effective. The DOL's final guidance confirms the restatement of the definition of "investment advice" that previously applied but broadens the circumstances under which sales representatives could be considered fiduciaries under ERISA in connection with recommendations to "rollover" assets from a qualified retirement plan to an individual retirement account. This guidance reverses an earlier DOL interpretation suggesting that "rollover" advice did not constitute investment advice giving rise to a fiduciary relationship. We have adapted our business practices accordingly, and continue to adapt them as regulatory requirements evolve.

Broker-Dealer and Securities Product Regulation

One of our subsidiaries is registered with the SEC as a broker-dealer under the Exchange Act and a member of, and subject to regulation by, FINRA. In addition, we may offer products regulated as securities. In each case, we will be subject to scrutiny from federal and state securities regulatory authorities and FINRA. Any of these may, from time to time, make inquiries and conduct examinations regarding compliance with securities and other laws and regulations.

Pandemic and Public Health Related Conditions and Regulation

The outbreak of COVID-19 and related conditions has created significant economic and financial turmoil both in the U.S. and around the world. Government, regulatory, business, and social reactions to COVID-19 also have significant effects on our business and the conditions in which we operate. For example, governments have imposed vaccination requirements, lock-downs, travel limitations, school closures, and other requirements. All of these conditions have disrupted distribution channels through which we sell our products, including independent agents and their clients. They have, and may continue to, depress economic activity that affects demands for our products. They may also materially affect our investment portfolio.

Guaranty Laws

Our life subsidiaries also may be required, under the solvency or guaranty laws of most states in which they do business, to pay assessments up to certain prescribed limits to fund policyholder losses or liabilities of insolvent insurance companies. These assessments may be deferred or forgiven under most guaranty laws if they would threaten an insurer's financial strength and, in certain instances, may be offset against future premium taxes.

Environmental Laws and Regulations

We are subject to environmental laws and regulations as an owner and operator of real property, which can include liabilities and costs in connection with any required remediation of such properties. In addition, we hold equity interests in companies that could potentially be subject to environmental liabilities. We assess real estate we acquire for environmental exposure, but unexpected environmental liabilities may arise.

Side Car Related Regulation

As we continue to develop and implement third-party capital reinsurance, such as “side cars,” we expect to manage additional related regulatory requirements in areas such as employment and labor, governance, reinsurance, securities, investment advising, and tax. We expect the scope of these requirements and our management strategies to be clearer as our planning and execution continue to progress.

Other State and NAIC Regulatory Developments

State insurance regulators and the NAIC are continually reexamining existing laws and regulations and developing new legislation for passage by state legislatures and new regulations for adoption by insurance authorities. Proposed laws and regulations or those still under development pertain to insurer solvency and market conduct and in recent years have focused on:

- insurance company investments;
- RBC guidelines, which consist of regulatory targeted surplus levels based on the relationship of statutory capital and surplus, with prescribed adjustments, to the sum of stated percentages of each element of a specified list of company risk exposures;
- suitability/best interest standard;
- the implementation of non-statutory guidelines and the circumstances under which dividends may be paid;
- principles-based reserving;
- own-risk solvency and enterprise risk management assessment;
- cybersecurity assessments;
- product approvals;
- agent licensing;
- sales practices; and
- algorithmic underwriting.

In addition, the NAIC is reviewing how insurers’ varieties of affiliate agreements, holding company structures, and forms of public or private ownership may affect insurers’ financial stability.

Other U.S. Federal Initiatives

Historically, the federal government has not directly regulated the business of insurance. However, federal legislation and administrative policies in several areas, including pension regulation, age and sex discrimination, financial services regulation, securities regulation and federal taxation can significantly affect the insurance business.

The Dodd-Frank Wall Street Reform and Consumer Protection Act the "Dodd-Frank Act") generally provides for enhanced federal supervision of financial institutions, including insurance companies in certain circumstances, and financial activities that it deems represent a systemic risk to financial stability or the U.S. economy. A Federal Insurance Office, established under the Dodd-Frank Act, monitors aspects of the insurance industry and its authority may extend to our business, although it does not have general regulatory authority over insurers.

The U.S. amended its internal revenue code to impose a 15% “corporate alternative minimum tax” based on net income, subject to some adjustments, beginning in tax year 2023. We continue to evaluate the potential impact of this tax. The federal government has also imposed a 1% excise tax on certain repurchases of corporate stock, and has issued related interim guidance. We expect the new tax to apply to our common stock repurchases.

The SEC has proposed new climate-related disclosure rules for public companies. Among other things, the proposed rules would require registrant disclosure on (1) governance of climate-related risks; (2) climate-related impacts on strategy, business model and outlook; (3) climate-related risk management; (4) greenhouse gas ("GHG") emissions; and (5) any internal carbon price or climate-related targets and goals. Large accelerated filers, such as us, would also have to obtain attestation by an independent third party of certain of their GHG emissions metrics. The proposed rules would also require registrants to include climate-related financial statement metrics (which would consist of disaggregated climate-related impacts on existing financial statement line items) and related disclosures in a note to audited financial statements, subject to adequate internal controls and to audit by an independent registered public accounting firm. Depending on the ultimate rules the SEC adopts, the cost and other impacts of such a rule on us may be significant.

Federal Income Tax

Generally, U.S. federal tax law permits tax deferral on the inside build-up of investment value of certain retirement savings, including annuity products, until a contract distribution has occurred. In general, death benefits paid under a life insurance contract are excluded from taxation. Attractiveness of the Company's products for some individuals may depend on the enacted tax rates and the impact on the value of the deferral. Congress from time to time may enact other changes to the tax law that could make our products less attractive to consumers, including legislation that would modify the tax favored treatment of retirement savings, life insurance and annuity products.

Human Capital

Our Team Members

American Equity's growth and innovation strategy relies on our employees' capabilities and expertise. Our human capital management is crucial to our delivery on our decades- and often life-long promises to policyholders, and as we continue to transform into an at-scale origination, spread and capital light fee-based business, and to manage capital to grow as well as produce returns for shareholders. As of December 31, 2022, American Equity employed approximately 840 full-time team members. All of our employees are located in the United States, and none were covered by a collective bargaining agreement. American Equity engaged less than 100 temporary or part-time workers.

Engagement

Our culture is the foundation for our efforts to provide the best products and exemplary customer service, as well as to build an engaged and valued team. We seek to cultivate a culture of growth, innovation, and purposeful teamwork that builds off of our foundation of customer service, stewardship, product integrity, and financial strength. Our cultural beliefs focus on:

- Performing as **One Team** to foster a trusting and transparent environment to work toward common objectives.
- **Inspiring Innovation** by leaving our comfort zones daily to advance the company's goals.
- **Taking Action** to seek the best available information and deliver results.
- **Owning It** by taking responsibility for our actions and growing from our experiences.
- **Breaking Boundaries** to engage in respectful conversations that invite diverse perspectives and experiences.

Health and Safety

Our employee benefits programs support our growing workforce's evolving needs. Healthcare options for benefit-eligible employees aim to maintain affordable team member contribution and proactively promote physical and mental well-being. One measure of the caliber of our benefits in 2022 was that over 85% of our employees chose coverage through our medical plan, and similarly high levels chose dental and/or vision coverage. During 2022, the company paid an average of 84% of participating employees' monthly medical premiums. We also offered out team members a free robust virtual holistic wellness program, in which hundreds took part.

Retirement Benefits

American Equity team members are eligible to participate in our 401(k) plan after thirty days of employment and age 18. We match 100% of team member contributions to the 401(k) plan up to 3% of the employee's total eligible compensation and match 50% of employee contributions up to the next 2% of the employee's total eligible compensation, subject to the Internal Revenue Code (the "Code") limitations.

We also align employee and shareholder interests and promote team members' ownership mindset through our long-standing Employee Stock Ownership Plan ("ESOP"). We make semi-annual discretionary contributions for all employees after a minimum of six months of service, and their interests vest after two years of service.

Training

At American Equity, we encourage and invest in a wide variety of professional development opportunities and in-role stretch assignments. Our employees expanded their skills and expertise through thousands of hours of training in our Academy for Excellence and LinkedIn Learning in 2022. We also engaged employees through a wide variety of internal and external leadership and subject-matter seminars, degree, and certificate programs.

Community Action

We support and partner with a diverse range of organizations to make a positive difference where our team members live and work. In 2022, we sponsored the LGBTQ Legacy Leader Awards; Black and Brown Business Summit; Central Iowa DEI Awards Minority Scholarship; and Women Lead Change. We also took concrete local action by continuing to partner with Pro Iowa to redevelop an EPA superfund site into a multi-use facility for youth and community sports and recreation, and by offering our team members paid time to volunteer in community-building efforts.

Compensation

For more information on our executive compensation programs and how they align with our business strategy and results, see our subsequent disclosure to be filed within 120 days after December 31, 2022.

Item 1A. Risk Factors

Any or each of the events described below may (or may continue to) adversely affect our reputation, our regulatory, customer, or other relationships, our business, our net income and results of operations, our expenses, our profitability, our liquidity or cash flows, our statutory capital position, our book value and book value per share, our ability to meet our obligations, our credit and financial strength ratings, our risk-based capital ratios, our financial condition, our cost of capital, or the market price of our common stock. The effects may vary widely from time to time, product to product, market to market, region to region, or segment to segment. Many of these risks are interrelated and could occur under similar business and economic conditions, and the occurrence of any of them may cause others to emerge or worsen. Such combinations could materially increase the severity of the cumulative or separate impact of these risks.

These risk factors are not a complete set of all potential risks that could affect us. You should carefully consider the risk factors together with other information contained in this Annual Report on Form 10-K, including "Business," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and accompanying notes in "Financial Statements and Supplementary Data," as well as in other reports and materials we submit to the SEC.

Risks Relating to Our Business and Economic Conditions

1. Our results may differ from our management assumptions, estimates, and models.

Our financial results are based on assumptions and estimates that depend on many factors, none of which are certain. Our actual results may differ significantly from our expectations. As a result, our decisions on products and pricing, calculation of account balances within our financial statements, and the amounts of regulatory and rating agency capital we expect to need to hold may be wrong. Our estimates are based on complex analysis and interpretation of large quantities of data, involve sophisticated judgment and expertise, and are imprecise. We may change our assumptions and estimates from time to time as a result of engaging more sophisticated methods, obtaining additional information, or due to discovery of errors. Our expected pricing expenses and benefits are based on assumptions about how long a policy will remain in force and about mortality and longevity. Our actual experience may differ from our pricing assumptions. We may have to change our actuarial estimates, accelerate amortization of deferred acquisition expenses, increase our policy benefit reserves, or pay higher benefits than we projected. For example, persistency lower than our assumptions may require us to accelerate the amortization of expenses we deferred in connection with the acquisition of the policy.

Certain financial statement balances depend on estimates and assumptions including the calculations of policyholder benefit reserves, derivatives and embedded derivatives, deferred policy acquisition costs and deferred sales inducements, the fair value of investments and valuation allowances. The calculations we use to estimate these balances are complex. We make significant assumptions such as expected index credits, the age when a policyholder may begin to utilize the lifetime income benefit rider, the number of policyholders that may not utilize the lifetime income benefit rider, expected policyholder behavior including expected lapse rates, discount rates and the expected cost of annual call options, any of which may change over time and may be inaccurate. We use judgement in making estimates and assumptions, and our accuracy depends on multiple factors, including market conditions, interest rates, credit conditions, spreads, liquidity, and observable market data. Our investment returns or cash flows may also differ from our expectations.

In addition, our risk management policies, procedures, and models may be imperfect or may not be sufficiently comprehensive. As a result, they may not identify or adequately protect us from every risk to which we are exposed.

2. Interest rate and equity market conditions could change.

Interest rate increases or decreases could harm our investment spread, or the difference between yields on our invested assets and our cost of money, the fair value of our investments and the reported value of stockholders' equity and the unrealized gain or loss position of our investment portfolio.

Rising interest rates may lead customers to surrender their policies, increasing our net cash outflows, requiring us to sell assets at a disadvantaged price and accelerating our amortization of deferred policy acquisition costs and deferred sales inducements. Our sales may decline during such times, or we may increase annuity crediting rates but be unable to generate the investment returns or spreads we desire. At other times, low interest rates may harm our ability to offer attractive rates and benefits to customers while maintaining profitability; this may reduce our fixed index annuity sales, as consumers seek potentially higher returns.

A decrease in the equity markets, a decrease in interest rates, or an increase in volatility in either, may require us to increase our reserves related to benefit guarantees. Our hedge program designed to mitigate these risks may not be entirely effective to offset the changes in the carrying value of the guarantees due to, among other things, the time lag between changes in their values and corresponding changes in the hedge positions, high levels of volatility in the equity markets and derivatives markets, extreme swings in interest rates, contract holder behavior different than expected, a strategic decision to adjust the hedging strategy in reaction to extreme market conditions or inconsistencies between economic and statutory reserving guidelines and divergence between the performance of the underlying funds and hedging indices.

3. Our investments may lose value or fail to grow as quickly as we expect due to market, credit, liquidity, concentration, default, and other risks.

Our investments and their performance, including our derivative financial instruments, are subject to credit defaults, market value volatility and changes to credit spreads. The impact of these items can be exacerbated by financial and credit market volatility. We may fail to adjust to market conditions, producing investment portfolio losses. Our portfolio diversification management by asset class, creditor, industry, and other limitations may be inadequate.

We may have to sell investments that are not publicly traded or that otherwise lack liquidity (such as privately placed fixed maturity securities, below investment grade securities, investments in mortgage loans and alternative investments) below fair market values and could incur losses. We may be unable to liquidate positions quickly to meet unexpected policyholder withdrawal obligations.

Our mortgage loans may fail to perform and borrowers may default on their obligations. Declining debt service coverage ratios and increasing loan to value ratios, poor loan performance, borrower or tenant financial difficulties, catastrophes, and other events may harm mortgage carrying values, which could lead to investment losses.

Derivatives margin requirements may increase, and we may be required to post collateral. In addition, our costs may increase due to counterparties' higher capital requirements for derivatives. We may need to liquidate higher yielding assets for cash to cover some or all of these costs.

4. Our option costs could increase.

Our cost of call options, which we use to manage the index-based risk component of our fixed index annuities, may increase due to higher equity market volatility, higher interest rates, or other market factors. We may be unable to effectively mitigate this risk by adjusting caps, participation rates, and asset fees on policy anniversary dates to reflect these increases.

5. We are exposed to counterparty credit risk.

We have counterparty credit risk with other insurance companies through reinsurance, including as that term is defined for U.S. statutory purposes.

Our efforts to mitigate these risks, such as by securing assets in trusts and requiring the reinsurer to establish a letter of credit or deposit securities in the trusts for any shortfall, may be inadequate to protect us. Where the annuity deposits we ceded are unsecured, our claims would be subordinated to those of the reinsurer's policyholders. Should our reinsurers fail to meet their obligations to us, we remain liable for the ceded policy liabilities. If we were forced to recapture reinsured business, we may have inadequate capital to do so.

We may be unable to use reinsurance to the extent and on the terms we want. As a result, we would have to accept an increase in our net liability exposure or a decrease in our statutory surplus, reduce the amount of business we write, or develop other alternatives.

We also have exposure to many other counterparties, including in the financial services industry. Many of these transactions expose us to credit risk in the event of default of our counterparty, either with respect to insufficient collateral that cannot be realized or is liquidated at prices not sufficient to recover the full amount of the related loan or derivative exposure, or in the case of default of unsecured debt instruments or derivative transactions. Our derivative counterparties may fail to perform. Our efforts to maintain quality and credit exposure concentration limits may be inadequate to mitigate this risk. Counterparties' failure to deliver on their derivative instrument obligations may impose costs on us to fund index credits on our fixed index annuities. We may be unable to enforce our counterparties' obligations to post collateral to secure their obligations to us. Among other things, a downturn in the U.S. or other economies could increase any or all of these risks.

6. The third parties on whom we rely for services may fail to perform or to comply with legal or regulatory requirements.

The third parties who perform various services for us, including sales agents, marketing organizations, investment managers, side car-related services, reinsurers, and information technologists, may fail to meet our performance expectations. Our controls to monitor their service levels and compliance with our rules and legal and regulatory standards may be inadequate.

7. Our competitors have greater resources, a broader array of products, and higher ratings, which may limit our ability to attract and retain customers or distributors.

We may be unable to compete successfully with larger companies who enjoy larger financial resources, broader and more diversified product lines, higher ratings, and more widespread agency relationships. Customers may choose fixed index, fixed rate, or variable annuities sold by other insurance companies, or choose mutual fund products, traditional bank products, and other retirement funding alternatives offered by asset managers, banks and broker/dealers. Competitors' products may have competitive or other advantages based on design, participation rates and crediting rates, policy terms and conditions, services provided to distributors and policyholders, ratings by rating agencies, reputation and distributor compensation.

We may be unable to compete successfully for product distribution sources (such as IMOs, other marketers, agents, broker/dealers, banks and registered investment advisors) based on innovative and timely products, financial strength, services provided to and the relationships developed with distributors, or competitive commission structures and timely payments. Our distributors may choose to sell others' products, and are generally free to do so. Consolidation among IMOs may increase these risks and our costs.

8. Our information technology and communication systems may fail or suffer a security breach.

We may lose access to or use of our information technology (IT) systems to accurately perform necessary business functions such as issuing new policies, providing customer support, maintaining existing policies, paying claims, managing our investment portfolios, and producing financial statements. Our efforts, policies, and processes to avoid or mitigate systems failures, fraud, cyberattacks, processing errors, and regulatory breaches may fail or prove inadequate.

We may be unable to keep the confidential information within our IT infrastructure secure or maintain adherence to privacy standards or expectations. Our complex information security controls framework that leverages multiple leading industry control standards, as well as extensive commercial control technologies we use to maintain the security of those systems, is imperfect and may fail. An attacker who circumvents our comprehensive information security controls infrastructure could access, view, misappropriate, alter, or delete information contained within the accessed systems, including personally identifiable policyholder information and proprietary business information.

Our efforts and expenses to maintain and enhance our existing systems to keep pace with changing security requirements, industry standards, and evolving customer preferences may be insufficient or misguided, impairing our ability to rely on information for product design, product pricing, and risk management decisions. Our extensive backup and recovery systems and contingency plans may not prevent system interruptions, failures, or allow us to promptly remediate those that do occur.

In addition, our systems, policies, and procedures for capturing electronic communications related to our business may fail to record and store all the information regulators require us to, or may fail to do so in the required format.

9. We may suffer a credit or financial strength downgrade.

We may fail to maintain or improve our financial strength or credit ratings, whether due to the results of operations of our subsidiaries or our financial condition.

A ratings downgrade, or the potential for a ratings downgrade, could cause distributors and sales agents to stop or reduce our product sales in favor of our competitors, could increase our policy or contract surrenders, and harm our ability to obtain reinsurance or to do so at competitive prices. A change in risk ratings of assets in our investment portfolio, such as private equity or structured assets, may require us to hold more capital.

10. We may be unable to raise additional capital to support our business and sustain our growth on favorable terms.

We may need to increase or maintain the statutory capital and surplus of our life insurance subsidiaries, or the capital of our holding company, through debt, equity, and/or other transactions. We may be unable to do so because of adverse market conditions or high cost of capital, or be able to do so only on unfavorable terms. As a result, we may have to limit sales of new annuity products. We may also agree to restrictions on other activities, transactions, or financial arrangements in order to obtain necessary capital.

11. U.S. and global capital markets and economies could deteriorate due to inflation or major public health issues, including the COVID-19 pandemic, political or social developments, or otherwise.

Economic and capital markets could suffer downturns, uncertainties, or market disruptions. For example, inflation or an economic recession, and governmental efforts to combat or avoid them, armed conflict in Europe or elsewhere and sanctions intended to address those conflicts or achieve other ends, COVID-19 and the related pandemic, and government and business efforts in reaction to them, may continue to create economic and financial turmoil, decreased economic output, unemployment, market dislocations, political uncertainties, stagnated economic growth, and other effects. These may reduce the performance, and increase the risks, of our investment portfolio. They may also prevent us from continuing normal business operations, and our measures to mitigate their effects - such as remote working and workplace safety measures - may be inadequate to limit the strain on our business continuity plans and contain operational risk, such as information technology and third-party service provider risks.

12. We may fail to authorize and pay dividends on our preferred stock.

We may fail to authorize and pay dividends on our preferred stock. Unpaid dividends would not accrue, and could result in our inability to pay or declare a dividend on our common stock or repurchase, redeem or otherwise acquire for consideration our common stock. Any such failure would also prevent us from making certain distributions to common shareholders. They may also give preferred shareholders the right to elect members of our Board of Directors or other corporate governance rights that could weaken the rights and interests of common shareholders and other stakeholders.

13. Our subsidiaries may be unable to pay dividends or make other payments to us.

Our future cash flows may be limited, as they depend upon the availability of dividends, surplus note interest payments and other statutorily permissible payments from our insurance subsidiaries, such as payments under our investment advisory agreements and tax allocation agreements with our subsidiaries. Without such cash flow, we may be unable to service debt we incur from time to time (including senior notes, term loans, subordinated debentures issued to a subsidiary trust, and others), pay operating expenses and pay dividends to common and preferred stockholders.

14. We may fail at reinsurance, investment management, or third-party capital arrangements.

We may be unable to source, negotiate, obtain timely regulatory approval for, and execute the reinsurance, investment management, or third-party-capital arrangements for our strategy to succeed. Our reinsurance or investment management counterparties may fail to optimally perform or to meet their obligations under our agreements with them. As a result, we may not realize our anticipated economic, strategic or other benefits of any such transaction and may incur unforeseen expenses or liabilities. Any reorganization or consolidation of the legal entities through which we conduct business may raise similar risks.

15. We may fail to prevent excessive risk-taking.

Our employees, including executives and others who manage sales, investments, products, wholesaling, underwriting, and others, may take excessive risks. Our compensation programs and practices, and our other controls, may not effectively deter excessive risk-taking or misconduct.

16. Our policies and procedures may fail to protect us from operational risks.

We may make errors or fail to detect incorrect or incomplete information in any of the large number of transactions we process through our complex customer application, suitability review, administrative, financial reporting, and accounting systems. Our controls and procedures to prevent such errors may not be effective. For example, we may fail to escheat property timely and completely, or fail to detect, deter or mitigate fraud against us or our customers. We may fail to maintain service standards or to operate efficiently or control costs. We may also suffer internal control deficiencies or disclosure control deficiencies that result in significant deficiencies or material weaknesses. In addition, we may fail to attract, motivate and retain employees, develop talent, or adequately plan for management succession.

17. We may be unable to protect our intellectual property and may face infringement claims.

We may be unable to prevent third parties from infringing on or misappropriating our intellectual property. We may incur litigation costs to enforce and protect it or to determine its scope or validity, and we may not be successful. In addition, we may be subject to claims by third parties for infringement of intellectual property, breach of license usage rights, or misappropriation of trade secrets. We may incur significant expenses for any such claims. If we are found to have infringed or misappropriated a third-party intellectual property right, we may be enjoined from providing certain products or services to our customers or from utilizing and benefiting from certain intellectual property. Alternatively, we could be required to enter into costly licensing arrangements with third parties or implement a costly alternative.

Risks Relating to Legal, Regulatory, Environment, Social, or Governance Matters

18. We may be subject to increased litigation, regulatory examinations, and tax audits.

We may become involved in increased litigation, including class action lawsuits, alleging improper product design, improper sales practices and similar claims. State regulatory bodies, such as state insurance departments, the SEC and the DOL may investigate our compliance with, among other things, insurance laws, securities laws and ERISA. In addition, U.S. and state authorities have and may continue to audit our compliance with tax laws.

19. Laws, regulations, accounting, and benchmarking standards may change.

Any of the myriad of insurance statutes and regulations in the various states and other jurisdictions in which our life insurance subsidiaries transact business, including those related to insurance holding companies, may change at any time with or without warning. Laws affecting our investments, such as rules on enforcing mortgage rights and rules affecting investment in rental properties, may change. Accounting standards such as those issued by the FASB, statutory accounting standards, or others may change, evolve, or be replaced. U.S. federal laws and rules, such as those related to securities or ERISA, may also change.

We may also be subject to new regulatory requirements as a result of our side car activities or new product offerings, or we may face increased scrutiny in new regulatory areas as a result of such activity, such as with respect to FINRA or investment advisor rules. Our efforts to manage such requirements and scrutiny may increase our costs or put us at a competitive disadvantage.

In addition, those with authority or influence may change their interpretation of such laws or accounting standards, or may disagree with our interpretation of them. We may be unable to adapt to any such changes or disagreements in a timely or effective manner. Tax law changes may also harm us. For example, should individual income tax rates decrease, some of the income tax advantages of our products would likewise decrease. Moreover, tax law may change or eliminate any of the income tax advantages of our products. Further, changes to the basis of U.S. income taxation (e.g., taxation of unearned gains), corporate tax rates, capital gains tax rates, and other changes, may affect us.

As we continue to transition away from using the London Interbank Offered Rate ("LIBOR") as a basis of our floating rate investments, we may face uncertainties, ambiguities, and negotiations over terms that could affect those investments or our estimates and projections.

20. Iowa or other applicable law, or our corporate governance documents or change-in-control agreements, may delay or deter takeovers or combinations.

State laws, our certificate of incorporation and by-laws, and agreements into which we have entered concerning changes in control may delay, deter or prevent a takeover attempt that stockholders might consider favorable.

21. Climate changes, or responses to it, may affect us.

Climate change may increase the frequency and severity of near- or long-term weather-related disasters, public health incidents, and pandemics, and their effects may increase over time. Climate change regulation may harm the value of investments we hold or harm our counterparties, including reinsurers. Our regulators may also increasingly focus their examinations on climate-related risks.

22. Our efforts to meet environmental, social, and governance standards and to enhance our sustainability may not meet expectations.

Our investors or others may evaluate our business practices by continually evolving and unclear environmental, social, and governance ("ESG") criteria that may reflect contrasting or conflicting values or agendas. Our practices may also not change in the particulars or at the rate all parties expect, and may involve management trade-offs. To the extent we establish specific commitments or targets, we may fail to meet them. We may also face criticism and scrutiny for any efforts we make with respect to ESG, including allegations that such efforts are inconsistent with duties we owe to shareholders or others.

23. ***We May Face a Variety of Risks If We Begin Operations Outside the United States.***

If we pursue opportunities outside the United States, we may face a wide range of political, legal, operational, economic and other risks, including but not limited to: nationalization or expropriation of assets; imposition of limits on foreign ownership of local companies; changes in laws, their application or interpretation; political instability; economic or trade sanctions; sanctions on cross-border exchange listing, investment or other securities transactions; dividend limitations; price controls; currency exchange controls or other transfer or exchange restrictions; heightened cybersecurity risks, or labor relations risks.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Not applicable.

Item 3. Legal Proceedings

See *Note 14 - Commitments and Contingencies* to our audited consolidated financial statements.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock is traded on the New York Stock Exchange ("NYSE") under the symbol AEL. The following table sets forth the high and low sales prices of our common stock for each quarterly period within the two most recent fiscal years as quoted on the NYSE.

	High	Low
2022		
First Quarter	$44.49	$35.05
Second Quarter	$42.18	$32.65
Third Quarter	$43.55	$33.22
Fourth Quarter	$46.76	$28.05
2021		
First Quarter	$32.54	$26.21
Second Quarter	$33.68	$29.18
Third Quarter	$33.79	$27.12
Fourth Quarter	$39.88	$29.46

As of February 16, 2023, to the best of our knowledge, there were approximately 580 shareholders of record of our common stock. In 2022 and 2021, we paid an annual cash dividend of $0.36 and $0.34, respectively, per share on our common stock. We intend to continue to pay an annual cash dividend on such shares so long as we have sufficient capital and/or future earnings to do so. Any further determination as to dividend policy will be made by our board of directors and will depend on a number of factors, including our future earnings, capital requirements, financial condition and future prospects and such other factors as our board of directors may deem relevant.

Since we are a holding company, our ability to pay cash dividends depends in large measure on our subsidiaries' ability to make distributions of cash or property to us. Iowa insurance laws restrict the amount of distributions American Equity Life and Eagle Life can pay to us without the approval of the Iowa Insurance Commissioner. See Management's Discussion and Analysis of Financial Condition and Results of Operations and *Note 13 - Statutory Financial Information and Dividend Restrictions* to our audited consolidated financial statements, which are incorporated by reference in this Item 5.

For disclosure on securities authorized for issuance under equity compensation plans, see our subsequent disclosure to be filed within 120 days after December 31, 2022.

Issuer Purchases of Equity Securities

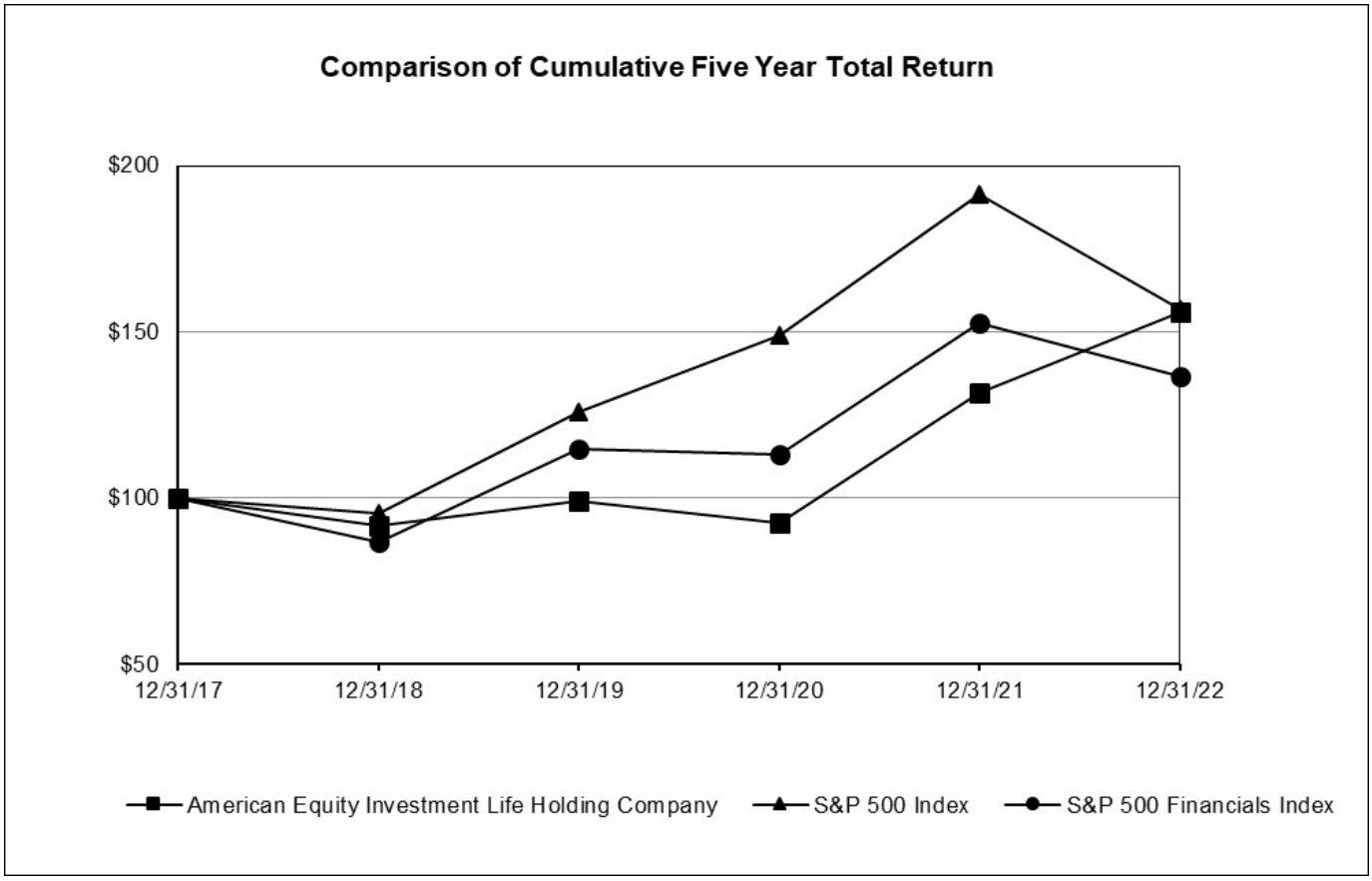
The following table presents the amount of our share purchase activity for the three months ended December 31, 2022:

Period	Total Number of Shares Purchased (shares)	Average Price Paid Per Share (dollars)	Total Number of Shares Purchased as Part of Publicly Announced Program (a) (shares)	Approximate Dollar Value of Shares That May Yet Be Purchased Under Program (dollars in thousands)
October 1, 2022 - October 31, 2022	304,688	$ 37.84	304,688	$ 201,586
November 1, 2022 - November 30, 2022	842,749	$ 36.32	842,749	$ 570,975
December 1, 2022 - December 31, 2022	50,272	$ 38.91	50,272	$ 569,018
Total	1,197,709		1,197,709	

(a) On October 18, 2020, the Company's Board of Directors approved a $500 million share repurchase program (since fully utilized). On November 19, 2021, the Company's Board of Directors authorized the repurchase of an additional $500 million of Company common stock. On November 11, 2022, the Company's Board of Directors authorized the repurchase of an additional $400 million of Company common stock.

Common Stock Performance Graph

The graph and table below compare the total return on our common shares with the total return on the S&P Global Ratings ("S&P") 500 and S&P 500 Financials indices for the five-year period ended on December 31, 2022. The graph and table show the total return on a hypothetical $100 investment in our common shares and in each index on December 31, 2017 including the reinvestment of all dividends. The graph and table below shall not be deemed to be "soliciting material" or to be "filed," or to be incorporated by reference in future filings with the SEC, or to be subject to the liabilities of Section 18 of the Exchange Act, except to the extent that we specifically incorporate it by reference into a document filed under the Securities Act or the Exchange Act.



	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
American Equity Investment Life Holding Co.	100.00	91.67	99.20	92.74	131.73	155.83
S&P 500 Index	100.00	95.62	125.72	148.85	191.58	156.88
S&P 500 Financials Index	100.00	86.97	114.91	112.96	152.54	136.48

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Management's discussion and analysis reviews our consolidated financial position at December 31, 2022 compared with December 31, 2021, and our consolidated results of operations for the years ended December 31, 2022 and 2021, and where appropriate, factors that may affect future financial performance. This analysis should be read in conjunction with our audited consolidated financial statements, notes thereto and selected consolidated financial data appearing elsewhere in this report.

For information and analysis relating to our financial condition and consolidated results of operations as of and for the year ended December 31, 2021, as well as for the year ended December 31, 2021 compared with the year ended December 31, 2020, see Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended December 31, 2021.

Cautionary Statement Regarding Forward-Looking Information

All statements, trend analysis and other information contained in this report and elsewhere (such as in filings by us with the SEC, press releases, presentations by us or management or oral statements) may contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended. Forward-looking statements give expectations or forecasts of future events and do not relate strictly to historical or current facts. They may relate to markets for our products, trends in our operations or financial results, strategic alternatives, future operations, strategies, plans, partnerships, investments, share buybacks and other financial developments. They use words and terms such as anticipate, assume, believe, can, continue, could, enable, estimate, expect, forecast, foreseeable, goal, improve, intend, likely, may, model, near, objective, opportunity, outlook, plan, potential, project, probable, remain, risk seek, should, strategy, target, will, would, and other words and terms of similar meaning or that are otherwise tied to future periods or future performance, in each case in all forms of speech and derivative forms, or similar words, as well as any projections of future events or results. Forward-looking statements, by their nature, are subject to a variety of assumptions, risks, and uncertainties that could cause actual results to differ materially from the results projected. Many of these risks and uncertainties cannot be controlled by the Company. Factors that may cause our actual decisions or results to differ materially from those contemplated by these forward-looking statements include, among other things:

- results differing from assumptions, estimates, and models.
- interest rate condition changes.
- investments losses or failures to grow as quickly as expected due to market, credit, liquidity, concentration, default, and other risks.
- option costs increases.
- counterparty credit risks.
- third parties service-provider failures to perform or to comply with legal or regulatory requirements.
- poor attraction and retention of customers or distributors due to competitors' greater resources, broader array of products, and higher ratings.
- information technology and communication systems failures or security breaches.
- credit or financial strength downgrades.
- inability to raise additional capital to support our business and sustain our growth on favorable terms.
- U.S. and global capital market and economic deterioration due to major public health issues, including the COVID-19 pandemic, political or social developments, or otherwise.
- failure to authorize and pay dividends on our preferred stock.
- subsidiaries' inability to pay dividends or make other payments to us.
- failure at reinsurance, investment management, or third-party capital arrangements.
- failure to prevent excessive risk-taking.
- failure of policies and procedures to protect from operational risks.
- inability to protect intellectual property, or intellectual property infringement claims.
- increased litigation, regulatory examinations, and tax audits.
- changes to laws, regulations, accounting, and benchmarking standards.
- takeover or combination delays or deterrence by laws, corporate governance documents, or change-in-control agreements.
- effects of climate changes, or responses to it.
- failure of efforts to meet environmental, social, and governance standards and to enhance sustainability.

For a detailed discussion of these and other factors that might affect our performance, see Item 1A of this report.

Executive Summary

As previously noted, we began to implement an updated strategy, referred to as AEL 2.0, after having undertaken a thorough review of our business in 2020. During 2022, we continued to make significant progress in the execution of the AEL 2.0 strategy in all four key pillars: Go-to-Market, Investment Management, Capital Structure and Foundational Capabilities. See **Item 1. Business - Strategy** for more information on the AEL 2.0 strategy and progress made during 2022.

Excellent customer service teamed with our ability to offer innovative insurance products that provide principal protection and lifetime income continued to result in significant sales of our annuity products. In 2022, our sales were $3.3 billion; over the last five years our sales have ranged from $3.3 billion to $6.0 billion.

The economic and personal investing environments continue to be conducive to the sale of fixed index and fixed rate annuity products as retirees and others looked to put their money in instruments that will protect their principal and provide them with consistent cash flow sources in their retirement years and a paycheck for life. Sales of fixed index and fixed rate annuity products decreased to $3.3 billion in 2022 compared to $6.0 billion in 2021. The decrease in fixed rate annuity sales was driven by the decision to focus on sales of fixed index annuity products as we believe such products align with the transformation of the Company from a spread based return on equity insurer to more of a fee-based return on asset insurer. The decrease in fixed index annuity sales was driven by the decision to focus on pricing discipline as interest rates fluctuated. With our latest pricing refresh in November 2022, we believe we are well positioned competitively to enter 2023 with strong momentum.

During 2022, we saw interest rates rise after an unprecedented period of low interest rates. In response, we have been actively managing policyholder crediting rates for new annuities and existing annuities as we focused on improving our pricing processes to become more nimble, targeted and responsive to market changes. We continue to have flexibility to reduce our crediting rates if necessary and could decrease our cost of money by approximately 82 basis points if we reduce current rates to guaranteed minimums. We expanded our privately sourced assets to include a more diversified portfolio in 2022 covering a variety of sectors, including infrastructure, middle market credit and commercial real estate equity. During 2022, we originated $5 billion of privately sourced assets with expected returns greater than 6%. Total private assets at year-end were nearly $11 billion, bringing our allocation to 22% of the investment portfolio at year-end.

On October 18, 2020, the Company's Board of Directors approved a $500 million share repurchase program (since fully utilized), and on November 19, 2021,the Company's Board of Directors authorized the repurchase of an additional $500 million of Company common stock. The share repurchase program has offset dilution from the issuance of shares to Brookfield, and its purpose remains to institute a regular cash return program for shareholders. On November 11, 2022, the Company's Board of Directors authorized the repurchase of an additional $400 million of Company common stock. As of December 31, 2022, we have repurchased approximately 23.9 million shares of our common stock to date at an average price of $34.74 per common share.

We specialize in the sale of individual annuities (primarily fixed and fixed index deferred annuities) through IMOs, agents, banks and broker-dealers. Fixed and fixed index annuities are an important product for Americans looking to fund their retirement needs as annuities have the ability to provide retirees a paycheck for life.

Under U.S. GAAP, premium collections for deferred annuities are reported as deposit liabilities instead of as revenues. Similarly, cash payments to policyholders are reported as decreases in the liabilities for policyholder account balances and not as expenses. Sources of revenues for products accounted for as deposit liabilities are net investment income, surrender charges assessed against policy withdrawals and fees deducted from policyholder account balances for lifetime income benefit riders, net realized gains (losses) on investments and changes in fair value of derivatives. Components of expenses for products accounted for as deposit liabilities are interest sensitive and index product benefits (primarily interest credited to account balances and changes in the liability for lifetime income benefit riders), changes in fair value of embedded derivatives, amortization of deferred sales inducements and deferred policy acquisition costs, other operating costs and expenses and income taxes.

Our profitability depends in large part upon:

- the amount of assets under our management,
- investment spreads we earn on our policyholder account balances,
- our ability to manage our investment portfolio to maximize returns and minimize risks such as interest rate changes and defaults or credit losses,
- our ability to appropriately price for lifetime income benefit riders offered on certain of our fixed rate and fixed index annuity policies,
- our ability to manage interest rates credited to policyholders and costs of the options purchased to fund the annual index credits on our fixed index annuities,
- our ability to manage the costs of acquiring new business (principally commissions paid to agents and distribution partners and bonuses credited to policyholders),
- our ability to maintain and continue to generate fee based revenue,
- our ability to manage our operating expenses, and
- income taxes.

Life insurance companies are subject to NAIC RBC requirements and rating agencies utilize a form of RBC to partially determine capital strength of insurance companies. Our RBC ratio at December 31, 2022 and 2021 was 415% and 400%, respectively.

We intend to manage our capitalization in normal economic conditions at a level that is consistent with rating agency capital at or above the A-level. It may drift downwards, at times, for reasons including, but not limited to, realized credit losses or temporary increases in required risk capital for ratings migrations. This level is intended to reflect a level that is consistent with the rating agencies expectations for capital adequacy ratios at different points in an economic cycle. This implies operating with a peak to trough swing whereby capital is absorbing risk at the low point of the economic cycle.

On November 28, 2022 S&P affirmed its "A-" financial strength rating on American Equity Life and its "BBB-" long-term issuer credit rating on American Equity Investment Life Holding Company with an outlook of "stable" on these ratings.

On September 9, 2022, A.M. Best affirmed its "A-" financial strength rating on American Equity Investment Life Insurance Company and its subsidiaries, American Equity Investment Life Insurance Company of New York and Eagle Life Insurance Company, its "bbb-" long-term issuer credit rating of American Equity Investment Life Holding Company, its "bbb-" senior unsecured debt ratings, and its "bb" perpetual, non-cumulative preferred stock ratings. The outlook for these credit ratings of "stable" was also affirmed by A.M. Best on September 9, 2022.

On December 7, 2022, Fitch affirmed its "A-" financial strength rating on American Equity Investment Life Insurance Company and its life insurance subsidiaries, its "BBB" issuer default rating on American Equity Investment Life Holding Company and its "BBB-" senior unsecured debt ratings, and revised its outlook to "stable" from "negative" on its financial strength, issuer default and senior unsecured debt ratings.

Earnings from products accounted for as deposit liabilities are primarily generated from the excess of net investment income earned over the interest credited or the cost of providing index credits to the policyholder, or the "investment spread." Our investment spread is summarized as follows:

	Year Ended December 31,		
	2022	**2021**	**2020**
Average yield on invested assets	4.34%	3.73%	4.12%
Aggregate cost of money	1.71%	1.55%	1.69%
Aggregate investment spread	2.63%	2.18%	2.43%
Impact of:			
Investment yield - additional prepayment income	0.03%	0.11%	0.08%
Cost of money benefit from over hedging	0.01%	0.07%	0.02%

The cost of money for fixed index annuities and average crediting rates for fixed rate annuities are computed based upon policyholder account balances and do not include the impact of amortization of deferred sales inducements. See Critical Accounting Policies and Estimates—Deferred Policy Acquisition Costs and Deferred Sales Inducements. With respect to our fixed index annuities, the cost of money includes the average crediting rate on amounts allocated to the fixed rate strategy and expenses we incur to fund the annual index credits. Proceeds received upon expiration of call options purchased to fund annual index credits are recorded as part of the change in fair value of derivatives, and are largely offset by an expense for interest credited to annuity policyholder account balances. See Critical Accounting Policies and Estimates - Policy Liabilities for Fixed Index Annuities and Financial Condition - Derivative Instruments.

Average yield on invested assets increased primarily as a result of strong returns on partnerships and other mark to market assets, the benefit from higher short-term interest rates, lower average cash balances and the ramp in private assets partly offset by lower prepayment income. See **Net investment income**. The aggregate cost of money increased primarily due to increases in options costs and a reduction in the benefit from over hedging as compared to the prior year. We have the flexibility to reduce our crediting rates if necessary and could decrease our cost of money by approximately 82 basis points if we reduce current rates to guaranteed minimums.

Results of Operations for the Three Years Ended December 31, 2022

Annuity deposits by product type collected during 2022, 2021 and 2020, were as follows:

Product Type	Year Ended December 31, 2022	2021	2020
	(Dollars in thousands)		
American Equity Life:			
Fixed index annuities	$ 2,692,141	$ 2,753,479	$ 1,992,059
Annual reset fixed rate annuities	5,329	6,133	8,128
Multi-year fixed rate annuities	56,511	855,702	395,982
Single premium immediate annuities	18,935	59,816	33,461
	2,772,916	3,675,130	2,429,630
Eagle Life:			
Fixed index annuities	479,279	697,068	345,519
Annual reset fixed rate annuities	380	350	97
Multi-year fixed rate annuities	82,581	1,597,292	907,151
	562,240	2,294,710	1,252,767
Consolidated:			
Fixed index annuities	3,171,420	3,450,547	2,337,578
Annual reset fixed rate annuities	5,709	6,483	8,225
Multi-year fixed rate annuities	139,092	2,452,994	1,303,133
Single premium immediate annuities	18,935	59,816	33,461
Total before coinsurance ceded	3,335,156	5,969,840	3,682,397
Coinsurance ceded	968,906	424,819	35,667
Net after coinsurance ceded	$ 2,366,250	$ 5,545,021	$ 3,646,730

Annuity deposits before coinsurance ceded decreased 44% during 2022 compared to 2021. Annuity deposits after coinsurance ceded decreased 57% during 2022 compared to 2021. The decrease in sales in 2022 compared to 2021 was primarily driven by a reduction in sales of multi-year fixed rate annuity products at both American Equity Life and Eagle Life which is in line with our 2022 sales strategy of focusing on sales of fixed index annuities.

We began ceding 75% of certain fixed index annuities issued after July 1, 2021 to North End Re which caused the increase in coinsurance ceded premiums for the year ended December 31, 2022 compared to 2021.

Net income available to common stockholders increased 174% to $1.2 billion in 2022 and decreased 33% to $430.3 million in 2021 from $637.9 million in 2020. The increase in net income available to common stockholders for the year ended December 31, 2022 was driven primarily by an increase in net investment income, a decrease in the change in fair value of embedded derivatives and a decrease in interest sensitive and index product benefits. These changes were partially offset by a decrease in the change in fair value of derivatives and increases in amortization of deferred sales inducements and deferred policy acquisition costs.

Net income available to common stockholders for the year ended December 31, 2022 was positively impacted by an increase in the aggregate investment spread as previously noted. Net income, in general, is impacted by the volume of business in force and the investment spread earned on this business. The average amount of annuity account balances outstanding (net of annuity liabilities ceded under coinsurance agreements) decreased 4% to $51.6 billion for the year ended December 31, 2022 compared to $53.7 billion in 2021 and increased 1% for the year ended December 31, 2021 compared to $53.3 billion in 2020. Our investment spread measured in dollars was $1.4 billion, $1.2 billion, and $1.3 billion for the years ended December 31, 2022, 2021 and 2020, respectively. Investment income for the year ended December 31, 2022 was positively impacted by strong returns on partnerships and other mark to market assets, the benefit from higher short-term interest rates, lower average cash balances and an increase in allocation to higher yielding privately sourced assets (see **Net investment income**). The volume of cash and cash equivalent holdings decreased in the fourth quarter of 2021 and the first quarter of 2022 with the execution of the reinsurance treaty with North End Re and the investment of cash balances above our target levels.

Net income was also impacted by the change in fair value of derivatives and embedded derivatives, which fluctuates from period to period based upon changes in fair values of call options purchased to fund the annual index credits for fixed index annuities and changes in interest rates used to discount the embedded derivative liability. Net income for the year ended December 31, 2022 was positively impacted by decreases in expected index credits on the next policy anniversary dates resulting from decreases in the fair value of the call options acquired to fund these index credits and net increases in the discount rates used to estimate the fair value of our embedded derivative liabilities, the impacts of which were partially offset by decreases in the change in fair value of derivatives and increases in amortization of deferred policy acquisition costs and deferred sales inducements related to changes in fair value of derivatives and embedded derivatives. See **Change in fair value of derivatives, Change in fair value of embedded derivatives, Amortization of deferred sales inducements** and **Amortization of deferred policy acquisition costs.**

We periodically update the key assumptions used in the calculation of amortization of deferred policy acquisition costs and deferred sales inducements retrospectively through an unlocking process when estimates of current or future gross profits/margins (including the impact of realized investment gains and losses) to be realized from a group of products are revised. In addition, we periodically update the assumptions used in determining the liability for lifetime income benefit riders and the embedded derivative component of our fixed index annuity policy benefit reserves as experience develops that is different from our assumptions.

Net income available to common stockholders for 2022, 2021 and 2020 includes effects from updates to assumptions as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Increase (decrease) in amortization of deferred sales inducements	$ 45,682	$ (45,107)	$ 428,101
Increase (decrease) in amortization of deferred policy acquisition costs	56,853	(45,662)	646,785
Increase (decrease) in interest sensitive and index product benefits	(53,042)	243,658	285,825
Decrease in change in fair value of embedded derivatives	(94,770)	(122,294)	(2,341,279)
Effect on net income available to common stockholders	35,543	(24,017)	769,611

We review these assumptions quarterly and as a result of these reviews, we made updates to assumptions during each year.

The most significant assumption updates made in 2022 were to investment spread assumptions, including the net investment earned rate and crediting rate on policies, lapse rate and partial withdrawal assumptions and lifetime income benefit rider utilization assumptions.

We updated our assumption for net investment spread for American Equity Life to remain steady at 2.60% through an eight-year reversion period. We increased our long-term net investment earned rate assumption by 40 basis points with an assumption of 4.25% in the near term increasing to 5.00% over the eight-year reversion period, and we increased our long-term crediting/discount rate assumption by 30 basis points with an assumption of 1.65% in the near term increasing to 2.40% over the eight year reversion period. In addition, we adjusted the grading of the discount rate assumption in the embedded derivative calculation. These changes resulted in an increase in expected future gross profits and therefore an increase in the deferred policy acquisition costs and deferred sales inducements balances. These changes also resulted in a decrease in the liability for lifetime income benefit riders due to a higher discount rate and a decrease in the fair value of the embedded derivative due to the grading of the crediting rate assumption.

We updated lapse rate and partial withdrawal assumptions based on actual historical experience. We refreshed lapse tables based on five years of lapse experience and implemented a 1% lapse floor. For policies with a lifetime income benefit rider that do not charge a fee, we increased the lapse rates. For policies with a lifetime income benefit rider that has been utilized, we decreased the lapse rates. We expanded our partial withdrawal assumptions to include scalars in our assumptions during the surrender charge period, shock period, and post-shock period. This resulted in partial withdrawals extending beyond the surrender charge period. The net impact of the lapse rate and partial withdrawal assumptions resulted in a decrease in expected future gross profits and a decrease in the deferred policy acquisition costs and deferred sales inducements balances. The net impact of these changes resulted in an increase in the liability for lifetime income benefit riders due to higher excess claims and lower gross profits and increased the fair value of the embedded derivative due to lower overall lapses and partial withdrawals.

We updated our lifetime income benefit rider utilization assumption structure to capture policyholder characteristics at a more granular level. This resulted in an increase in the number of policies utilizing the benefit and increased the excess claims. The impact of this change resulted in an increase in the liability for lifetime income benefit riders, an increase in the fair value of the embedded derivative, and an increase in the deferred policy acquisition costs and deferred sales inducements balances.

The most significant assumption updates made in 2021 were to investment spread assumptions, including the net investment earned rate and crediting rate on policies, lifetime income benefit rider utilization assumptions, mortality assumptions, and lapse rate assumptions as discussed below. In addition, we made assumption updates to change the reinsurance expense assumption associated with the refinancing of statutory redundant reserves effective October 1, 2021.

Due to the continued low interest rate environment, we updated our assumption for investment spread for American Equity Life to 2.25% in the near term and increasing to 2.50% over an eight-year reversion period and our assumption for crediting/discount rate to 1.55% increasing to 2.10% over an eight-year reversion period. Prior to these assumption updates, our long-term assumption for aggregate investment spread was at 2.60% at the end of an eight-year reversion period, with a near term crediting/discount rate of 1.90% increasing to 2.10% over an eight-year reversion period. The assumption change to decrease aggregate investment spread resulted in lower expected future gross profits as compared to previous estimates and a decrease in the balances of deferred policy acquisition costs and deferred sales inducements.

We updated lapse rate and mortality assumptions based on historical experience. For certain annuity products without a lifetime income benefit rider, the lapse rate assumption was increased in more recent cohorts to reflect higher lapses on polices with a market value adjustment ("MVA") feature. For other annuity products with a lifetime income benefit rider, the population was bifurcated based on whether policies had utilized the rider. For those policies which had utilized the rider, the lapse rate assumption was decreased in later durations. The overall mortality assumption was lowered to reflect historical experience. The net impact of the updates to the lapse rate and mortality assumptions resulted in higher expected future gross profits as compared to previous estimates and an increase in the balances of deferred policy

acquisition costs and deferred sales inducements. The net impact of the updates to lapse rate and mortality assumptions resulted in an increase in the liability for lifetime income benefit riders due to a greater amount of expected benefit payments in excess of account values.

We updated the lifetime income benefit rider utilization assumption based on historical experience. The ultimate utilization assumption was lowered for policies with a fee rider and certain policies with a no-fee rider. In addition, the utilization assumption was changed to reflect seasonality with higher utilization rates during the first quarter of each year. The net impact of the updates to the utilization assumption resulted in a decrease in the liability for lifetime income benefit riders due to a lower amount of expected benefits payments due to lower expected utilization. The net impact of the updates to the utilization assumption resulted in higher expected future gross profits as compared to previous estimates and an increase in the balances of deferred policy acquisition costs and deferred sales inducements.

The most significant assumption update to the calculation of the fair value of the embedded derivative component of our fixed index annuity policy benefit reserve in 2021 was the change in lapse rate assumptions discussed above. The net impact of the updates to the lapse rate assumption resulted in a decrease in the embedded derivative component of our fixed index annuity policy benefit reserves as less funds ultimately qualify for excess benefits.

Non-GAAP operating income available to common stockholders, a non-GAAP financial measure increased 25% to $362.9 million in 2022 and increased 320% to $290.5 million in 2021 from $69.1 million in 2020. The increase in non-GAAP operating income available to common stockholders for the year ended December 31, 2022 was primarily a result of the impact of assumption updates made during 2022 compared to the impact of assumption updates made during 2021. Non-GAAP operating income available to common stockholders and Non-GAAP operating income available to common stockholders per common share - assuming dilution, excluding the impact of notable items, for the year ended December 31, 2022 were $336.4 million and $3.67 per share, respectively. Non-GAAP operating income available to common stockholders and Non-GAAP operating income available to common stockholders per common share - assuming dilution, excluding the impact of notable items, for the year ended December 31, 2021 were $368.5 million and $3.90 per share, respectively. Non-GAAP operating income available to common stockholders, excluding the impact of notable items, for the year ended December 31, 2022 was negatively impacted by an increase in interest sensitive and index product benefits due to a larger increase in lifetime income benefit rider reserves and increases in amortization of deferred sales inducements and deferred policy acquisition costs compared to 2021. Non-GAAP operating income available to common stockholders for the year ended December 31, 2022 was positively impacted by an increase in the aggregate investment spread as previously noted and an increase in other revenue compared to 2021.

In addition to net income available to common stockholders, we have consistently utilized non-GAAP operating income available to common stockholders, a non-GAAP financial measure commonly used in the life insurance industry, as an economic measure to evaluate our financial performance. Non-GAAP operating income available to common stockholders equals net income available to common stockholders adjusted to eliminate the impact of items that fluctuate from year to year in a manner unrelated to core operations, and we believe measures excluding their impact are useful in analyzing operating trends. The most significant adjustments to arrive at non-GAAP operating income available to common stockholders eliminate the impact of fair value accounting for our fixed index annuity business and are not economic in nature but rather impact the timing of reported results. We believe the combined presentation and evaluation of non-GAAP operating income available to common stockholders together with net income available to common stockholders provides information that may enhance an investor's understanding of our underlying results and profitability.

Non-GAAP operating income available to common stockholders is not a substitute for net income available to common stockholders determined in accordance with GAAP. The adjustments made to derive non-GAAP operating income available to common stockholders are important to understand our overall results from operations and, if evaluated without proper context, non-GAAP operating income available to common stockholders possesses material limitations. As an example, we could produce a low level of net income available to common stockholders or a net loss available to common stockholders in a given period, despite strong operating performance, if in that period we experience significant net realized losses from our investment portfolio. We could also produce a high level of net income available to common stockholders in a given period, despite poor operating performance, if in that period we generate significant net realized gains from our investment portfolio. As an example of another limitation of non-GAAP operating income available to common stockholders, it does not include the decrease in cash flows expected to be collected as a result of credit losses on financial assets. Therefore, our management reviews net realized investment gains (losses) and analyses of our net investment income, including impacts related to credit losses, in connection with their review of our investment portfolio. In addition, our management examines net income available to common stockholders as part of their review of our overall financial results.

The adjustments made to net income available to common stockholders to arrive at non-GAAP operating income available to common stockholders and non-GAAP operating income available to common stockholders, excluding notable items for 2022, 2021 and 2020 are set forth in the table that follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Reconciliation from net income available to common stockholders to non-GAAP operating income available to common stockholders:			
Net income available to common stockholders	$ 1,177,269	$ 430,317	$ 637,945
Adjustments to arrive at non-GAAP operating income available to common stockholders:			
Net realized losses on financial assets, including credit losses	36,428	10,299	59,355
Change in fair value of derivatives and embedded derivatives	(1,080,356)	(187,290)	(784,005)
Net investment income	664	—	—
Other revenue	5,969	—	—
Income taxes	222,966	37,184	155,808
Non-GAAP operating income available to common stockholders	362,940	290,510	69,103
Impact of excluding notable items	(26,572)	78,036	310,117
Non-GAAP operating income available to common stockholders, excluding notable items	$ 336,368	$ 368,546	$ 379,220
Per common share - assuming dilution:			
Non-GAAP operating income available to common stockholders	$ 3.96	$ 3.07	$ 0.75
Impact of excluding notable items	(0.29)	0.83	3.36
Non-GAAP operating income available to common stockholders, excluding notable items	$ 3.67	$ 3.90	$ 4.11
Notable items impacting non-GAAP operating income available to common stockholders:			
Impact of actuarial assumption updates	$ (26,572)	$ 78,036	$ 340,895
Tax benefit related to the CARES Act	—	—	(30,778)
Total notable items	$ (26,572)	$ 78,036	$ 310,117

The amounts disclosed in the reconciliation above are presented net of related adjustments to amortization of deferred sales inducements and deferred policy acquisition costs and accretion of lifetime income benefit rider reserves where applicable. Notable items reflect the after-tax impact to non-GAAP operating income available to common stockholders for certain items that do not reflect the company's expected ongoing operations. Notable items primarily include the impact from actuarial assumption updates. The presentation of notable items is intended to help investors better understand our results and to evaluate and forecast those results.

Non-GAAP operating income available to common stockholders for 2022, 2021 and 2020 includes effects from updates to assumptions as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Increase (decrease) in amortization of deferred sales inducements	$ 8,670	$ (66,066)	$ 57,467
Increase (decrease) in amortization of deferred policy acquisition costs	10,520	(78,183)	90,970
Increase (decrease) in interest sensitive and index product benefits	(53,042)	243,658	285,825
Effect on non-GAAP operating income available to common stockholders	26,572	(78,036)	(340,895)

The impact to net income available to common stockholders and non-GAAP operating income available to common stockholders from assumption updates varies due to the impact of fair value accounting for our fixed index annuity business as non-GAAP operating income available to common stockholders eliminates the impact of fair value accounting for our fixed index annuity business. While the assumption updates made during 2022, 2021 and 2020 were consistently applied, the impact to net income available to common stockholders and non-GAAP operating income available to common stockholders varies due to different amortization rates being applied to gross profit adjustments included in the valuation.

Annuity product charges (surrender charges assessed against policy withdrawals and fees deducted from policyholder account balances for lifetime income benefit riders) decreased 5% to $230.4 million in 2022 and decreased 3% to $242.6 million in 2021 from $251.2 million in 2020. The components of annuity product charges are set forth in the table that follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Surrender charges	$ 72,699	$ 67,657	$ 72,551
Lifetime income benefit riders (LIBR) fees	157,655	174,974	178,676
	$ 230,354	$ 242,631	$ 251,227
Withdrawals from annuity policies subject to surrender charges	$ 1,145,415	$ 1,099,098	$ 776,305
Average surrender charge collected on withdrawals subject to surrender charges	6.3 %	6.2 %	9.3 %
Fund values on policies subject to LIBR fees	$ 19,473,279	$ 22,183,623	$ 22,986,903
Weighted average per policy LIBR fee	0.81 %	0.79 %	0.78 %

The decrease in annuity product charges during 2022 was attributable to a decrease in fees assessed for lifetime income benefit riders due to a smaller volume of business in force subject to the fees slightly offset by an increase in the average fees being charged and an increase in withdrawals subject to surrender charges compared to 2021. The smaller volume of business subject to the fees is primarily due to the execution of the North End Re reinsurance treaty which was effective on July 1, 2021 and the execution of the AeBe reinsurance treaty which was effective October 3, 2022. See **Interest sensitive and index product benefits** below for corresponding expense recognized on lifetime income benefit riders.

Net investment income increased 13% to $2.3 billion in 2022 and decreased 7% to $2.0 billion in 2021 from $2.2 billion in 2020. The increase for 2022 compared to 2021 was attributable to an increase in the average yield earned on invested assets during 2022. Average invested assets excluding derivative instruments (on an amortized cost basis) decreased 3% to $53.2 billion in 2022 and increased 3% to $54.8 billion in 2021 compared to $53.1 billion in 2020.

The average yield earned on average invested assets was 4.34%, 3.73% and 4.12% for 2022, 2021 and 2020, respectively. The increase in yield earned on average invested assets in 2022 was primarily attributable to strong returns on partnerships and other mark to market assets, the benefit from higher short-term interest rates, lower average cash balances and the ramp in private assets partly offset by lower prepayment income.

The expected return on investments purchased during 2022 was 5.01%, net of third-party investment management expenses. Purchases for 2022 included $5.7 billion of fixed maturity securities with an expected return of 4.02% and $5.0 billion of privately sourced assets with an expected return of 6.14%. The privately sourced assets include investments in infrastructure, middle market credit and commercial real estate equity. The expected return on investments purchased during 2021 and 2020 was 3.92% and 3.84%, respectively.

Change in fair value of derivatives primarily consists of call options purchased to fund annual index credits on fixed index annuities. The components of change in fair value of derivatives are as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Call options:			
Gain (loss) on option expiration	$ (287,328)	$ 1,368,381	$ 15,042
Change in unrealized gains/losses	(831,440)	(20,456)	19,562
Warrants	264	810	—
Interest rate swaps	(19,624)	—	—
Interest rate caps	—	—	62
	$ (1,138,128)	$ 1,348,735	$ 34,666

The differences between the change in fair value of derivatives between years for call options are primarily due to the performance of the indices upon which our call options are based which impacts the level of gains on call option expirations, the fair values of those call options and changes in the fair values of those call options between years. The changes in gain (loss) on option expiration and in unrealized gains/ losses on call options for the year ended December 31, 2022 as compared to 2021 are due to equity market performance in 2022 compared to 2021. A substantial portion of our call options are based upon the S&P 500 Index with the remainder based upon other equity and bond market indices. The range of index appreciation (after applicable caps, participation rates and asset fees) for options expiring during these years is as follows:

	Year Ended December 31,		
	2022	2021	2020
S&P 500 Index			
Point-to-point strategy	0.0% - 12.5%	0.0% - 42.6%	0.0% - 17.4%
Monthly average strategy	0.0% - 8.6%	0.0% - 29.4%	0.0% - 11.9%
Monthly point-to-point strategy	0.0% - 12.9%	0.0% - 21.7%	0.0% - 14.0%
Volatility control index point-to-point strategy	0.0% - 7.3%	0.0% - 9.7%	0.0% - 9.3%
Fixed income (bond index) strategies	0.0% - 6.5%	0.0% - 10.0%	0.0% - 13.6%

The change in fair value of derivatives is also influenced by the aggregate cost of options purchased. During 2022, the aggregate cost of options were higher than in 2021 as option costs generally increased during 2022. The aggregate cost of options is also influenced by the amount of policyholder funds allocated to the various indices and market volatility which affects option pricing. See Critical Accounting Policies and Estimates - Policy Liabilities for Fixed Index Annuities.

Net realized gains (losses) on investments include gains and losses on the sale of securities and other investments and changes in allowances for credit losses on our securities and mortgage loans on real estate. Net realized gains (losses) on investments fluctuate from year to year primarily due to changes in the interest rate and economic environments and the timing of the sale of investments. See *Note 3 - Investments* and *Note 4 - Mortgage Loans on Real Estate* to our audited consolidated financial statements and Financial Condition - Credit Losses for a detailed presentation of the types of investments that generated the gains (losses) as well as discussion of credit losses on our securities recognized during the periods presented and Financial Condition - Investments and *Note 4 - Mortgage Loans on Real Estate* to our audited consolidated financial statements for discussion of credit losses recognized on mortgage loans on real estate.

Securities sold at losses are generally due to our long-term fundamental concern with the issuers' ability to meet their future financial obligations or to improve our risk or duration profiles as they pertain to our asset liability management.

Other revenue increased 180% to $43.9 million in 2022 compared to $15.7 million in 2021. The increase for 2022 compared to 2021 was primarily attributable to the increase in business ceded under the North End Re reinsurance treaty which was effective July 1, 2021. See *Note 8 - Reinsurance and Policy Provisions* to our audited consolidated financial statements for more information. The components of other revenue are summarized as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Asset liability management fees	$ 12,686	$ 5,470	$ —
Amortization of deferred gain	31,235	10,200	—
	$ 43,921	$ 15,670	$ —

Interest sensitive and index product benefits decreased 67% to $889.7 million in 2022 and increased 74% to $2.7 billion in 2021 from $1.5 billion in 2020. The components of interest sensitive and index product benefits are summarized as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Index credits on index policies	$ 305,292	$ 1,977,888	$ 747,489
Interest credited (including changes in minimum guaranteed interest for fixed index annuities)	249,579	253,725	198,745
Lifetime income benefit riders	334,779	449,793	597,036
	$ 889,650	$ 2,681,406	$ 1,543,270

The changes in index credits were attributable to changes in the level of appreciation of the underlying indices (see discussion above under **Change in fair value of derivatives**) and the amount of funds allocated by policyholders to the respective index options. Total proceeds received upon expiration of the call options purchased to fund the annual index credits were $0.3 billion, $2.0 billion and $0.8 billion for the years ended December 31, 2022, 2021 and 2020, respectively. The decrease in interest credited in 2022 was due to a reduction in interest credited to funds allocated to the fixed option strategy within our fixed index annuities due to a decrease in the average balance allocated to the fixed option strategy partially offset by an increase in deferred annuity products that receive a fixed rate of interest. The decrease in benefits recognized for lifetime income benefit riders for 2022 compared to 2021 was due to the impact of assumption updates made during 2022 compared to assumption updates made during 2021 partially offset by the impacts on the calculation of the lifetime income benefit rider reserve of actual results compared to expected results for items such as lifetime income benefit rider election rates and the level of index credits. The net impact of updating expected results with actual results led to an increase in the lifetime income benefit rider reserve for the year ended December 31, 2022. In addition, fund value of policies with lifetime income benefit riders decreased as a result of the North End Re reinsurance treaty executed during 2021 and the execution of the AeBe reinsurance treaty which was effective October 3, 2022. **See Net income available to common stockholders** above for discussion of the changes in the assumptions used in determining reserves for lifetime income benefit riders for the years ended December 31, 2022 and 2021.

Amortization of deferred sales inducements is based on historical, current and future expected gross profits. The changes in amortization from period to period are the result of differences in actual gross profits compared to expected or modeled gross profits and changes to the underlying business. The increases in amortization before and after gross profit adjustments for 2022 compared to 2021 were due to the impact of assumption updates made during 2022 compared to the impact of assumption updates made during 2021. In addition, amortization of deferred sales inducements for the year ended December 31, 2022 increased due to increases in actual gross profits for the year ended December 31, 2022 compared to 2021. Amortization of deferred sales inducements for the year ended December 31, 2022 also increased as index credits on index policies for the year ended December 31, 2022 were less than index credits on index policies for 2021. Bonus products represented 63%, 65% and 75% of our net annuity account values at December 31, 2022, 2021 and 2020, respectively. The amount of amortization is affected by amortization associated with fair value accounting for derivatives and embedded derivatives utilized in our fixed index annuity business and amortization associated with net realized gains (losses) on investments. Fair value accounting for derivatives and embedded derivatives utilized in our fixed index annuity business creates differences in the recognition of revenues and expenses from derivative instruments including the embedded derivative liabilities in our fixed index annuity contracts. The change in fair value of the embedded derivatives will not correspond to the change in fair value of the derivatives (purchased call options), because the purchased call options are one-year options while the options valued in the fair value of embedded derivatives cover the expected lives of the contracts which typically exceed ten years.

Amortization of deferred sales inducements is summarized as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Amortization of deferred sales inducements before gross profit adjustments	$ 234,778	$ 112,790	$ 243,067
Gross profit adjustments:			
Fair value accounting for derivatives and embedded derivatives	177,131	40,899	202,660
Net realized losses on investments	(3,361)	(997)	(7,563)
Amortization of deferred sales inducements after gross profit adjustments	$ 408,548	$ 152,692	$ 438,164

See **Net income available to common stockholders** and **Non-GAAP operating income available to common stockholders, a non-GAAP financial measure** above for discussion of the impact of assumption updates on amortization of deferred sales inducements for the years ended December 31, 2022 and 2021. See Critical Accounting Policies and Estimates - Deferred Policy Acquisition Costs and Deferred Sales Inducements.

Change in fair value of embedded derivatives includes changes in the fair value of our fixed index annuity embedded derivatives (see *Note 6 - Derivative Instruments* to our audited consolidated financial statements). The components of change in fair value of embedded derivatives are as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Fixed index annuities - embedded derivatives	$ (2,561,676)	$ (876,803)	$ (1,922,085)
Other changes in difference between policy benefit reserves computed using derivative accounting vs. long-duration contracts accounting	648,580	520,863	635,298
Reinsurance related embedded derivative	(439,502)	(2,362)	—
	$ (2,352,598)	$ (358,302)	$ (1,286,787)

The change in fair value of the fixed index annuity embedded derivatives resulted from (i) changes in the expected index credits on the next policy anniversary dates, which are related to the change in fair value of the call options acquired to fund those index credits discussed above in **Change in fair value of derivatives**; (ii) changes in the expected annual cost of options we will purchase in the future to fund index credits

beyond the next policy anniversary; (iii) changes in the discount rates used in estimating our embedded derivative liabilities; and (iv) the growth in the host component of the policy liability. The amounts presented as "Other changes in difference between policy benefit reserves computed using derivative accounting vs. long-duration contracts accounting" represent the total change in the difference between policy benefit reserves for fixed index annuities computed under the derivative accounting standard and the long-duration contracts accounting standard at each balance sheet date, less the change in fair value of our fixed index annuities embedded derivative. See Critical Accounting Policies and Estimates- Policy Liabilities for Fixed Index Annuities.

The primary reasons for the decrease in the change in fair value of the fixed index annuity embedded derivatives during 2022 compared to 2021 were due to decreases in expected index credits on the next policy anniversary dates resulting from decreases in the fair value of the call options acquired to fund the index credits during 2022 compared to increases in the expected index credits resulting from increases in the fair value of the call options acquired to fund these index credits during 2021 and larger increases in the net discount rates used in the calculation during 2022 compared to 2021. The discount rates used in estimating our embedded derivative liabilities fluctuate based on the changes in the general level of risk free interest rates and our own credit spread.

The reinsurance agreements executed in 2022 with AeBe and 2021 with North End Re to cede certain fixed index annuity product liabilities on a coinsurance funds withheld and modified coinsurance basis contain embedded derivatives. The fair value of these embedded derivatives are based on the unrealized gains and losses of the underlying assets held in the funds withheld and modified coinsurance portfolios and the fair value of the assets decreased during 2022. See *Note 6 - Derivative Instruments* for discussion on this embedded derivative.

Amortization of deferred policy acquisition costs is based on historical, current and future expected gross profits. The changes in amortization from period to period are the result of differences in actual gross profits compared to expected or modeled gross profits and changes to the underlying business. The increases in amortization before and after gross profit adjustments for 2022 compared to 2021 were due to the impact of assumption updates made during 2022 compared to the impact of assumption updates made during 2021. In addition, amortization of deferred policy acquisition costs for the year ended December 31, 2022 increased due to increases in actual gross profits for the year ended December 31, 2022 as compared to 2021. Amortization of deferred policy acquisition costs for the year ended December 31, 2022 also increased as index credits on index policies for the year ended December 31, 2022 were less than index credits on index policies for 2021. The amount of amortization is affected by amortization associated with fair value accounting for derivatives and embedded derivatives utilized in our fixed index annuity business and amortization associated with net realized gains (losses) on investments. As discussed above, fair value accounting for derivatives and embedded derivatives utilized in our fixed index annuity business creates differences in the recognition of revenues and expenses from derivative instruments including the embedded derivative liabilities in our fixed index annuity contracts.

Amortization of deferred policy acquisition costs is summarized as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Amortization of deferred policy acquisition costs before gross profit adjustments	$ 330,290	$ 181,589	$ 368,139
Gross profit adjustments:			
Fair value accounting for derivatives and embedded derivatives	290,905	88,576	293,827
Net realized losses on investments	(5,895)	(1,837)	(12,412)
Amortization of deferred policy acquisition costs after gross profit adjustments	$ 615,300	$ 268,328	$ 649,554

See **Net income available to common stockholders** and **non-GAAP operating income available to common stockholders, a non-GAAP financial measure,** above for discussion of the impact of assumption updates on amortization of deferred policy acquisition costs for the years ended December 31, 2022 and 2021. See Critical Accounting Policies and Estimates - Deferred Policy Acquisition Costs and Deferred Sales Inducements.

Other operating costs and expenses decreased 2% to $239.6 million in 2022 and increased 33% to $243.7 million in 2021 from $183.6 million in 2020 and are summarized as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Salary and benefits	$ 162,061	$ 139,155	$ 95,815
Other	77,555	104,557	87,821
Total other operating costs and expenses	$ 239,616	$ 243,712	$ 183,636

Salary and benefits increased $22.9 million for the year ended December 31, 2022 compared to 2021. The increases in salary and benefits were primarily due to an increased number of employees related to our continued growth and implementation of AEL 2.0 as well as increases in the expense recognized under our equity and cash incentive compensation programs ("incentive compensation programs"). The increases in expenses related to our incentive compensation programs were primarily due to new compensation programs and increases in the expected payouts due to a larger number of employees participating in the programs.

Other expenses decreased for the year ended December 31, 2022 compared to 2021. The decrease was primarily related to a decrease in risk charges expense due to the recapture of an existing reinsurance agreement which was replaced with a new agreement with a lower risk charge.

We expect the level of other operating costs and expenses to be in the $250 million range for 2023 as we continue to execute on the AEL 2.0 strategy.

Income tax expense increased in 2022 primarily due to an increase in income before income taxes. The effective income tax rates were 21.0% and 21.4% for 2022 and 2021, respectively.

Income tax expense and the resulting effective tax rate are based upon two components of income before income taxes ("pretax income") that are taxed at different tax rates. Life insurance income is generally taxed at a statutory rate of approximately 21.5% reflecting the absence of state income taxes for substantially all of the states that the life insurance subsidiaries do business in. The income (loss) for the parent company and other non-life insurance subsidiaries (the "non-life insurance group") is generally taxed at a statutory tax rate of 28.7% reflecting the combined federal and state income tax rates. The effective income tax rates resulting from the combination of the income tax provisions for the life and non-life sources of income (loss) vary from year to year based primarily on the relative size of pretax income from the two sources.

We did not provide for a valuation allowance for the deferred income tax asset attributable to unrealized losses on available for sale fixed maturity securities. Management expects that the passage of time will result in the reversal of the unrealized losses on available for sale fixed maturity securities due to the fair value increasing as these securities near maturity. We have the intent and ability to hold these securities to maturity and do not believe it would be necessary to liquidate these securities at a loss. In addition, we have the ability to sell fixed maturity securities in unrealized gain positions to offset realized deferred income tax assets attributable to unrealized losses on available for sale fixed maturity securities. To the extent future changes in facts and circumstances impact our intent and ability to hold these assets to recovery, this could impact the realization of the deferred tax asset.

Financial Condition

Investments

Our investment strategy is to maximize current income and total investment return through active management while maintaining a responsible asset allocation strategy containing high credit quality investments and providing adequate liquidity to meet our cash obligations to policyholders and others. Our investment strategy is also reflective of insurance statutes, which regulate the type of investments that our life subsidiaries are permitted to make and which limit the amount of funds that may be used for any one type of investment.

As previously noted, as part of our AEL 2.0 investment pillar, we have increased our allocation to private assets in part by partnering with proven asset managers in our focus expansion sectors of commercial real estate, residential real estate including mortgages and single family rental homes, infrastructure debt and equity, middle market lending and lending to revenue, technology and software sector companies.

The composition of our investment portfolio is summarized as follows:

	December 31,			
	2022		2021	
	Carrying Amount	Percent	Carrying Amount	Percent
	(Dollars in thousands)			
Fixed maturity securities:				
U.S. Government and agencies	$ 169,071	0.4 %	$ 1,078,746	1.9 %
States, municipalities and territories	3,822,943	8.5 %	3,758,761	6.5 %
Foreign corporate securities and foreign governments	616,938	1.4 %	375,097	0.6 %
Corporate securities	20,201,774	44.8 %	32,631,189	57.0 %
Residential mortgage backed securities	1,366,927	3.0 %	1,125,049	2.0 %
Commercial mortgage backed securities	3,447,075	7.6 %	4,682,900	8.2 %
Other asset backed securities	5,155,254	11.4 %	5,146,567	9.0 %
Total fixed maturity securities	34,779,982	77.1 %	48,798,309	85.2 %
Mortgage loans on real estate	6,778,977	15.0 %	5,650,480	9.9 %
Real estate investments	1,056,063	2.3 %	337,939	0.6 %
Limited partnerships and limited liability companies	1,266,779	2.8 %	520,120	0.9 %
Derivative instruments	431,727	1.0 %	1,277,480	2.2 %
Other investments	829,900	1.8 %	690,344	1.2 %
	45,143,428	100.0 %	57,274,672	100.0 %
Coinsurance investments (1)	6,181,870		3,101,832	
	$ 51,325,298		$ 60,376,504	

(1) Investments held by American Equity Life in a segregated account to support liabilities reinsured under both coinsurance with funds withheld and modified coinsurance reinsurance agreements.

Fixed Maturity Securities

Our fixed maturity security portfolio is managed to minimize risks such as interest rate changes and defaults or credit losses while earning a sufficient and stable return on our investments. The largest portion of our fixed maturity securities are in investment grade (typically NAIC designation 1 or 2) publicly traded or privately placed corporate securities.

A summary of our fixed maturity securities by NRSRO ratings is as follows:

	December 31,					
	2022			2021		
Rating Agency Rating	Amortized Cost	Carrying Amount	Percent of Fixed Maturity Securities	Amortized Cost	Carrying Amount	Percent of Fixed Maturity Securities
	(Dollars in thousands)					
Aaa/Aa/A	$ 24,462,459	$ 21,723,282	62.5 %	$ 24,943,232	$ 27,496,506	56.4 %
Baa	14,228,490	12,434,302	35.7 %	18,443,171	20,147,369	41.3 %
Total investment grade	38,690,949	34,157,584	98.2 %	43,386,403	47,643,875	97.7 %
Ba	554,605	485,166	1.4 %	899,253	930,321	1.9 %
B	94,185	79,058	0.2 %	104,443	117,989	0.2 %
Caa	20,020	18,540	0.1 %	38,484	39,354	0.1 %
Ca and lower	40,664	39,634	0.1 %	61,352	66,770	0.1 %
Total below investment grade	709,474	622,398	1.8 %	1,103,532	1,154,434	2.3 %
	39,400,423	34,779,982	100.0 %	44,489,935	48,798,309	100.0 %
Coinsurance investments (1)	5,465,596	5,024,635		2,509,248	2,507,634	
	$ 44,866,019	$ 39,804,617		$ 46,999,183	$ 51,305,943	

(1) Investments held by American Equity Life in a segregated account to support liabilities reinsured under both coinsurance with funds withheld and modified coinsurance reinsurance agreements.

The NAIC's Securities Valuation Office ("SVO") is responsible for the day-to-day credit quality assessment of securities owned by state regulated insurance companies. The purpose of such assessment and valuation is for determining regulatory capital requirements and regulatory reporting. Insurance companies report ownership to the SVO when such securities are eligible for regulatory filings. The SVO conducts credit analysis on these securities for the purpose of assigning a NAIC designation and/or unit price. Typically, if a security has been rated by an NRSRO, the SVO utilizes that rating and assigns a NAIC designation based upon the following system:

NAIC Designation	NRSRO Equivalent Rating
1	Aaa/Aa/A
2	Baa
3	Ba
4	B
5	Caa
6	Ca and lower

The NAIC introduced 20 NAIC designation modifiers that are applied to each NAIC designation to determine a security's NAIC designation category. New risk-based capital charges for each of the 20 designated categories for reporting were effective beginning December 31, 2021.

For most of the bonds held in our portfolio the NAIC designation matches the NRSRO equivalent rating. However, for certain loan-backed and structured securities, as defined by the NAIC, the NAIC rating is not always equivalent to the NRSRO rating presented in the previous table. The NAIC has adopted revised rating methodologies for certain loan-backed and structured securities comprised of non-agency residential mortgage backed securities ("RMBS") and commercial mortgage backed securities ("CMBS"). The NAIC’s objective with the revised rating methodologies for these structured securities is to increase the accuracy in assessing expected losses and use the improved assessment to determine a more appropriate capital requirement for such structured securities. The revised methodologies reduce regulatory reliance on rating agencies and allow for greater regulatory input into the assumptions used to estimate expected losses from structured securities.

The use of this process by the SVO may result in certain non-agency RMBS and CMBS being assigned an NAIC designation that is different than the equivalent NRSRO rating. The NAIC designations for non-agency RMBS and CMBS are based on security level expected losses as modeled by an independent third party (engaged by the NAIC) and the statutory carrying value of the security, including any purchase discounts or impairment charges previously recognized. Evaluation of non-agency RMBS and CMBS held by insurers using the NAIC rating methodologies is performed on an annual basis.

Our fixed maturity security portfolio is managed to minimize risks such as defaults or impairments while earning a sufficient and stable return on our investments. Our strategy with respect to our fixed maturity securities portfolio has been to invest primarily in investment grade securities. Investment grade is NAIC 1 and 2 securities and Baa3/BBB- and better securities on the NRSRO scale. We expect this strategy to meet the objective of minimizing risk while also managing asset capital charges on a regulatory capital basis.

A summary of our fixed maturity securities by NAIC designation is as follows:

	December 31, 2022				December 31, 2021			
NAIC Designation	Amortized Cost	Fair Value	Carrying Amount	Percentage of Total Carrying Amount	Amortized Cost	Fair Value	Carrying Amount	Percentage of Total Carrying Amount
	(Dollars in thousands)				(Dollars in thousands)			
1	$ 24,466,961	$ 21,752,775	$ 21,752,775	62.5 %	$ 25,378,938	$ 28,006,835	$ 28,006,835	57.4 %
2	14,185,506	12,398,001	12,398,001	35.7 %	18,028,077	19,667,529	19,667,529	40.3 %
3	562,190	490,198	490,198	1.4 %	909,173	941,071	941,071	2.0 %
4	109,409	91,495	91,495	0.3 %	133,070	147,160	147,160	0.3 %
5	61,721	36,738	36,738	0.1 %	16,496	15,357	15,357	— %
6	14,636	10,775	10,775	— %	24,181	20,357	20,357	— %
	39,400,423	34,779,982	34,779,982	100.0 %	44,489,935	48,798,309	48,798,309	100.0 %
Coinsurance investments (1)	5,465,596	5,024,635	5,024,635		2,509,248	2,507,634	2,507,634	
	$ 44,866,019	$ 39,804,617	$ 39,804,617		$ 46,999,183	$ 51,305,943	$ 51,305,943	

(1) Investments held by American Equity Life in a segregated account to support liabilities reinsured under both coinsurance with funds withheld and modified coinsurance reinsurance agreements.

The amortized cost and fair value of fixed maturity securities at December 31, 2022, by contractual maturity are presented in *Note 3 - Investments* to our audited consolidated financial statements in this Form 10-K, which is incorporated by reference in this Item 7.

Unrealized Losses

The amortized cost and fair value of fixed maturity securities that were in an unrealized loss position were as follows:

	Number of Securities	Amortized Cost	Unrealized Losses, Net of Allowance	Allowance for Credit Losses	Fair Value
		(Dollars in thousands)			
December 31, 2022					
Fixed maturity securities, available for sale:					
U.S. Government and agencies	27	$ 165,746	$ (4,637)	$ —	$ 161,109
States, municipalities and territories	514	3,265,080	(574,814)	—	2,690,266
Foreign corporate securities and foreign governments	43	590,944	(74,151)	—	516,793
Corporate securities	2,103	21,393,656	(3,224,609)	(3,214)	18,165,833
Residential mortgage backed securities	219	1,235,672	(126,368)	(133)	1,109,171
Commercial mortgage backed securities	339	3,750,331	(391,966)	—	3,358,365
Other asset backed securities	567	4,579,149	(382,563)	—	4,196,586
	3,812	34,980,578	(4,779,108)	(3,347)	30,198,123
Coinsurance investments (1)	698	3,085,834	(504,739)	—	2,581,095
	4,510	$ 38,066,412	$ (5,283,847)	$ (3,347)	$ 32,779,218
December 31, 2021					
Fixed maturity securities, available for sale:					
U.S. Government and agencies	8	$ 761,102	$ (124)	$ —	$ 760,978
States, municipalities and territories	42	173,106	(2,485)	(2,776)	167,845
Foreign corporate securities and foreign governments	3	34,673	(801)	—	33,872
Corporate securities	176	1,433,317	(26,035)	—	1,407,282
Residential mortgage backed securities	74	280,044	(2,093)	(70)	277,881
Commercial mortgage backed securities	89	795,405	(16,553)	—	778,852
Other asset backed securities	577	3,118,385	(50,018)	—	3,068,367
	969	6,596,032	(98,109)	(2,846)	6,495,077
Coinsurance investments (1)	458	1,327,173	(14,261)	—	1,312,912
	1,427	$ 7,923,205	$ (112,370)	$ (2,846)	$ 7,807,989

(1) Investments held by American Equity Life in a segregated account to support liabilities reinsured under both coinsurance with funds withheld and modified coinsurance reinsurance agreements.

The unrealized losses at December 31, 2022 are principally related to the timing of the purchases of certain securities, which carry less yield than those available at December 31, 2022. Approximately 98% and 83% of the unrealized losses on fixed maturity securities shown in the above table for December 31, 2022 and 2021, respectively, are on securities that are rated investment grade, defined as being the highest two NAIC designations.

The increase in unrealized losses from December 31, 2021 to December 31, 2022 was primarily related to an increase in treasury yields during the twelve months ended December 31, 2022. The 10-year U.S. Treasury yields at December 31, 2022 and December 31, 2021 were 3.88% and 1.52%, respectively. The 30-year U.S. Treasury yields at December 31, 2022 and December 31, 2021 were 3.97% and 1.90%, respectively.

The following table sets forth the composition by credit quality (NAIC designation) of fixed maturity securities with gross unrealized losses:

NAIC Designation	Carrying Value of Securities with Gross Unrealized Losses	Percent of Total	Gross Unrealized Losses (1)	Percent of Total
		(Dollars in thousands)		
December 31, 2022				
1	$ 18,396,691	60.9 %	$ (2,836,027)	59.4 %
2	11,207,008	37.1 %	(1,825,520)	38.2 %
3	465,867	1.6 %	(72,976)	1.5 %
4	89,686	0.3 %	(17,922)	0.4 %
5	29,075	0.1 %	(25,037)	0.5 %
6	9,796	— %	(1,626)	— %
	30,198,123	100.0 %	(4,779,108)	100.0 %
Coinsurance investments (2)	2,581,095		(504,739)	
	$ 32,779,218		$ (5,283,847)	
December 31, 2021				
1	$ 3,825,403	58.9 %	$ (33,823)	34.4 %
2	2,233,761	34.4 %	(47,154)	48.1 %
3	376,933	5.8 %	(13,723)	14.0 %
4	33,229	0.5 %	(1,083)	1.1 %
5	9,506	0.1 %	(1,140)	1.2 %
6	16,244	0.3 %	(1,186)	1.2 %
	6,495,076	100.0 %	(98,109)	100.0 %
Coinsurance investments (2)	1,312,912		(14,261)	
	$ 7,807,988		$ (112,370)	

(1) Gross unrealized losses have been adjusted to reflect the allowance for credit loss of $3.3 million and $2.8 million as of December 31, 2022 and 2021, respectively.

(2) Investments held by American Equity Life in a segregated account to support liabilities reinsured under both coinsurance with funds withheld and modified coinsurance reinsurance agreements.

Our investments' gross unrealized losses and fair value, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position at December 31, 2022 and 2021, along with a description of the factors causing the unrealized losses is presented in *Note 3 - Investments* to our audited consolidated financial statements in this Form 10-K, which is incorporated by reference in this Item 7.

The amortized cost and fair value of fixed maturity securities in an unrealized loss position and the number of months in a continuous unrealized loss position (fixed maturity securities that carry an NRSRO rating of BBB/Baa or higher are considered investment grade) were as follows:

	Number of Securities	Amortized Cost, Net of Allowance (1)	Fair Value	Gross Unrealized Losses, Net of Allowance (1)
		(Dollars in thousands)		
December 31, 2022				
Fixed maturity securities, available for sale:				
Investment grade:				
Less than six months	984	$ 6,296,895	$ 5,968,793	$ (328,102)
Six months or more and less than twelve months	2,308	24,207,057	20,481,666	(3,725,391)
Twelve months or greater	427	3,761,294	3,153,240	(608,054)
Total investment grade	3,719	34,265,246	29,603,699	(4,661,547)
Below investment grade:				
Less than six months	12	51,711	47,494	(4,217)
Six months or more and less than twelve months	34	319,964	265,726	(54,238)
Twelve months or greater	47	340,310	281,204	(59,106)
Total below investment grade	93	711,985	594,424	(117,561)
	3,812	34,977,231	30,198,123	(4,779,108)
Coinsurance investments (2)	698	3,085,834	2,581,095	(504,739)
	4,510	$ 38,063,065	$ 32,779,218	$ (5,283,847)
December 31, 2021				
Fixed maturity securities, available for sale:				
Investment grade:				
Less than six months	567	$ 4,255,321	$ 4,223,368	$ (31,953)
Six months or more and less than twelve months	39	132,110	130,156	(1,954)
Twelve months or greater	281	1,752,779	1,705,640	(47,139)
Total investment grade	887	6,140,210	6,059,164	(81,046)
Below investment grade:				
Less than six months	11	43,745	42,994	(751)
Six months or more and less than twelve months	7	28,544	25,706	(2,838)
Twelve months or greater	64	380,686	367,213	(13,473)
Total below investment grade	82	452,975	435,913	(17,062)
	969	6,593,185	6,495,077	(98,108)
Coinsurance investments (2)	458	1,327,173	1,312,912	(14,261)
	1,427	$ 7,920,358	$ 7,807,989	$ (112,369)

(1) Amortized cost and gross unrealized losses have been adjusted to reflect the allowance for credit loss of $3.3 million and $2.8 million as of December 31, 2022 and 2021, respectively.

(2) Investments held by American Equity Life in a segregated account to support liabilities reinsured under both coinsurance with funds withheld and modified coinsurance reinsurance agreements.

The amortized cost and fair value of fixed maturity securities (excluding U.S. Government and agencies) segregated by investment grade (NRSRO rating of BBB/Baa or higher) and below investment grade that had unrealized losses greater than 20%, when comparing fair value to amortized cost, and the number of months in a continuous unrealized loss position were as follows:

	Number of Securities	Amortized Cost, Net of Allowance (1)	Fair Value	Gross Unrealized Losses, Net of Allowance (1)
		(Dollars in thousands)		
December 31, 2022				
Investment grade:				
Less than six months	333	$ 3,955,378	$ 3,062,075	$ (893,303)
Six months or more and less than twelve months	299	4,496,559	3,146,868	(1,349,691)
Twelve months or greater	1	40,351	26,854	(13,497)
Total investment grade	633	8,492,288	6,235,797	(2,256,491)
Below investment grade:				
Less than six months	8	61,481	47,057	(14,424)
Six months or more and less than twelve months	7	111,990	71,271	(40,719)
Twelve months or greater	—	—	—	—
Total below investment grade	15	173,471	118,328	(55,143)
	648	8,665,759	6,354,125	(2,311,634)
Coinsurance investments (2)	423	1,250,509	859,395	(391,114)
	1,071	$ 9,916,268	$ 7,213,520	$ (2,702,748)
December 31, 2021				
Investment grade:				
Less than six months	—	$ —	$ —	$ —
Six months or more and less than twelve months	—	—	—	—
Twelve months or greater	—	—	—	—
Total investment grade	—	—	—	—
Below investment grade:				
Less than six months	—	—	—	—
Six months or more and less than twelve months	—	—	—	—
Twelve months or greater	—	—	—	—
Total below investment grade	—	—	—	—
	—	—	—	—
Coinsurance investments (2)	—	—	—	—
	—	$ —	$ —	$ —

(1) Amortized cost and gross unrealized losses have been adjusted to reflect the allowance for credit loss of $3.3 million and $2.8 million as of December 31, 2022 and 2021, respectively.

(2) Investments held by American Equity Life in a segregated account to support liabilities reinsured under both coinsurance with funds withheld and modified coinsurance reinsurance agreements.

The amortized cost and fair value of fixed maturity securities, by contractual maturity, that were in an unrealized loss position are shown below. Actual maturities will differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties. All of our mortgage and other asset backed securities provide for periodic payments throughout their lives, and are shown below as a separate line.

	Available for sale	
	Amortized Cost	Fair Value
	(Dollars in thousands)	
December 31, 2022		
Due in one year or less	$ 567,599	$ 563,298
Due after one year through five years	3,591,040	3,377,197
Due after five years through ten years	4,844,271	4,280,762
Due after ten years through twenty years	7,443,657	6,377,081
Due after twenty years	8,968,858	6,935,663
	25,415,425	21,534,001
Residential mortgage backed securities	1,235,672	1,109,171
Commercial mortgage backed securities	3,750,331	3,358,365
Other asset backed securities	4,579,149	4,196,586
	34,980,577	30,198,123
Coinsurance investments (1)	3,085,834	2,581,095
	$ 38,066,411	$ 32,779,218
December 31, 2021		
Due in one year or less	$ 762,035	$ 761,590
Due after one year through five years	49,668	46,687
Due after five years through ten years	476,811	467,284
Due after ten years through twenty years	443,909	435,589
Due after twenty years	669,775	658,827
	2,402,198	2,369,977
Residential mortgage backed securities	280,044	277,881
Commercial mortgage backed securities	795,405	778,852
Other asset backed securities	3,118,385	3,068,367
	6,596,032	6,495,077
Coinsurance investments (1)	1,327,173	1,312,912
	$ 7,923,205	$ 7,807,989

(1) Investments held by American Equity Life in a segregated account to support liabilities reinsured under both coinsurance with funds withheld and modified coinsurance reinsurance agreements.

International Exposure

We hold fixed maturity securities with international exposure. As of December 31, 2022, 14.7% of the carrying value of our fixed maturity securities was comprised of corporate debt securities of issuers based outside of the United States and debt securities of foreign governments. Our fixed maturity securities with international exposure are primarily denominated in U.S. dollars. Our investment professionals analyze each holding for credit risk by economic and other factors of each country and industry. The following table presents our international exposure in our fixed maturity portfolio by country or region:

	December 31, 2022		
	Amortized Cost	Carrying Amount/ Fair Value	Percent of Total Carrying Amount
	(Dollars in thousands)		
Europe	$ 2,285,608	$ 1,994,351	5.7 %
Asia/Pacific	383,900	324,205	0.9 %
Latin America	313,097	272,291	0.8 %
Non-U.S. North America	1,178,177	1,045,695	3.0 %
Australia & New Zealand	927,819	815,440	2.3 %
Other	795,657	696,191	2.0 %
	5,884,258	5,148,173	14.7 %
Coinsurance investments (1)	1,036,513	909,094	
	$ 6,920,771	$ 6,057,267	

(1) Investments held by American Equity Life in a segregated account to support liabilities reinsured under both coinsurance with funds withheld and modified coinsurance reinsurance agreements.

All of the securities presented in the table above are investment grade (NAIC designation of either 1 or 2), except for the following:

	December 31, 2022	
	Amortized Cost	Carrying Amount/ Fair Value
	(Dollars in thousands)	
Europe	$ 96,525	$ 82,618
Asia/Pacific	62	52
Latin America	45,570	37,194
Non-U.S. North America	23,209	19,911
Australia & New Zealand	219	182
Other	91,588	62,509
	257,173	202,466
Coinsurance investments (1)	32,889	20,123
	$ 290,062	$ 222,589

(1) Investments held by American Equity Life in a segregated account to support liabilities reinsured under both coinsurance with funds withheld and modified coinsurance reinsurance agreements.

Watch List

At each balance sheet date, we identify invested assets which have characteristics (i.e., significant unrealized losses compared to amortized cost and industry trends) creating uncertainty as to our future assessment of credit losses. As part of this assessment, we review not only a change in current price relative to amortized cost but the issuer's current credit rating and the probability of full recovery of principal based upon the issuer's financial strength. For corporate issuers, we evaluate the financial stability and quality of asset coverage for the securities relative to the term to maturity for the issues we own. For structured securities, we evaluate changes in factors such as collateral performance, default rates, loss severity and expected cash flows. At December 31, 2022, the amortized cost and fair value of securities on the watch list (all fixed maturity securities) are as follows:

General Description	Number of Securities	Amortized Cost	Allowance for Credit Losses	Amortized Cost, Net of Allowance	Net Unrealized Losses, Net of Allowance	Fair Value
		(Dollars in thousands)				
States, municipalities and territories	1	$ 20,657	$ —	$ 20,657	$ (3,344)	$ 17,313
Corporate securities - Public securities	6	20,860	—	20,860	(1,050)	19,810
Corporate securities - Private placement securities	1	10,646	(3,214)	7,432	—	7,432
Residential mortgage backed securities	22	25,095	(133)	24,962	(2,954)	22,008
Commercial mortgage backed securities	8	41,899	—	41,899	(2,752)	39,147
Other asset backed securities	1	2,314	—	2,314	—	2,314
Collateralized loan obligations	16	103,907	—	103,907	(21,239)	82,668
	55	$ 225,378	$ (3,347)	$ 222,031	$ (31,339)	$ 190,692

We expect to recover the unrealized losses, net of allowances, as we did not have the intent to sell and it was not more likely than not that we would be required to sell these securities prior to recovery of the amortized cost basis, net of allowances. Our analysis of these securities and their credit performance at December 31, 2022 is as follows:

States municipalities and territories: The decline in value of this security is primarily due to the security being recently restructured as part of bankruptcy proceedings and uncertainty around the impact of the restructure.

Corporate securities: The corporate securities included on the watch list primarily include a security in the utilities industry that is under financial stress due to the impact of power outages and a security in the retail market which is in an unrealized loss position and for which we have the intent to sell as part of our risk reduction effort.

Structured securities: The structured securities included on the watch list have generally experienced higher levels of stress due to the impact COVID-19 had on the economy. In addition, certain securities are included on the watch list as they are in an unrealized loss position and we have the intent to sell as part of our risk reduction effort.

Credit Losses

We have a policy and process to identify securities in our investment portfolio for which we recognize credit loss. See Critical Accounting Policies and Estimates—Evaluation of Allowance for Credit Losses on Available for Sale Fixed Maturity Securities and Mortgage Loan Portfolios and *Note 3 - Investments* to our audited consolidated financial statements in this Form 10-K, which is incorporated by reference in this Item 7.

During 2022, we recognized $15.0 million of credit losses which includes $10.0 million of credit losses on structured securities primarily due to our intent to sell such securities and $7.1 million of credit losses on corporate securities due to a $3.3 million credit loss on a security and $3.8 million of credit losses on securities due to our intent to sell such securities which were partially offset by a $2.1 million reduction in credit losses primarily due to revised financial outlook on securities related to senior living facilities in the Southeastern region of the United States driven in part by a restructuring of its debt facilities.

During 2021, we recognized credit losses of $6.2 million related to our fixed maturity securities which consisted of $6.9 million of credit losses on commercial mortgage backed securities due to our intent to sell the securities, partially offset by net recoveries on corporate securities, municipal securities and residential mortgage backed securities.

Mortgage Loans on Real Estate

Our financing receivables consist of three mortgage loan portfolio segments: commercial mortgage loans, agricultural mortgage loans and residential mortgage loans. Our commercial mortgage loan portfolio consists of loans with an outstanding principal balance of $3.6 billion as of December 31, 2022 and 2021. This portfolio consists of mortgage loans collateralized by the related properties and is diversified as to property type, location and loan size. Our mortgage lending policies establish limits on the amount that can be loaned to one borrower and other criteria to attempt to reduce the risk of default. Our agricultural mortgage loan portfolio consists of loans with an outstanding principal balance of $567.6 million and $408.1 million as of December 31, 2022 and 2021, respectively. These loans are collateralized by agricultural land and are diversified as to location within the United States. Our residential mortgage loan portfolio consists of loans with an outstanding principal balance of $2.8 billion and $1.7 billion as of December 31, 2022 and 2021, respectively. These loans are collateralized by the related properties and are diversified as to location within the United States. Mortgage loans on real estate are generally reported at cost adjusted for amortization of premiums and accrual of discounts, computed using the interest method and net of valuation allowances.

At December 31, 2022 and 2021, the largest principal amount outstanding for any single commercial mortgage loan was $83.3 million and $81.5 million, respectively, and the average loan size was $5.8 million and $5.3 million, respectively. In addition, the average loan-to-value ratio for commercial and agricultural mortgage loans combined was 51.4% and 52.3% at December 31, 2022 and 2021, respectively, based upon the underwriting and appraisal at the time the loan was made. This loan-to-value ratio is indicative of our conservative underwriting policies and practices for originating mortgage loans and may not be indicative of collateral values at the current reporting date. Our current practice is to only obtain market value appraisals of the underlying collateral at the inception of the loan unless we identify indicators of impairment in our ongoing analysis of the portfolio, in which case, we either calculate a value of the collateral using a capitalization method or obtain a third party appraisal of the underlying collateral. The commercial mortgage loan portfolio is summarized by geographic region and property type in *Note 4 - Mortgage Loans on Real Estate* of our audited consolidated financial statements of this Form 10-K, which is incorporated by reference in this Item 7.

In the normal course of business, we commit to fund mortgage loans up to 90 days in advance. At December 31, 2022, we had commitments to fund commercial mortgage loans totaling $112.8 million, with interest rates ranging from 6.9% to 8.2%. During 2022 and 2021, the commercial mortgage loan industry has been very competitive due to relatively attractive returns that can be realized on mortgage loans. For the year ended December 31, 2022, we received $403.6 million in cash for loans being paid in full compared to $350.6 million for the year ended December 31, 2021. Some of the loans being paid off have either reached their maturity or are nearing maturity. At December 31, 2022, we had commitments to fund agricultural mortgage loans totaling $18.5 million with interest rates ranging from 6.4% to 6.7%, and had commitments to fund residential mortgage loans totaling $288.8 million with interest rates ranging from 7.00% to 12.0%.

See *Note 4 - Mortgage Loans on Real Estate* to our audited consolidated financial statements, incorporated by reference, for a presentation of our valuation allowance, foreclosure activity and troubled debt restructure analysis. We have a process by which we evaluate the credit quality of each of our mortgage loans. This process utilizes each loan's loan-to-value and debt service coverage ratios as primary metrics. See *Note 4 - Mortgage Loans on Real Estate* to our audited consolidated financial statements, incorporated by reference, for a summary of our portfolio by loan-to-value and debt service coverage ratios.

We closely monitor loan performance for our commercial, agricultural and residential mortgage loan portfolios. Commercial, agricultural and residential loans are considered nonperforming when they are 90 days or more past due. Aging of financing receivables is summarized in the following table:

	Current	30-59 days past due	60-89 days past due	Over 90 days past due	Total
As of December 31, 2022:			(Dollars in thousands)		
Commercial mortgage loans	$ 3,554,558	$ —	$ —	$ —	$ 3,554,558
Agricultural mortgage loans	562,828	—	—	3,135	565,963
Residential mortgage loans	2,751,261	62,450	16,924	34,843	2,865,478
Total mortgage loans	$ 6,868,647	$ 62,450	$ 16,924	$ 37,978	$ 6,985,999
As of December 31, 2021:					
Commercial mortgage loans	$ 3,628,502	$ —	$ —	$ —	$ 3,628,502
Agricultural mortgage loans	406,999	—	—	—	406,999
Residential mortgage loans	1,631,999	34,447	3,030	7,045	1,676,521
Total mortgage loans	$ 5,667,500	$ 34,447	$ 3,030	$ 7,045	$ 5,712,022

Private Assets

The following table is a breakout of our private asset investments as of December 31, 2022 and 2021.

Private Asset Class	December 31, 2022		December 31, 2021	
	Amount	Percent	Amount	Percent
	(Dollars in thousands)			
Real estate loans				
Commercial	$ 3,385	6.8 %	$ 3,591	6.6 %
Residential	3,002	6.0 %	1,772	3.2 %
Agricultural	566	1.2 %	407	0.8 %
Total real estate loans	6,953	14.0 %	5,770	10.6 %
Private credit				
Middle market	1,493	3.0 %	1,062	2.0 %
Specialty finance	443	0.9 %	—	— %
Infrastructure debt	555	1.1 %	508	0.9 %
Total private credit	2,491	5.0 %	1,570	2.9 %
Equity				
Residential real estate	961	1.9 %	344	0.6 %
Commercial real estate	117	0.2 %	5	— %
Infrastructure	91	0.2 %	73	0.1 %
Core private equity	364	0.7 %	253	0.5 %
Total equity	1,533	3.0 %	675	1.2 %
Total private assets	$ 10,977	22.0 %	$ 8,015	14.7 %

The investment balances within the table above include fixed maturity securities and mortgage loans at amortized cost and real estate and other investments at carrying values as reflected in the consolidated balance sheets.

Derivative Instruments

Our derivative instruments consist of call options purchased to provide the income needed to fund the annual index credits on our fixed index annuity products and interest rate swaps used to hedge against changes in fair value due to changes in interest rates. The fair value of the call options is based upon the amount of cash that would be required to settle the call options obtained from the counterparties adjusted for the nonperformance risk of the counterparty. The nonperformance risk for each counterparty is based upon its credit default swap rate. We have no performance obligations related to the call options. The fair value of the pay fixed/receive float interest rate swaps are determined using internal valuation models that generate discounted expected future cash flows by constructing a projected Secure Overnight Financing Rate (SOFR) curve over the term of the swap.

Our interest rate swaps qualify for hedge accounting and our call options do not qualify for hedge accounting. Any change in the fair value of the derivatives is recognized immediately in the consolidated statements of operations. A presentation of our derivative instruments along with a discussion of the business strategy involved with our derivatives for both our derivatives designated as hedging instruments and our derivatives not designated as hedging instruments is included in *Note 6 - Derivative Instruments* to our audited consolidated financial statements in this Form 10-K, which is incorporated by reference in this Item 7.

Liabilities

Our liability for policy benefit reserves decreased to $61.1 billion at December 31, 2022 compared to $65.5 billion at December 31, 2021. The decrease in policy benefit reserves is due to additional in-force policy reserves being ceded to third party reinsurers during 2022 as well as funds returned to policyholders being in excess of net deposits and interest and index credits credited to policyholders during 2022. Substantially all of our annuity products have a surrender charge feature designed to reduce the risk of early withdrawal or surrender of the policies and to compensate us for our costs if policies are withdrawn early. Our lifetime income benefit rider also reduces the risk of early withdrawal or surrender of the policies as it provides an additional liquidity option to policyholders as the policyholder can elect to receive guaranteed payments for life from their contract without requiring them to annuitize their contract value and the rider is not transferable to other contracts. Notwithstanding these policy features, the withdrawal rates of policyholder funds may be affected by changes in interest rates and other factors.

See *Note 10 - Notes and Loan Payable* to our audited consolidated financial statements in this Form 10-K, which is incorporated by reference in this Item 7 for discussion of our notes and loan payable.

See *Note 11 - Subordinated Debentures* to our audited consolidated financial statements for additional information concerning our subordinated debentures payable to, and the preferred securities issued by, our subsidiary trusts.

Liquidity and Capital Resources

Liquidity for Insurance Operations

Our insurance subsidiaries' primary sources of cash flow are annuity deposits, investment income, and proceeds from the sale, maturity and calls of investments. The primary uses of funds are investment purchases, payments to policyholders in connection with surrenders and withdrawals, policy acquisition costs and other operating expenses.

Liquidity requirements are met primarily by funds provided from operations. Our life subsidiaries generally receive adequate cash flow from annuity deposits and investment income to meet their obligations. Annuity liabilities are generally long-term in nature. However, a primary liquidity concern is the risk of an extraordinary level of early policyholder withdrawals. We include provisions within our annuity policies, such as surrender charges and bonus vesting, which help limit and discourage early withdrawals. Our lifetime income benefit rider also limits the risk of early withdrawals as it provides an additional liquidity option to policyholders as the policyholder can elect to receive guaranteed payments for life from their contract without requiring them to annuitize their contract value and the rider is not transferable to other contracts. At December 31, 2022, approximately 90% or $43.0 billion of our annuity liabilities were subject to penalty upon surrender, with a weighted average remaining surrender charge period of 4.6 years and a weighted average surrender charge percentage of 7.9%.

Our insurance subsidiaries generally have adequate cash flows from annuity deposits and investment income to meet their policyholder and other obligations. Net cash flows from annuity deposits and funds returned to policyholders as surrenders, withdrawals and death claims were $(1.9) billion for the year ended December 31, 2022 compared to $1.3 billion for the year ended December 31, 2021 with the decrease attributable to a $3.1 billion decrease in net annuity deposits after coinsurance and a $66.9 million (after coinsurance) increase in funds returned to policyholders. We continue to invest the net proceeds from policyholder transactions and investment activities in high quality fixed maturity securities, mortgage loans, and other high quality private assets. We have a highly liquid investment portfolio that can be used to meet policyholder and other obligations as needed. In addition, we intend to hold approximately 1% to 3% of our investment portfolio in cash and cash equivalents. Scheduled principal repayments, calls and tenders of available for sale fixed maturity securities and net investment income were $2.8 billion and $2.3 billion, respectively, during the year ended December 31, 2022.

Liquidity of Parent Company

We, as the parent company, are a legal entity separate and distinct from our subsidiaries, and have no business operations. We need liquidity primarily to service our debt (senior notes, term loan and subordinated debentures issued to a subsidiary trust), pay operating expenses and pay dividends to common and preferred stockholders. Our assets consist primarily of the capital stock and surplus notes of our subsidiaries. Accordingly, our future cash flows depend upon the availability of dividends, surplus note interest payments and other statutorily permissible payments from our subsidiaries, such as payments under our investment advisory agreements and tax allocation agreement with our subsidiaries. These sources provide adequate cash flow for us to meet our current and reasonably foreseeable future obligations and we expect they will be adequate to fund our parent company cash flow requirements in 2023.

The ability of our life insurance subsidiaries to pay dividends or distributions, including surplus note payments, will be limited by applicable laws and regulations of the states in which our life insurance subsidiaries are domiciled, which subject our life insurance subsidiaries to significant regulatory restrictions. These laws and regulations require, among other things, our insurance subsidiaries to maintain minimum solvency requirements and limit the amount of dividends these subsidiaries can pay.

Currently, American Equity Life may pay dividends or make other distributions without the prior approval of the Iowa Insurance Commissioner, unless such payments, together with all other such payments within the preceding twelve months, exceed the greater of (1) American Equity Life's net gain from operations for the preceding calendar year, or (2) 10% of American Equity Life's statutory capital and surplus at the preceding December 31. For 2023, up to $369.3 million can be distributed as dividends by American Equity Life without prior approval of the Iowa Insurance Commissioner. In addition, dividends and surplus note payments may be made only out of statutory earned surplus, and all surplus note payments are subject to prior approval by regulatory authorities in the life subsidiary's state of domicile. American Equity Life had $2.0 billion of statutory earned surplus at December 31, 2022.

The maximum distribution permitted by law or contract is not necessarily indicative of an insurer's actual ability to pay such distributions, which may be constrained by business and regulatory considerations, such as the impact of such distributions on surplus, which could affect the insurer's ratings or competitive position, the amount of premiums that can be written and the ability to pay future dividends or make other distributions. Further, state insurance laws and regulations require that the statutory surplus of our life subsidiaries following any dividend or distribution must be reasonable in relation to their outstanding liabilities and adequate for their financial needs. Along with solvency regulations, the primary driver in determining the amount of capital used for dividends is the level of capital needed to maintain desired financial strength ratings from rating agencies. Both regulators and rating agencies could become more conservative in their methodology and criteria, including increasing capital requirements for our insurance subsidiaries which, in turn, could negatively affect the cash available to us from insurance subsidiaries. As of December 31, 2022, we estimate American Equity Life has sufficient statutory capital and surplus, combined with capital available to the holding company, to maintain its insurer financial strength rating objective. However, this capital may not be sufficient if significant future losses are incurred or a rating agency modifies its rating criteria and access to additional capital could be limited.

On November 30, 2020 we issued 9,106,042 common shares to Brookfield at a value of $37.00 per share for net proceeds of $333.6 million. On January 7, 2022, we issued an additional 6,775,000 shares to Brookfield at a value of $37.33 per share for net proceeds of $252.9 million.

From the 2020 inception of the share repurchase program through December 31, 2022, we have repurchased approximately 23.9 million shares of our common stock at an average price of $34.74 per common share, including 14.8 million shares repurchased during the year ended December 31, 2022. As of December 31, 2022, we had $569 million remaining under our share repurchase program.

Cash and cash equivalents of the parent holding company at December 31, 2022, were $531.3 million. We also have the ability to issue equity, debt or other types of securities through one or more methods of distribution. The terms of any offering would be established at the time of the offering, subject to market conditions. On February 15, 2022, we established a new five-year credit agreement for $300 million in unsecured delayed draw term loan commitments. On July 6, 2022, we borrowed $300 million under this agreement which matures on February 15, 2027.

In January 2022, American Equity Life became a member of the Federal Home Loan Bank of Des Moines ("FHLB") which provides access to collateralized borrowings and other FHLB products. We may also issue funding agreements to the FHLB. Both the collateralized borrowings and funding agreements require us to pledge qualified assets as collateral. Obligations arising from funding agreements, which totaled $300.0 million as of December 31, 2022 are used in investment spread activities.

Statutory accounting practices prescribed or permitted for our life subsidiaries differ in many respects from those governing the preparation of financial statements under GAAP. Accordingly, statutory operating results and statutory capital and surplus may differ substantially from amounts reported in the GAAP basis financial statements for comparable items. Information as to statutory capital and surplus and statutory net income (loss) for our life subsidiaries as of December 31, 2022 and 2021 and for the years ended December 31, 2022, 2021 and 2020 is included in *Note 13 - Statutory Financial Information and Dividend Restrictions* to our audited consolidated financial statements.

In the normal course of business, we enter into financing transactions, lease agreements, or other commitments. These commitments may obligate us to certain cash flows during future periods. The following table summarizes such obligations as of December 31, 2022.

	Payments Due by Period				
	Total	Less Than 1 year	1–3 Years	4–5 Years	After 5 Years
	(Dollars in thousands)				
Annuity and single premium universal life products (1)	$ 63,211,336	$ 4,022,156	$ 15,083,920	$ 7,398,151	$ 36,707,109
Notes and loan payable, including interest payments (2)	1,028,981	50,714	154,288	823,979	—
Subordinated debentures, including interest payments (3)	215,825	4,850	9,700	9,700	191,575
Operating leases	28,503	3,792	8,097	5,601	11,013
Mortgage loan funding and other investments	2,390,862	2,390,862	—	—	—
Total	$ 66,875,507	$ 6,472,374	$ 15,256,005	$ 8,237,431	$ 36,909,697

(1) Amounts shown in this table are projected payments through the year 2073 which we are contractually obligated to pay to our annuity policyholders. The payments are derived from actuarial models which assume a level interest rate scenario and incorporate assumptions regarding mortality and persistency, when applicable. These assumptions are based on our historical experience.

(2) Period that principal amounts are due is determined by the earliest of the call/put date or the maturity date of each note payable.

(3) Amount shown is net of equity investments in the capital trusts due to the contractual right of offset upon repayment of the notes.

Critical Accounting Policies & Estimates

The increasing complexity of the business environment and applicable authoritative accounting guidance require us to closely monitor our accounting policies. We have identified six critical accounting policies and estimates that are complex and require significant judgment. The following summary of our critical accounting policies and estimates is intended to enhance your ability to assess our financial condition and results of operations and the potential volatility due to changes in estimates.

Valuation of Investments

Our fixed maturity securities classified as available for sale are reported at fair value. Unrealized gains and losses, if any, on these securities are included directly in stockholders' equity as a component of accumulated other comprehensive income (loss), net of income taxes and certain adjustments for assumed changes in amortization of deferred policy acquisition costs, deferred sales inducements and policy benefit reserves. Unrealized gains and losses represent the difference between the amortized cost or cost basis and the fair value of these investments. We use significant judgment within the process used to determine fair value of these investments.

GAAP defines fair value as the price that would be received to sell an asset or paid to transfer a liability (exit price) in an orderly transaction between market participants at the measurement date. We categorize our financial instruments into three levels of fair value hierarchy based on the priority of inputs used in determining fair value. The hierarchy defines the highest priority inputs (Level 1) as quoted prices in active markets for identical assets or liabilities. The lowest priority inputs (Level 3) are our own assumptions about what a market participant would use in determining fair value such as estimated future cash flows. In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, a financial instrument's level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. Our assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the financial instrument.

We categorize financial instruments recorded at fair value in the consolidated balance sheets as follows:

Level 1 - Quoted prices are available in active markets for identical financial instruments as of the reporting date. We do not adjust the quoted price for these financial instruments, even in situations where we hold a large position and a sale could reasonably impact the quoted price.

Level 2 - Quoted prices in active markets for similar financial instruments, quoted prices for identical or similar financial instruments in markets that are not active; and models and other valuation methodologies using inputs other than quoted prices that are observable.

Level 3 - Models and other valuation methodologies using significant inputs that are unobservable for financial instruments and include situations where there is little, if any, market activity for the financial instrument. The inputs into the determination of fair value require significant management judgment or estimation. Financial instruments that are included in Level 3 are securities for which no market activity or data exists and for which we used discounted expected future cash flows with our own assumptions about what a market participant would use in determining fair value.

The following table presents the fair value of fixed maturity securities, available for sale, by pricing source and hierarchy level as of December 31, 2022 and 2021, respectively:

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
	(Dollars in thousands)			
December 31, 2022				
Priced via third party pricing services	$ 26,184	$ 30,061,381	$ —	$ 30,087,565
Priced via independent broker quotations	—	—	—	—
Priced via other methods	—	4,034,863	657,554	4,692,417
	$ 26,184	$ 34,096,244	$ 657,554	$ 34,779,982
% of Total	0.1 %	98.0 %	1.9 %	100.0 %
Coinsurance investments (1)	—	4,836,923	187,712	5,024,635
	$ 26,184	$ 38,933,167	$ 845,266	$ 39,804,617
December 31, 2021				
Priced via third party pricing services	$ 32,742	$ 46,930,830	$ —	$ 46,963,572
Priced via independent broker quotations	—	—	—	—
Priced via other methods	—	2,005,747	—	2,005,747
	$ 32,742	$ 48,936,577	$ —	$ 48,969,319
% of Total	0.1 %	99.9 %	— %	100.0 %
Coinsurance investments (1)	32,695	2,303,929	—	2,336,624
	$ 65,437	$ 51,240,506	$ —	$ 51,305,943

(1) Investments held by American Equity Life in a segregated account to support liabilities reinsured under both coinsurance with funds withheld and modified coinsurance reinsurance agreements.

Management's assessment of all available data when determining fair value of our investments is necessary to appropriately apply fair value accounting.

We utilize independent pricing services in estimating the fair values of investment securities. The independent pricing services incorporate a variety of observable market data in their valuation techniques, including:

- reported trading prices,
- benchmark yields,
- broker-dealer quotes,
- benchmark securities,
- bids and offers,
- credit ratings,
- relative credit information, and
- other reference data.

The independent pricing services also take into account perceived market movements and sector news, as well as a security's terms and conditions, including any features specific to that issue that may influence risk and marketability. Depending on the security, the priority of the use of observable market inputs may change as some observable market inputs may not be relevant or additional inputs may be necessary.

The independent pricing services provide quoted market prices when available. Quoted prices are not always available due to market inactivity. When quoted market prices are not available, the third parties use yield data and other factors relating to instruments or securities with similar characteristics to determine fair value for securities that are not actively traded. We generally obtain one value from our primary external pricing service. In situations where a price is not available from this service, we may obtain quotes or prices from additional parties as needed. Market indices of similar rated asset class spreads are considered for valuations and broker indications of similar securities are compared. Inputs used by the broker include market information, such as yield data and other factors relating to instruments or securities with similar characteristics. Valuations and quotes obtained from third party commercial pricing services are non-binding and do not represent quotes on which one may execute the disposition of the assets.

We validate external valuations at least quarterly through a combination of procedures that include the evaluation of methodologies used by the pricing services, comparison of the prices to a secondary pricing source, analytical reviews and performance analysis of the prices against trends, and maintenance of a securities watch list. Additionally, as needed we utilize discounted cash flow models or perform independent valuations on a case-by-case basis using inputs and assumptions similar to those used by the pricing services. Although we do identify differences from time to time as a result of these validation procedures, we did not make any significant adjustments as of December 31, 2022 and 2021.

Evaluation of Allowance for Credit Losses on Available for Sale Fixed Maturity Securities and Mortgage Loan Portfolios

The process to identify available for sale fixed maturity securities that could potentially require an allowance for credit loss involves significant judgment and estimates by management. We review and analyze all fixed maturity securities on an ongoing basis for changes in market interest rates and credit deterioration. This review process includes analyzing our ability to recover the amortized cost or cost basis of each fixed maturity security that has a fair value that is materially lower than its amortized cost and requires a high degree of management judgment and involves uncertainty. The evaluation of fixed maturity securities for credit loss is a quantitative and qualitative process, which is subject to risks and uncertainties.

We have a policy and process to identify fixed maturity securities that could potentially have a credit loss. This process involves monitoring market events and other items that could impact issuers. The evaluation includes but is not limited to such factors as:

- the extent to which fair value is less than amortized cost or cost;
- whether the issuer is current on all payments and all contractual payments have been made as agreed;
- the remaining payment terms and the financial condition and near-term prospects of the issuer;
- the lack of ability to refinance due to liquidity problems in the credit market;
- the fair value of any underlying collateral;
- the existence of any credit protection available;
- our intent to sell and whether it is more likely than not we would be required to sell prior to recovery for debt securities;
- consideration of rating agency actions; and
- changes in estimated cash flows of mortgage and asset backed securities.

We determine whether an allowance for credit loss should be established for fixed maturity securities by assessing all facts and circumstances surrounding each security. Where the decline in fair value of fixed maturity securities is attributable to changes in market interest rates or to factors such as market volatility, liquidity and spread widening, and we anticipate recovery of all contractual or expected cash flows, we do not consider these securities to have credit loss because we do not intend to sell these securities and it is not more likely than not we will be required to sell these securities before a recovery of amortized cost, which may be maturity.

If we intend to sell a fixed maturity security or if it is more likely than not that we will be required to sell a security before recovery of its amortized cost basis, credit loss has occurred and the difference between amortized cost and fair value will be recognized as a loss in operations.

If we do not intend to sell and it is not more likely than not we will be required to sell the fixed maturity security but also do not expect to recover the entire amortized cost basis of the security, a credit loss would be recognized in operations in the amount of the expected credit loss. We determine the amount of expected credit loss by calculating the present value of the cash flows expected to be collected discounted at each security's acquisition yield based on our consideration of whether the security was of high credit quality at the time of acquisition. The difference between the present value of expected future cash flows and the amortized cost basis of the security is the amount of credit loss recognized in operations. The recognized credit loss is limited to the unrealized loss on the security.

The determination of the credit loss component of a mortgage backed security is based on a number of factors. The primary consideration in this evaluation process is the issuer's ability to meet current and future interest and principal payments as contractually stated at time of purchase. Our review of these securities includes an analysis of the cash flow modeling under various default scenarios considering independent third party benchmarks, the seniority of the specific tranche within the structure of the security, the composition of the collateral and the actual default, loss severity and prepayment experience exhibited. With the input of third party assumptions for default projections, loss severity and prepayment expectations, we evaluate the cash flow projections to determine whether the security is performing in accordance with its contractual obligation.

We utilize the models from a leading structured product software specialist serving institutional investors. These models incorporate each security's seniority and cash flow structure. In circumstances where the analysis implies a potential for principal loss at some point in the future, we use our "best estimate" cash flow projection discounted at the security's effective yield at acquisition to determine the amount of our potential credit loss associated with this security. The discounted expected future cash flows equates to our expected recovery value. Any shortfall of the expected recovery when compared to the amortized cost of the security will be recorded as credit loss.

The cash flow modeling is performed on a security-by-security basis and incorporates actual cash flows on the residential mortgage backed securities through the current period, as well as the projection of remaining cash flows using a number of assumptions including default rates, prepayment rates and loss severity rates. The default curves we use are tailored to the Prime or Alt-A residential mortgage backed securities that we own, which assume lower default rates and loss severity for Prime securities versus Alt-A securities. These default curves are scaled higher or lower depending on factors such as current underlying mortgage loan performance, rating agency loss projections, loan to value ratios, geographic diversity, as well as other appropriate considerations.

The determination of the credit loss component of a corporate bond is based on the underlying financial performance of the issuer and their ability to meet their contractual obligations. Considerations in our evaluation include, but are not limited to, credit rating changes, financial statement and ratio analysis, changes in management, significant changes in credit spreads, breaches of financial covenants and a review of the economic outlook for the industry and markets in which they trade. In circumstances where an issuer appears unlikely to meet its future obligation, an estimate of credit loss is determined. Credit loss is calculated using default probabilities as derived from the credit default swaps markets in conjunction with recovery rates derived from independent third party analysis or a best estimate of credit loss. This credit loss rate is then incorporated into a present value calculation based on an expected principal loss in the future discounted at the yield at the date of purchase and compared to amortized cost to determine the amount of credit loss associated with the security.

For fixed maturity securities which we do not intend to sell and it is not more likely than not we will be required to sell, but our intent changes due to changes or events that could not have been reasonably anticipated, a credit loss may be recognized in operations. Unrealized losses may be recognized in future periods in operations should we later conclude that the decline in fair value below amortized cost represents a credit loss pursuant to our accounting policy described above. The use of different methodologies and assumptions to determine the fair value of investments and the timing and amount of impairments may have a material effect on the amounts presented in our consolidated financial statements.

We establish a valuation allowance to provide for the risk of credit losses inherent in our mortgage loan portfolios. The valuation allowance is maintained at a level believed adequate by management to absorb estimated expected credit losses.

The valuation allowances for each of our mortgage loan portfolios are estimated by deriving probability of default and recovery rate assumptions based on the characteristics of the loans in each portfolio, historical economic data and loss information, and current and forecasted economic conditions. Key loan characteristics impacting the estimate for our commercial mortgage loan portfolio include the current state of the borrower’s credit quality, which considers factors such as loan-to-value (“LTV”) and debt service coverage (“DSC”) ratios, loan performance, underlying collateral type, delinquency status, time to maturity, and original credit scores. Key loan characteristics impacting the estimate for our agricultural and residential mortgage loan portfolios include the current state of the borrowers' credit quality, delinquency status, time to maturity and original credit scores.

Policy Liabilities for Fixed Index Annuities

We offer a variety of fixed index annuities with crediting strategies linked to the S&P 500 Index and other equity and bond market indices. We purchase call options on the applicable indices as an investment to provide the income needed to fund the annual index credits on the index products. See Financial Condition—Derivative Instruments. Certain derivative instruments embedded in the fixed index annuity contracts are recognized in the consolidated balance sheets at their fair values and changes in fair value are recognized immediately in our consolidated statements of operations in accordance with accounting standards for derivative instruments and hedging activities.

Accounting for derivatives prescribes that the contractual obligations for future annual index credits are treated as a "series of embedded derivatives" over the expected life of the applicable contracts. Policy liabilities for fixed index annuities are equal to the sum of the "host" (or guaranteed) component and the embedded derivative component for each fixed index annuity policy. The host value is established at inception of the contract and accreted over the policy's life at a constant rate of interest. We estimate the fair value of the embedded derivative component at each valuation date by (i) projecting policy contract values and minimum guaranteed contract values over the expected lives of the contracts and (ii) discounting the excess of the projected contract value amounts at the applicable risk-free interest rates adjusted for our nonperformance risk related to those liabilities. The projections of policy contract values are based on our best estimate assumptions for future policy growth and future policy decrements including lapse, partial withdrawal and mortality rates. Our best estimate assumptions for future policy growth include assumptions for the expected index credits on the next policy anniversary date which are derived from the fair values of the underlying call options purchased to fund such index credits and the expected costs of annual call options we will purchase in the future to fund index credits beyond the next policy anniversary. The projections of minimum guaranteed contract values include the same best estimate assumptions for policy decrements as were used to project policy contract values. The amounts reported in the consolidated statements of operations as "Interest sensitive and index product benefits" represent amounts credited to policy liabilities pursuant to accounting by insurance companies for certain long-duration contracts which include index credits through the most recent policy anniversary. The amounts reported in the consolidated statements of operations as "Change in fair value of embedded derivatives" equal the change in the difference between policy benefit reserves for fixed index annuities computed under the derivative accounting standard and the long-duration contracts accounting standard at each balance sheet date.

In general, the change in the fair value of the embedded derivatives will not correspond to the change in fair value of the purchased call options because the purchased call options are generally one year options while the options valued in the embedded derivatives represent the rights of the contract holder to receive index credits over the entire period the fixed index annuities are expected to be in force, which typically exceeds 10 years.

The most sensitive assumptions in determining policy liabilities for fixed index annuities are 1) the rates used to discount the excess projected contract values, 2) the expected cost of annual call options we will purchase in the future to fund index credits beyond the next policy anniversary date and 3) our best estimate for future policy decrements specific to lapse rates.

As indicated above, the discount rates used to discount excess projected contract value are based on applicable risk-free interest rates adjusted for our nonperformance risk related to those liabilities. If the discount rates used to discount the excess projected contract values at December 31, 2022 were to increase by 100 basis points, our reserves for fixed index annuities would decrease by $336.2 million. A decrease by 100 basis points in the discount rates used to discount the excess projected contract values would increase our reserves for fixed index annuities by $386.4 million.

As of December 31, 2022, we utilized an estimate of 2.40% for the expected cost of annual call options, which is based on estimated long-term account value growth and a historical review of our actual options costs. If the expected cost of annual call options we purchase in the future to fund index credits beyond the next policy anniversary date were to increase by 25 basis points, our reserves for fixed index annuities would increase by $334.2 million. A decrease of 25 basis points in the expected cost of annual call options would decrease our reserves for fixed index annuities by $298.1 million.

Our lapse rate assumptions are based on actual experience and our outlook as to future expectations for lapse rates. If lapse rates were to increase 10%, our reserves for fixed index annuities would decrease by $4.2 million. A decrease in lapse rates of 10% would increase our reserves for fixed index annuities by $3.3million.

Liability for Lifetime Income Benefit Riders

The liability for lifetime income benefit riders is based on the actual and present value of expected benefit payments to be paid in excess of projected policy values recognizing the excess over the expected lives of the underlying policies based on the actual and present value of expected assessments including investment spreads, product charges and fees. The inputs used in the calculation of the liability for lifetime income benefit riders include actual policy values, actual income account values, actual payout factors, actual roll-up rates and our best estimate assumptions for future policy growth, expected utilization of lifetime income benefit riders, which includes the ages at which policyholders are expected to elect to begin to receive lifetime income benefit payments and the percentage of policyholders who elect to receive lifetime income benefit payments, the type of income benefit payments selected upon election and future assumptions for lapse, partial withdrawal and mortality rates. The assumptions are reviewed quarterly and updates to the assumptions are made based on historical results and our best estimates of future experience. The liability for lifetime income benefit riders is included in policy benefit reserves in the consolidated balance sheets and the change in the liability is included in interest sensitive and index product benefits in the consolidated statements of operations. See **Results of Operations for the Three Years Ended December 31, 2022** in this Item 7 for a discussion and presentation of the effects of assumption revisions.

The most sensitive assumptions in the calculation of the liability for lifetime income benefit riders are 1) the expected cost of annual call options we will purchase in the future, 2) the percentage of policyholders who elect to receive lifetime income benefit payments, 3) our best estimate for future policy decrements specific to lapse rates and 4) the net investment earned rate.

We utilize the expected cost of annual call options we will purchase in the future to project policy values and to discount future cash flows. In addition, it is a key component in the calculation of expected assessments in the projection period. As of December 31, 2022, we utilized an estimate of 2.40% for the long-term expected cost of annual call options, which is based on estimated long-term account value growth and a historical review of the cost of our actual call options. If the expected cost of annual call options and fixed crediting rates were to increase by

25 basis points, our liability for lifetime income benefit riders would decrease by $128.8 million. A decrease of 25 basis points in the expected cost of annual call options and fixed crediting rates would increase our liability for lifetime income benefit riders by $111.7 million.

Our assumptions related to the percentage of policyholders who elect to receive lifetime income benefit payments is based on actual experience and our outlook as to future expectations for utilization rates. If the ultimate floor assumption on the percentage of policyholders who elect to receive lifetime income benefit payments was increased by 30% at December 31, 2022, our liability for lifetime income benefit riders would increase by $205.2 million. A decrease by 30% in the ultimate floor assumption on the percentage of policyholders who elect to receive lifetime income benefit payments would decrease our liability for lifetime income benefit riders by $260.6 million.

Our lapse rate assumptions are based on actual experience and our outlook as to future expectations for lapse rates. If lapse rates were to increase 10%, our liability for lifetime income benefit riders would decrease by $6.2 million. A decrease in lapse rates of 10% would increase our liability for lifetime income benefit riders by $2.3 million.

The net investment earned rate is a key component in the calculation of expected assessments in the projection period. The net investment earned rate is based on current yields being earned in our invested assets portfolio, future expectations for earned yields and the expected mean reversion period. If the net investment earned rate were to increase 10 basis points, our liability for lifetime income benefit riders would decrease by $23.5 million. A decrease in the net investment earned rate of 10 basis points would increase our liability for lifetime income benefit riders by $24.1 million.

Deferred Policy Acquisition Costs and Deferred Sales Inducements

Costs relating to the successful production of new business are not expensed when incurred but instead are capitalized as deferred policy acquisition costs or deferred sales inducements. Only costs which are expected to be recovered from future policy revenues and gross profits may be deferred.

Deferred policy acquisition costs and deferred sales inducements are subject to loss recognition testing on a quarterly basis or when an event occurs that may warrant loss recognition. Deferred policy acquisition costs consist principally of commissions and certain costs of policy issuance. Deferred sales inducements consist of premium and interest bonuses credited to policyholder account balances.

For annuity products, these costs are being amortized in proportion to actual and expected gross profits. Actual and expected gross profits include the the excess of net investment income earned over the interest credited or the cost of providing index credits to the policyholders, or the "investment spread"; and to a lesser extent, product charges and fees net of expected excess payments for lifetime income benefit riders and certain policy expenses. Actual and expected gross profits for fixed index annuities also include the impact of amounts recorded for the change in fair value of derivatives and the change in fair value of embedded derivatives. Current period amortization is adjusted retrospectively through an unlocking process when estimates of actual and expected gross profits (including the impact of net realized gains (losses) on investments and credit losses recognized in operations) to be realized from a group of products are updated. Our estimates of future gross profits are based on actuarial assumptions related to the underlying policies terms, lives of the policies, yield on investments supporting the liabilities and level of expenses necessary to maintain the polices over their entire lives. Revisions are made based on historical results and our best estimates of future experience. See **Results of Operations for the Three Years Ended December 31, 2022** in this Item 7 for a discussion and presentation of the effects of assumption revisions.

The most sensitive assumptions used to calculate amortization of deferred policy acquisition costs and deferred sales inducements are 1) the net investment earned rate, 2) our best estimate for future policy decrements specific to lapse rates and 3) the expected cost of annual call options we will purchase in the future.

The net investment earned rate is a key component in the calculation of estimated gross profits. The net investment earned rate is based on current yields being earned in our invested assets portfolio, future expectations for earned yields and the expected mean reversion period. If the net investment earned rate were to increase 10 basis points, our combined balance for deferred policy acquisition costs and deferred sales inducements at December 31, 2022 would increase by $99.7 million. A decrease in the net investment earned rate of 10 basis points would decrease our combined balance for deferred policy acquisition costs and deferred sales inducements at December 31, 2022 by $101.6 million.

Our lapse rate assumptions are based on actual experience and our outlook as to future expectations for lapse rates. If lapse rates were to increase 10%, our combined balance of deferred policy acquisition costs and deferred sales inducements would decrease by $75.8 million. A decrease in lapse rates of 10% would increase our combined balance of deferred policy acquisition costs and deferred sales inducements by $77.0 million.

We utilize the expected cost of annual call options we will purchase in the future to project policy values and to discount future cash flows. In addition, it is a key component in the calculation of expected gross profits in the projection period. As of December 31, 2022, we utilized an estimate of 2.40% for the expected long-term cost of annual call options, which is based on estimated long-term account value growth and a historical review of the cost of our actual call options. If the expected cost of annual call options and fixed crediting rates were to increase by 25 basis points, our combined balance of deferred policy acquisition costs and deferred sales inducements would decrease by $104.4 million. A decrease of 25 basis points in the expected cost of annual call options and fixed crediting rates would decrease our combined balance of deferred policy acquisition costs and deferred sales inducements by $98.9 million.

Deferred Income Taxes

We account for income taxes using the liability method. This method provides for the tax effects of transactions reported in the audited consolidated financial statements for both taxes currently due and deferred. Deferred income taxes reflect the impact of temporary differences between the amount of assets and liabilities recognized for financial reporting purposes and such amounts recognized for tax purposes. A temporary difference is a transaction, or amount of a transaction, that is recognized currently for financial reporting purposes but will not be recognized for tax purposes until a future tax period, or is recognized currently for tax purposes but will not be recognized for financial reporting purposes until a future reporting period. Deferred income taxes are measured by applying enacted tax rates for the years in which the temporary differences are expected to be recovered or settled to the amount of each temporary difference.

The realization of deferred income tax assets is primarily based upon management's estimates of future taxable income. Valuation allowances are established when management estimates, based on available information, that it is more likely than not that deferred income tax assets will not be realized. Significant judgment is required in determining whether valuation allowances should be established, as well as the amount of such allowances. When making such determination, consideration is given to, among other things, the following:

- future taxable income of the necessary character exclusive of reversing temporary differences and carryforwards;
- future reversals of existing taxable temporary differences;
- taxable capital income in prior carryback years; and
- tax planning strategies.

Actual realization of deferred income tax assets and liabilities may materially differ from these estimates as a result of changes in tax laws as well as unanticipated future transactions impacting related income tax balances.

The realization of deferred income tax assets related to unrealized losses on our available for sale fixed maturity securities is also based upon our intent to hold these securities for a period of time sufficient to allow for a recovery in fair value and not realize the unrealized loss.

New Accounting Pronouncements

See *Note 1 - Significant Accounting Policies* to our audited consolidated financial statements in this Form 10-K beginning on page F-12, which is incorporated by reference in this Item 7, for new accounting pronouncement disclosures.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We seek to invest our available funds in a manner that will maximize shareholder value and fund future obligations to policyholders and debtors, subject to appropriate risk considerations. We seek to meet this objective through investments that: (i) consist substantially of investment grade fixed maturity securities, (ii) have projected returns which satisfy our spread targets, and (iii) have characteristics which support the underlying liabilities. Many of our products incorporate surrender charges, market interest rate adjustments or other features, including lifetime income benefit riders, to encourage persistency.

We seek to maximize the total return on our fixed maturity securities through active investment management. Accordingly, we have determined that our available for sale portfolio of fixed maturity securities is available to be sold in response to: (i) changes in market interest rates, (ii) changes in relative values of individual securities and asset sectors, (iii) changes in prepayment risks, (iv) changes in credit quality outlook for certain securities, (v) liquidity needs, and (vi) other factors.

Interest rate risk is our primary market risk exposure. Substantial and sustained increases and decreases in market interest rates can affect the profitability of our products and the fair value of our investments. The profitability of most of our products depends on the spreads between interest yield on investments and rates credited on insurance liabilities. We have the ability to adjust crediting rates (caps, participation rates or asset fee rates for fixed index annuities) on substantially all of our annuity liabilities at least annually (subject to minimum guaranteed values). Substantially all of our annuity products have surrender and withdrawal penalty provisions designed to encourage persistency and to help ensure targeted spreads are earned. In addition, a significant amount of our fixed index annuity policies and many of our annual reset fixed rate deferred annuities were issued with a lifetime income benefit rider which we believe improves the persistency of such annuity products. However, competitive factors, including the impact of the level of surrenders and withdrawals, may limit our ability to adjust or maintain crediting rates at levels necessary to avoid narrowing of spreads under certain market conditions.

A major component of our interest rate risk management program is structuring the investment portfolio with cash flow characteristics consistent with the cash flow characteristics of our insurance liabilities. We use models to simulate cash flows expected from our existing business under various interest rate scenarios. These simulations enable us to measure the potential gain or loss in fair value of our interest rate-sensitive financial instruments, to evaluate the adequacy of expected cash flows from our assets to meet the expected cash requirements of our liabilities and to determine if it is necessary to lengthen or shorten the average life and duration of our investment portfolio. The "duration" of a security is the time weighted present value of the security's expected cash flows and is used to measure a security's sensitivity to changes in interest rates. When the durations of assets and liabilities are similar, exposure to interest rate risk is minimized because a change in value of assets should be largely offset by a change in the value of liabilities.

If interest rates were to increase 10% (40 basis points) from levels at December 31, 2022, we estimate that the fair value of our fixed maturity securities would decrease by approximately $1.1 billion. The impact on stockholders' equity of such decrease (net of income taxes and certain adjustments for changes in amortization of deferred policy acquisition costs, deferred sales inducements and policy benefit reserves) would be a decrease of $422.8 million in accumulated other comprehensive income and a decrease in stockholders' equity. The models used to estimate

the impact of a 10% change in market interest rates incorporate numerous assumptions, require significant estimates and assume an immediate and parallel change in interest rates without any management of the investment portfolio in reaction to such change. Consequently, potential changes in value of our financial instruments indicated by the simulations will likely be different from the actual changes experienced under given interest rate scenarios, and the differences may be material. Because we actively manage our investments and liabilities, our net exposure to interest rates can vary over time. However, any such decreases in the fair value of our fixed maturity securities (unless related to credit concerns of the issuer requiring recognition of a credit loss) would generally be realized only if we were required to sell such securities at losses prior to their maturity to meet our liquidity needs, which we manage using the surrender and withdrawal provisions of our annuity contracts and through other means. See Financial Condition—Liquidity for Insurance Operations for a further discussion of the liquidity risk.

The amortized cost of fixed maturity securities that are callable at the option of the issuer, excluding securities with a make-whole provision, was $2.1 billion as of December 31, 2022. During the years ended December 31, 2022 and 2021, we received $0.9 billion and $2.3 billion, respectively, in net redemption proceeds related to the exercise of such call provisions. We have reinvestment risk related to these redemptions to the extent we cannot reinvest the net proceeds in assets with credit quality and yield characteristics similar to the redeemed bonds. Such reinvestment risk typically occurs in a declining rate environment. In addition, we have $6.0 billion of floating rate investments as of December 31, 2022. The majority of these investments are based on the 3 month LIBOR rate and are reset quarterly. We have a plan to transition these investments away from LIBOR in 2023. Should rates decline to levels which tighten the spread between our average portfolio yield and average cost of interest credited on annuity liabilities, we have the ability to reduce crediting rates (caps, participation rates or asset fees for fixed index annuities) on most of our annuity liabilities to maintain the spread at our targeted level. At December 31, 2022, approximately 91% of our annuity liabilities were subject to annual adjustment of the applicable crediting rates at our discretion, limited by minimum guaranteed crediting rates specified in the policies. At December 31, 2022, approximately 14% of our annuity liabilities were at minimum guaranteed crediting rates.

We purchase call options on the applicable indices to fund the annual index credits on our fixed index annuities. These options are primarily one-year instruments purchased to match the funding requirements of the underlying policies. Fair value changes associated with those investments are substantially offset by an increase or decrease in the amounts added to policyholder account balances for fixed index products. The difference between proceeds received at expiration of these options and index credits, as shown in the following table, is primarily due to under or over-hedging as a result of policyholder behavior being different than our expectations.

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Proceeds received at expiration of options related to such credits	$ 312,133	$ 2,019,477	$ 758,604
Annual index credits to policyholders on their anniversaries	305,292	1,977,888	747,489

On the anniversary dates of the index policies, we purchase new one-year call options to fund the next annual index credits. The risk associated with these prospective purchases is the uncertainty of the cost, which will determine whether we are able to earn our spread on our fixed index business. We manage this risk through the terms of our fixed index annuities, which permit us to change caps, participation rates and asset fees, subject to contractual features. By modifying caps, participation rates or asset fees, we can limit option costs to budgeted amounts, except in cases where the contractual features would prevent further modifications. Based upon actuarial testing which we conduct as a part of the design of our fixed index products and on an ongoing basis, we believe the risk that contractual features would prevent us from controlling option costs is not material.

Item 8. Consolidated Financial Statements and Supplementary Data

The audited consolidated financial statements are included as a part of this report on Form 10-K on pages F-1 through F-59.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

In accordance with the Securities Exchange Act Rules 13a-15(e) and 15d-15(e), our management, under the supervision of our Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report on Form 10-K. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the design and operation of our disclosure controls and procedures were effective as of December 31, 2022 in recording, processing, summarizing and reporting, on a timely basis, information required to be disclosed by us in the reports that we file or submit under the Exchange Act.

(b) Management's Report on Internal Control over Financial Reporting

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in the Exchange Act Rules 13a-15(f) and 15d-15(f). Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2022 based upon criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on the assessment, management has determined that we maintained effective internal control over financial reporting as of December 31, 2022.

The Company's independent registered public accounting firm, Ernst & Young LLP, who audited the consolidated financial statements included in this annual report on Form 10-K, has issued an attestation report on the effectiveness of management's internal control over financial reporting as of December 31, 2022. This report appears on page F-2 of this annual report on Form 10-K.

(c) Changes in Internal Control over Financial Reporting.

There were no changes in our internal control over financial reporting that occurred during the quarter ended December 31, 2022, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

The information required by Part III is incorporated by reference from our subsequent disclosure to be filed within 120 days after December 31, 2022.

PART IV

Item 15. Exhibits and Financial Statement Schedules

Financial Statements and *Financial Statement Schedules.* See Index to Consolidated Financial Statements and Schedules on page F-1 for a list of financial statements and financial statement schedules included in this report.

All other schedules to the audited consolidated financial statements required by Article 7 of Regulation S-X are omitted because they are not applicable, not required, or because the information is included elsewhere in the audited consolidated financial statements or notes thereto.

Exhibit Index

Note Regarding Reliance on Statements in Our Contracts and Other Exhibits: We include agreements and other exhibits to this Annual Report on Form 10-K to provide information regarding their terms and not to provide any other factual or disclosure information about us, our subsidiaries or affiliates, or the other parties to the agreements, or for any other purpose. The agreements and other exhibits contain representations and warranties by each of the parties to the applicable agreement. These representations and warranties have been made solely for the benefit of the other parties to the applicable agreement or other arrangement and (i) should not in all instances be treated as categorical statements of fact, but rather as a way of allocating the risk to one of the parties if those statements prove to be inaccurate; (ii) have in many cases been qualified by disclosures that were made to the other party in connection with the negotiation of the applicable agreement, which disclosures are not necessarily reflected in the agreement; (iii) may apply standards of materiality in a way that is different from what may be viewed as material to investors; and (iv) were made only as of the date of the applicable agreement or other exhibit, or such other date or dates as may be specified in the document and are subject to more recent developments. Accordingly, these representations and warranties may not describe the actual state of affairs as of the date they were made or at any other time.

Exhibit No.	Description
3.1	Articles of Incorporation, including Articles of Amendment (Incorporated by reference to Exhibit 3.1 to Post-Effective Amendment No. 1 to the Registration Statement on Form 10, filed on July 22, 1999, File No. 000-25985)
3.2	Articles of Amendment to Articles of Incorporation (Incorporated by reference to Exhibit 3.1 to Form 10-Q for the period ended June 30, 2000 filed on August 14, 2000, File No. 000-25985)
3.3	Articles of Amendment to Articles of Incorporation (Incorporated by reference to Exhibit 3.2 to Pre-Effective Amendment No. 1 to the Registration Statement on Form S-1 filed on October 20, 2003, File No. 333-108794)
3.4	Articles of Amendment to Articles of Incorporation (Incorporated by reference to Exhibit 3.3 to the Registration Statement on Form S-3 filed on January 15, 2008, File No. 333-148681)

Exhibit No.	Description
3.5	Articles of Amendment to Articles of Incorporation (Incorporated by reference to Exhibit 3.5 to Form 10-Q for the period ended June 30, 2011 filed on August 5, 2011, File No. 001-31911)
3.6	Articles of Amendment to Articles of Incorporation (Incorporated by reference to Exhibit 3.2 to Form 8-A12B filed on November 20, 2019, File No. 001-31911)
3.7	Articles of Amendment to Articles of Incorporation (Incorporated by reference to Exhibit 3.7 to Form 8-A12B filed on June 16, 2020, File No. 001-31911)
3.8	Fourth Amended and Restated Bylaws, redlined for amendments effective November 17, 2022 (Incorporated by reference to Exhibit 3.1 to Form 8-K filed on November 23, 2022)
3.9	Fourth Amended and Restated Bylaws (Incorporated by reference to Exhibit 3.2 to Form 8-K filed on November 23, 2022)
4.1	Indenture dated October 29, 1999 between American Equity Investment Life Holding Company and Wilmington Trust Company (as successor in interest to West Des Moines State Bank), as trustee (Incorporated by reference to Exhibit 10.19 to the Registration Statement on Form S-1, File No. 333-108794, including all pre-effective amendments thereto)
4.2	Trust Preferred Securities Guarantee Agreement dated October 29, 1999 between American Equity Investment Life Holding Company and Wilmington Trust Company (as successor in interest to West Des Moines State Bank), as trustee (Incorporated by reference to Exhibit 10.20 to the Registration Statement on Form S-1, File No. 333-108794, including all pre-effective amendments thereto)
4.3	Trust Common Securities Guarantee Agreement dated October 29, 1999 between American Equity Investment Life Holding Company and West Des Moines State Bank, as trustee (Incorporated by reference to Exhibit 10.21 to the Registration Statement on Form S-1, File No. 333-108794, including all pre-effective amendments thereto)
4.4	Instruments of Resignation, Appointment and Acceptance, effective September 12, 2006, among American Equity Investment Life Holding Company, Wilmington Trust Company, West Des Moines State Bank and Delaware Trust Company, National Association (formerly known as First Union Trust Company, National Association) (Incorporated by reference to Exhibit 4.10A to Form 10-K for the year ended December 31, 2008 filed on March 16, 2009)
4.5	Senior Amended and Restated Indenture, dated as of April 22, 2004, between American Equity Investment Life Holding Company and U.S. Bank National Association, as trustee (Incorporated by reference to Exhibit 4.1 to Amendment No.1 to Form S-3 filed on April 22, 2004).
4.6	Third Supplemental Indenture, dated as of June 16, 2017, between American Equity Investment Life Holding Company and U.S. Bank National Association, as trustee (Incorporated by reference to Exhibit 4.2 to Form 8-K filed on June 16, 2017)
4.7	Deposit Agreement, dated November 21, 2019, among American Equity Investment Life Holding Company, Computershare Inc. and Computershare Trust Company, N.A., collectively, as depositary, Computershare Inc., as registrar and transfer agent, and the holders from time to time of the depositary receipts (Incorporated by reference to Exhibit 4.1 to Form 8-K filed on November 21, 2019)
4.8	Form of Depository Receipt (included in Exhibit 4.7)
4.9	Deposit Agreement, dated as of June 17, 2020, among the Company, Computershare Inc. and Computershare Trust Company, N.A., collectively as Depositary, the other parties thereto and the holders from time to time of depositary receipts issued thereunder (Incorporated by reference to Exhibit 4.1 to Form 8-K filed on June 17, 2020)
4.10	Form of Depository Receipt (included in Exhibit 4.9)
4.11	Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934 (Incorporated by reference to Exhibit 4.11 to Form 10-K for the year ended December 31, 2021 filed on March 1, 2022)
4.12	Subordinated Amended and Restated Indenture, dated as of April 22, 2004, between American Equity Investment Life Holding Company and U.S. Bank National Association, as trustee (Incorporated by reference to Exhibit 4.2 to Amendment No. 1 to Form S-3 filed on April 22, 2004)
4.13	Form of Certificate for the common stock of American Equity Investment Life Holding Company, par value $1 per share (Incorporated by reference to Exhibit 4.11 to Pre-Effective Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-108794), filed on November 12, 2003)
10.1 *	Form of Change in Control Agreement between American Equity Investment Life Holding Company and each of Anant Bhalla, Ronald J. Grensteiner, and Jeffrey D. Lorenzen (Incorporated by reference to Exhibit 10.1 to Form 8-K filed on December 14, 2012)
10.2 *	American Equity Investment Life Holding Company 2016 Employee Incentive Plan (Incorporated by reference to the Appendix A to the Company's proxy statement on Form DEF 14A filed on April 18, 2016)
10.3 *	First Amendment to American Equity Investment Life Holding Company 2016 Employee Incentive Plan (Incorporated by reference to Exhibit 99.2 to Form S-8 filed on September 8, 2016)
10.4 *	Second Amendment to American Equity Investment Life Holding Company 2016 Employee Incentive Plan (Incorporated by reference to Exhibit 10.4 to Form 10-Q for the period ended March 31, 2019 filed on May 8, 2019)
10.5*	Form of Employee Stock Option Agreement (Incorporated by reference to Exhibit 10.33 to Form 10-K for the year ended December 31, 2019 filed on February 25, 2020)
10.6 *	Offer Letter dated January 2, 2020 by and between American Equity Investment Life Holding Company and Anant Bhalla (Incorporated by reference to Exhibit 10.1 to Form 8-K filed on January 9, 2020)
10.7 *	American Equity Investment Life Holding Company Amended and Restated Equity Incentive Plan (Incorporated by reference to the Appendix A to the Company's proxy statement on Form DEF 14A filed on April 24, 2020)
10.8 *	Form of Director Restricted Stock Award Agreement with Respect to Common Stock of American Equity Investment Life Holding Company (Incorporated by reference to Exhibit 10.1 to Form 8-K filed on June 4, 2020)
10.9 *	Form of Restricted Stock Unit Award Agreement (Incorporated by reference to Exhibit 10.1 to Form 10-Q for the period ended June 30, 2020 filed on August 10, 2020)
10.10 *	Form of Performance Restricted Stock Unit Award Agreement (Incorporated by reference to Exhibit 10.2 to Form 10-Q for the period ended June 30, 2020 filed on August 10, 2020)
10.11 *	Form of Employee Stock Option Agreement (Incorporated by reference to Exhibit 10.3 to Form 10-Q for the period ended June 30, 2020 filed on August 10, 2020)
10.12	Investment Agreement, dated as of October 17, 2020, by and among American Equity Investment Life Holding Company, Brookfield Asset Management Inc. and Burgundy Acquisitions I Ltd. (Incorporated by reference to Exhibit 10.1 to Form 8-K filed on October 19, 2020)
10.13 *	Form of Employee Stock Option Agreement with Respect to Common Stock of American Equity Investment Life Holding Company (Incorporated by reference to Exhibit 10.2 to Form 8-K filed on November 25, 2020)

Exhibit No.	Description
10.14 *	American Equity Investment Life Holding Company Amended and Restated Short-Term Incentive Plan (Incorporated by reference to Exhibit 10.32 to Form 10-K for the year ended December 31, 2020 filed on March 1, 2021)
10.15 *	First Amendment to American Equity Investment Life Holding Company Amended and Restated Short-Term Incentive Plan (Incorporated by reference to Exhibit 10.33 to Form 10-K for the year ended December 31, 2020 filed on March 1, 2021)
10.16 *	First Amendment to American Equity Investment Life Holding Company Amended and Restated Equity Incentive Plan (Incorporated by reference to Exhibit 10.34 to Form 10-K for the year ended December 31, 2020 filed on March 1, 2021)
10.17 *	Form of Change in Control Agreement between American Equity Investment Life Holding Company and James L. Hamalainen and Axel Andre (Incorporated by reference to Exhibit 10.35 to Form 10-K for the year ended December 31, 2020 filed on March 1, 2021)
10.18 *	Form of Employee Stock Option Agreement (Incorporated by reference to Exhibit 10.36 to Form 10-K for the year ended December 31, 2020 filed on March 1, 2021)
10.19	Assignment Agreement, Consent and Waiver in Anticipation of Regulatory Form A Filing dated February 28, 2021 by and among Brookfield Asset Management, Inc., Burgundy Acquisitions I Ltd., Brookfield Asset Management Reinsurance Partners Ltd., North End Re (Cayman) SPC and American Equity Investment Life Holding Company (Incorporated by reference to Exhibit 10.37 to Form 10-K for the year ended December 31, 2020 filed on March 1, 2021)
10.20 *	Form of Employee Restricted Stock Unit Award Agreement - Performance Based Award, effective April 2021 (Incorporated by reference to Exhibit 10.2 to Form 10-Q for the period ended March 31, 2021 filed on May 10, 2021)
10.21	Amendment to Investment Agreement, dated June 10, 2021, by and among American Equity Investment Life Holding Company, Brookfield Asset Management, Inc., Brookfield Asset Management Reinsurance Partners Ltd. and North End Re (Cayman) SPC (Incorporated by reference to Exhibit 10.1 to Form 8-K filed on June 10, 2021)
10.22 *	Offer Letter Agreement dated August 25, 2021 between American Equity Investment Life Insurance Company and Axel Andre (Incorporated by reference to Exhibit 10.1 to Form 10-Q for the period ended September 30, 2021 filed on November 9, 2021)
10.23 *	American Equity Transition Benefit Plan, dated as of August 6, 2021 (Incorporated by reference to Exhibit 10.3 to Form 10-Q for the period ended September 30, 2021 filed on November 9, 2021)
10.24 *	Form of Separation Agreement under American Equity Transition Benefit Plan, effective August 6, 2021 (Incorporated by reference to Exhibit 10.4 to Form 10-Q for the period ended September 30, 2021 filed on November 9, 2021)
10.25 *	Offer Letter Agreement dated November 3, 2021 between American Equity Investment Life Insurance Company and Dewayne Lummus (Incorporated by reference to Exhibit 10.33 to Form 10-K for the period ended December 31, 2021 filed on March 1, 2022)
10.26 *	Form of 2022-2024 Performance-Based Employee Restricted Stock Unit Award Agreement under the American Equity Investment Life Holding Company Amended and Restated Equity Incentive Plan (Incorporated by reference to Exhibit 10.1 to Form 10-Q for the period ended March 31, 2022 filed on May 9, 2022)
10.27 *	Form of 2022 Time-Based Employee Restricted Stock Unit Award Agreement (Two- or Three-Year Cliff) under the American Equity Investment Life Holding Company Amended and Restated Equity Incentive Plan (Incorporated by reference to Exhibit 10.2 to Form 10-Q for the period ended March 31, 2022 filed on May 9, 2022)
10.28 *	Form of 2022 Time-Based Employee Restricted Stock Unit Award Agreement (Two-Year Ratable) under the American Equity Investment Life Holding Company Amended and Restated Equity Incentive Plan (Incorporated by reference to Exhibit 10.3 to Form 10-Q for the period ended March 31, 2022 filed on May 9, 2022)
10.29 *	Second Amendment to the American Equity Investment Life Holding Company Amended and Restated Short-Term Incentive Plan, effective January 1, 2022 (Incorporated by reference to Exhibit 10.4 to Form 10-Q for the period ended March 31, 2022 filed on May 9, 2022)
10.30 *	Deferred Long-Term Incentive Cash Plan, effective January 1, 2022 (Incorporated by reference to Exhibit 10.5 to Form 10-Q for the period ended March 31, 2022 filed on May 9, 2022)
10.31 *	Offer Letter dated June 29, 2022, between American Equity Investment Life Insurance Company and Ronald J. Grensteiner (Incorporated by reference to Exhibit 10.1 to Form 10-Q for the period ended June 30, 2022 filed on August 9, 2022)
10.32 *	American Equity Life Employee Indemnification Plan, dated as of September 8, 2022 (Incorporated by reference to Exhibit 10.1 to Form 10-Q for the period ended September 30, 2022 filed on November 8, 2022)
10.33 *	Form of 2022 Time-Based Employee Restricted Stock Unit Award Agreement (Three-Year Ratable) under the American Equity Investment Life Holding Company Amended and Restated Equity Incentive Plan (Incorporated by reference to Exhibit 10.2 to Form 10-Q for the period ended September 30, 2022 filed on November 8, 2022)
10.34 *	Offer Letter effective August 2, 2022 between American Equity Investment Life Insurance Company and Nicholas Volpe (Incorporated by reference to Exhibit 10.3 to Form 10-Q for the period ended September 30, 2022 filed on November 8, 2022)
10.35	Credit Agreement, dated as of February 15, 2022, among American Equity Investment Life Holding Company, the lenders party thereto and Citizens Bank, N.A., as administrative agent for the lenders (Incorporated by reference to Exhibit 10.1 to Form 8-K filed on February 17, 2022)
10.36 *	Separation Agreement between American Equity Investment Life Holding Company and American Equity Investment Life Insurance Company and Phyllis Zanghi executed December 31, 2022
10.37 *	Employee Strategic Incentive Restricted Stock Unit Award Agreement between American Equity Investment Life Holding Company and Anant Bhalla, dated November 29, 2022
10.38 *	First Amendment to American Equity Transition Benefit Plan, effective October 1, 2022
21.2	Subsidiaries of American Equity Investment Life Holding Company
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm
23.2	Consent of KPMG LLP, Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Exhibit No.	Description
101	The following materials from American Equity Investment Life Holding Company's Annual Report on Form 10-K for the year ended December 31, 2022 formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Operations, (iii) the Consolidated Statements of Comprehensive Income (Loss), (iv) the Consolidated Statements of Changes in Stockholders' Equity, (v) the Consolidated Statements of Cash Flows, (vi) the Notes to Consolidated Financial Statements, (vii) Schedule I - Summary of Investments - Other Than Investments in Related Parties, (viii) Schedule II — Condensed Financial Information of Registrant, (ix) Schedule III - Supplementary Insurance Information and (x) Schedule IV — Reinsurance.
104	The cover page from American Equity Investment Life Holding Company's Annual Report on Form 10-K for the year ended December 31, 2022 formatted in iXBRL and contained in Exhibit 101.

* Denotes management contract or compensatory plan.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, this 28th day of February 2023.

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY

By: /s/ ANANT BHALLA

Anant Bhalla,
Chief Executive Officer & President

Pursuant to the requirements of the Securities Exchange Act of 1934, this registration statement has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

Signature	Title (Capacity)	Date
/s/ ANANT BHALLA Anant Bhalla	Chief Executive Officer, President and Director (Principal Executive Officer)	February 28, 2023
/s/ AXEL ANDRE Axel Andre	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 28, 2023
/s/ DEWAYNE LUMMUS Dewayne Lummus	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 28, 2023
/s/ DAVID S. MULCAHY David S. Mulcahy	Non-Executive Chairman and Director	February 28, 2023
/s/ JOYCE A. CHAPMAN Joyce A. Chapman	Director	February 28, 2023
/s/ BRENDA J. CUSHING Brenda J. Cushing	Director	February 28, 2023
/s/ DOUGLAS T. HEALY Douglas T. Healy	Director	February 28, 2023
/s/ ROBERT L. HOWE Robert L. Howe	Director	February 28, 2023
/s/ WILLIAM R. KUNKEL William R. Kunkel	Director	February 28, 2023
/s/ ALAN D. MATULA Alan D. Matula	Director	February 28, 2023
/s/ GERARD D. NEUGENT Gerard D. Neugent	Director	February 28, 2023

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY AND SUBSIDIARIES

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS AND SCHEDULES

YEARS ENDED DECEMBER 31, 2022, 2021 and 2020

Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting	F-2
Reports of Independent Registered Public Accounting Firm (Ernst & Young LLP, Des Moines, Iowa, Auditor Firm ID: 42; KPMG LLP, Des Moines, Iowa, Auditor Firm ID: 185)	F-3
Consolidated Financial Statements:	
Consolidated Balance Sheets	F-6
Consolidated Statements of Operations	F-7
Consolidated Statements of Comprehensive Income (Loss)	F-8
Consolidated Statements of Changes in Stockholders' Equity	F-9
Consolidated Statements of Cash Flows	F-10
Notes to Consolidated Financial Statements	
Note 1. Significant Accounting Policies	F-12
Note 2. Fair Value of Financial Instruments	F-17
Note 3. Investments	F-24
Note 4. Mortgage Loans on Real Estate	F-30
Note 5. Variable Interest Entities	F-35
Note 6. Derivative Instruments	F-37
Note 7. Deferred Policy Acquisition Costs, Deferred Sales Inducements and Liability for Lifetime Income Benefit Riders	F-40
Note 8. Reinsurance and Policy Provisions	F-42
Note 9. Income Taxes	F-45
Note 10. Notes and Loan Payable	F-47
Note 11. Subordinated Debentures	F-47
Note 12. Retirement and Share-based Compensation Plans	F-48
Note 13. Statutory Financial Information and Dividend Restrictions	F-50
Note 14. Commitments and Contingencies	F-50
Note 15. Earnings Per Common Share and Stockholders' Equity	F-51
Schedules:	
Schedule I—Summary of Investments—Other Than Investments in Related Parties	F-53
Schedule II—Condensed Financial Information of Registrant	F-54
Schedule III—Supplementary Insurance Information	F-58
Schedule IV—Reinsurance	F-59

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of
American Equity Investment Life Holding Company

Opinion on Internal Control over Financial Reporting

We have audited American Equity Investment Life Holding Company and subsidiaries' internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, American Equity Investment Life Holding Company and subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheet of the Company, as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive income (loss), changes in stockholders' equity and cash flows for the year ended December 31, 2022, and the related notes and financial statement schedules I to IV, and our report dated February 28, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Des Moines, Iowa
February 28, 2023

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of
American Equity Investment Life Holding Company

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of American Equity Investment Life Holding Company and subsidiaries (the Company) as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive income (loss), changes in stockholders' equity and cash flows for each of the two years in the period ended December 31, 2022, and the related notes and financial statement schedules I to IV (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the two years in the period December 31, 2022, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 28, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Deferred Policy Acquisition Costs (DAC), Deferred Sales Inducements (DSI) and liability for Lifetime Income Benefit Rider (LIBR)

Description of the Matter

At December 31, 2022 DAC, DSI, and LIBR balances were $3.6 billion, $2.6 billion, and $2.3 billion, respectively. As discussed in Note 1 to the consolidated financial statements, DAC and DSI are amortized over the lives of the policies in relation to the emergence of actual gross profits (AGPs) and estimated gross profits (EGPs). The LIBR is based on the actual and present value of expected benefit payments to be paid in excess of projected policy values, and the excess is recognized over the expected lives of the underlying policies based on the actual and present value of expected assessments. The expected assessments are calculated using the same assumptions used to determine DAC and DSI EGPs, including investment spreads, product charges, and fees. There is significant uncertainty inherent in calculating EGPs and expected assessments, as the calculation is sensitive to management's best estimate of assumptions such as investment earned rate, the expected cost of annual call options, lapse, partial withdrawal, mortality, LIBR reset and LIBR utilization. Management's assumptions are adjusted, also known as unlocking, based on actual policyholder behavior and market experience and projecting for expected trends. The unlocking results in amortization being recalculated using the new assumptions for estimated gross profits, resulting either in additional or less cumulative amortization expense. Additionally, the LIBR is adjusted in a similar manner to unlocking of DAC and DSI to reflect the changes in management's assumptions.

Auditing the valuation of the Company's DAC, DSI and LIBR was complex because of the highly judgmental nature of the methods and determination of the assumptions applied to determine the EGPs and expected assessments. The high degree of judgment was primarily due to the sensitivity of the EGPs and expected assessments to the methods and assumptions applied which have a significant effect on the valuation of DAC, DSI, and LIBR.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of the Company's controls over management's process for the development of the significant assumptions used in calculating the DAC and DSI EGPs, and assessments used in the valuation of LIBR. These controls included, among others, the review and approval process management has in place for the development of the significant assumptions described above.

To evaluate the judgment used by management in determining the EGPs and expected assessments, among other procedures, we involved actuarial specialists and evaluated the methodology applied by management in determining the EGPs and expected assessments with those used in prior periods and the industry. To evaluate the significant assumptions used by management, we compared policyholder behavior assumptions that we identified as being higher risk to prior actual experience, observable market data or management's estimates of prospective changes in these assumptions. We tested management's recalculation of EGPs and performed independent recalculations of LIBR for a sample of policies, which we compared to the actuarial model used by management.

Fixed Index Annuity Embedded Derivative Liability

Description of the Matter

As of December 31, 2022, the fair value of the Company's fixed index annuity embedded derivative liability totaled $35.1 billion, net of coinsurance ceded. The Company's fixed index annuity contracts contain crediting features, where amounts credited to the contract's account value are linked to the performance of certain market indices. The index crediting feature is accounted for as an embedded derivative liability and reported at fair value as discussed in Notes 1 and 2 to the consolidated financial statements. Management reviews the assumptions used to determine the fair value of the embedded derivative on a quarterly basis.

Auditing the valuation of the Company's fixed index annuity embedded derivative was complex because of the highly judgmental nature of the determination of the assumptions required to determine the fair value of the embedded derivative. In particular, the fair value was sensitive to the significant assumptions used to determine future policy growth including lapse, partial withdrawal, mortality, LIBR reset, LIBR utilization, and the expected cost of annual call options.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design, and tested the operating effectiveness of the Company's controls over management's process for the development of the significant assumptions used in measuring the fair value of the embedded derivative for fixed index annuities. These controls included, among others, the review and approval process management has in place for the development of the significant assumptions.

To evaluate the judgment used by management in determining the assumptions used in measuring the fair value of the fixed index annuity embedded derivative, among other procedures, we involved actuarial specialists and evaluated the methodology applied by management in determining the fair value with those used in the prior period and in the industry. To evaluate the significant assumptions used by management in the methodology applied, we compared policyholder behavior assumptions to prior actual experience and management's estimate of prospective changes in the assumptions. In addition, we compared the expected cost of annual call options to actual and historical cost of annual call options. We performed an independent recalculation of the embedded derivative for a sample of policies for comparison with the actuarial model used by management.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2020.

Des Moines, Iowa
February 28, 2023

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
American Equity Investment Life Holding Company:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of operations, comprehensive income, changes in stockholders' equity, and cash flows of American Equity Investment Life Holding Company and subsidiaries (the Company) for the year ended December 31, 2020, and the related notes (and financial statement schedules II to IV) (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the results of its operations and its cash flows for the year ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audit included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provide a reasonable basis for our opinion.

/s/ KPMG LLP

We served as the Company's auditor from 2005 to 2020.

Des Moines, Iowa
March 1, 2021

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(Dollars in thousands, except share and per share data)

	December 31,	
	2022	2021
Assets		
Investments:		
Fixed maturity securities, available for sale, at fair value (amortized cost of $44,866,019 as of 2022 and $46,999,183 as of 2021; allowance for credit losses of $3,347 as of 2022 and $2,846 as of 2021)	$ 39,804,617	$ 51,305,943
Mortgage loans on real estate (net of allowance for credit losses of $36,972 as of 2022 and $24,024 as of 2021)	6,949,027	5,687,998
Real estate investments related to consolidated variable interest entities	1,056,063	337,939
Limited partnerships and limited liability companies (2022 and 2021 include $684,834 and $168,711 related to consolidated variable interest entities)	1,266,779	520,120
Derivative instruments	431,727	1,277,480
Other investments	1,817,085	1,247,024
Total investments	51,325,298	60,376,504
Cash and cash equivalents (2022 and 2021 include $27,235 and $23,763 related to consolidated variable interest entities)	1,919,669	4,508,982
Coinsurance deposits (net of allowance for credit losses of $8,737 as of 2022 and $2,264 as of 2021)	13,208,399	8,850,608
Accrued investment income (2022 and 2021 include $3,444 and $3 related to consolidated variable interest entities)	497,851	445,097
Deferred policy acquisition costs	3,562,075	2,222,769
Deferred sales inducements	2,593,350	1,546,073
Deferred income taxes	220,873	—
Income taxes recoverable	55,498	166,586
Other assets (2022 and 2021 include $10,690 and $1,524 related to consolidated variable interest entities)	543,128	232,490
Total assets	$ 73,926,141	$ 78,349,109
Liabilities and Stockholders' Equity		
Liabilities:		
Policy benefit reserves	$ 61,118,134	$ 65,477,778
Other policy funds and contract claims	512,790	226,844
Notes and loan payable	792,073	496,250
Subordinated debentures	78,753	78,421
Deferred income taxes	—	541,972
Funds withheld for reinsurance liabilities	6,577,426	3,124,740
Other liabilities (2022 and 2021 include $78,644 and $20,168 related to consolidated variable interest entities)	1,656,509	2,079,977
Total liabilities	70,735,685	72,025,982
Stockholders' equity:		
Preferred stock, Series A; par value $1 per share; $400,000 aggregate liquidation preference; 20,000 shares authorized; issued and outstanding: 2022 and 2021 - 16,000 shares	16	16
Preferred stock, Series B; par value $1 per share; $300,000 aggregate liquidation preference; 12,000 shares authorized; issued and outstanding: 2022 and 2021 - 12,000 shares	12	12
Common stock; par value $1 per share; 200,000,000 shares authorized; issued and outstanding: 2022 - 84,810,255 shares (excluding 24,590,353 treasury shares); 2021 - 92,513,517 shares (excluding 9,936,715 treasury shares)	84,810	92,514
Additional paid-in capital	1,325,316	1,614,374
Accumulated other comprehensive income (loss)	(2,155,055)	1,848,789
Retained earnings	3,914,124	2,767,422
Total stockholders' equity attributable to American Equity Investment Life Holding Company	3,169,223	6,323,127
Noncontrolling interests	21,233	—
Total stockholders' equity	3,190,456	6,323,127
Total liabilities and stockholders' equity	$ 73,926,141	$ 78,349,109

See accompanying notes to consolidated financial statements.

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

(Dollars in thousands, except per share data)

	Year Ended December 31,		
	2022	**2021**	**2020**
Revenues:			
Premiums and other considerations	$ 19,739	$ 58,202	$ 39,382
Annuity product charges	230,354	242,631	251,227
Net investment income	2,307,463	2,037,475	2,182,078
Change in fair value of derivatives	(1,138,128)	1,348,735	34,666
Net realized losses on investments	(47,848)	(13,242)	(80,680)
Other revenue	43,921	15,670	—
Loss on extinguishment of debt	—	—	(2,024)
Total revenues	1,415,501	3,689,471	2,424,649
Benefits and expenses:			
Insurance policy benefits and change in future policy benefits	31,099	67,983	49,742
Interest sensitive and index product benefits	889,650	2,681,406	1,543,270
Amortization of deferred sales inducements	408,548	152,692	438,164
Change in fair value of embedded derivatives	(2,352,598)	(358,302)	(1,286,787)
Interest expense on notes and loan payable	32,098	25,581	25,552
Interest expense on subordinated debentures	5,331	5,324	5,557
Amortization of deferred policy acquisition costs	615,300	268,328	649,554
Other operating costs and expenses	239,616	243,712	183,636
Total benefits and expenses	(130,956)	3,086,724	1,608,688
Income before income taxes	1,546,457	602,747	815,961
Income tax expense	325,155	128,755	144,501
Net income	1,221,302	473,992	671,460
Less: Net income available to noncontrolling interests	358	—	—
Net income available to American Equity Investment Life Holding Company stockholders	1,220,944	473,992	671,460
Less: Preferred stock dividends	43,675	43,675	33,515
Net income available to American Equity Investment Life Holding Company common stockholders	$ 1,177,269	$ 430,317	$ 637,945
Earnings per common share	$ 13.00	$ 4.58	$ 6.93
Earnings per common share - assuming dilution	$ 12.86	$ 4.55	$ 6.90
Weighted average common shares outstanding (in thousands):			
Earnings per common share	90,558	93,860	92,055
Earnings per common share - assuming dilution	91,538	94,491	92,392

See accompanying notes to consolidated financial statements.

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(Dollars in thousands)

	Year Ended December 31,		
	2022	2021	2020
Net income	$ 1,221,302	$ 473,992	$ 671,460
Other comprehensive income (loss):			
Change in net unrealized investment gains/losses (1)	(5,064,286)	(441,008)	1,058,289
Reclassification of unrealized investment gains/losses to net income (1)	(7,516)	(4,044)	16,690
Other comprehensive income (loss) before income tax	(5,071,802)	(445,052)	1,074,979
Income tax effect related to other comprehensive income (loss)	1,067,958	90,284	(225,746)
Other comprehensive income (loss)	(4,003,844)	(354,768)	849,233
Comprehensive income (loss)	$ (2,782,542)	$ 119,224	$ 1,520,693

(1) Net of related adjustments to amortization of deferred sales inducements, deferred policy acquisition costs and policy benefit reserves.

See accompanying notes to consolidated financial statements.

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

(Dollars in thousands, except per share data)

	Preferred Stock	Common Stock	Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Noncontrolling Interest	Total Stockholders' Equity
Balance at December 31, 2019	$ 16	$ 91,107	$ 1,212,311	$ 1,354,324	$ 1,768,764	$ —	$ 4,426,522
Net income for the year	—	—	—	—	671,460	—	671,460
Other comprehensive income	—	—	—	849,233	—	—	849,233
Issuance of preferred stock	12	—	290,248	—	—	—	290,260
Share-based compensation	—	—	10,215	—	—	—	10,215
Issuance of common stock	—	10,053	328,008	—	—	—	338,061
Treasury stock acquired, common	—	(5,439)	(159,655)	—	—	—	(165,094)
Cumulative effect of change in accounting principle	—	—	—	—	(9,295)	—	(9,295)
Dividends on preferred stock	—	—	—	—	(33,515)	—	(33,515)
Dividends on common stock ($0.32 per share)	—	—	—	—	(28,859)	—	(28,859)
Balance at December 31, 2020	28	95,721	1,681,127	2,203,557	2,368,555	—	6,348,988
Net income for the year	—	—	—	—	473,992	—	473,992
Other comprehensive loss	—	—	—	(354,768)	—	—	(354,768)
Share-based compensation	—	—	24,601	—	—	—	24,601
Issuance of common stock	—	460	4,394	—	—	—	4,854
Treasury stock acquired, common	—	(3,667)	(95,748)	—	—	—	(99,415)
Dividends on preferred stock	—	—	—	—	(43,675)	—	(43,675)
Dividends on common stock ($0.34 per share)	—	—	—	—	(31,450)	—	(31,450)
Balance at December 31, 2021	28	92,514	1,614,374	1,848,789	2,767,422	—	6,323,127
Net income for the year	—	—	—	—	1,220,944	358	1,221,302
Other comprehensive loss	—	—	—	(4,003,844)	—	—	(4,003,844)
Share-based compensation	—	—	15,827	—	—	—	15,827
Issuance of common stock	—	7,112	246,866	—	—	—	253,978
Treasury stock acquired, common	—	(14,816)	(551,751)	—	—	—	(566,567)
Dividends on preferred stock	—	—	—	—	(43,675)	—	(43,675)
Dividends on common stock ($0.36 per share)	—	—	—	—	(30,567)	—	(30,567)
Contributions from noncontrolling interests	—	—	—	—	—	20,875	20,875
Balance at December 31, 2022	$ 28	$ 84,810	$ 1,325,316	$ (2,155,055)	$ 3,914,124	$ 21,233	$ 3,190,456

See accompanying notes to consolidated financial statements.

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Dollars in thousands)

	Year Ended December 31,		
	2022	2021	2020
Operating activities			
Net income	$ 1,221,302	$ 473,992	$ 671,460
Adjustments to reconcile net income to net cash provided by operating activities:			
Interest sensitive and index product benefits	889,650	2,681,406	1,543,270
Amortization of deferred sales inducements	408,548	152,692	438,164
Annuity product charges	(230,354)	(242,631)	(251,227)
Change in fair value of embedded derivatives	(2,352,598)	(358,302)	(1,286,787)
Change in traditional life and accident and health insurance reserves	(26,973)	40,090	8,694
Policy acquisition costs deferred	(198,623)	(307,857)	(255,154)
Amortization of deferred policy acquisition costs	615,300	268,328	649,554
Provision for depreciation and other amortization	14,185	5,527	5,199
Amortization of discounts and premiums on investments	2,640	19,861	57,437
Loss on extinguishment of debt	—	—	2,024
Realized gains/losses on investments	47,848	13,242	80,680
Change in fair value of derivatives	1,138,127	(1,348,704)	(34,668)
Distributions from equity method investments	4,090	12,409	1,968
Deferred income taxes	304,946	128,423	141,071
Share-based compensation	15,827	24,601	10,215
Change in accrued investment income	(52,754)	(47,015)	74,744
Change in income taxes recoverable/payable	111,088	(165,724)	(1,291)
Change in other assets	(30,973)	(4,464)	(849)
Change in other policy funds and contract claims	279,936	(19,809)	(21,865)
Change in collateral held for derivatives	(851,971)	17,423	(72,413)
Change in collateral held for securities lending	—	—	(495,039)
Change in funds withheld from reinsurers	931,600	3,124,740	—
Change in other liabilities	24,987	(221,726)	38,995
Other	(221,647)	(13,338)	804
Net cash provided by operating activities	2,044,181	4,233,164	1,304,986
Investing activities			
Sales, maturities, or repayments of investments:			
Fixed maturity securities, available for sale	9,691,210	4,490,736	8,291,316
Mortgage loans on real estate	1,916,328	862,666	378,812
Derivative instruments	584,055	2,260,959	860,520
Other investments	739,027	368,837	4,324
Acquisitions of investments:			
Fixed maturity securities, available for sale	(8,894,629)	(9,206,733)	(2,429,114)
Mortgage loans on real estate	(3,092,385)	(2,386,712)	(1,121,756)
Real estate investments acquired	(724,484)	(335,767)	—
Derivative instruments	(790,229)	(748,061)	(730,333)
Other investments	(1,842,843)	(1,512,123)	(105,925)
Purchases of property, furniture and equipment	(40,961)	(18,109)	(13,240)
Net cash provided by (used in) investing activities	(2,454,911)	(6,224,307)	5,134,604

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)

(Dollars in thousands)

	Year Ended December 31,		
	2022	**2021**	**2020**
Financing activities			
Receipts credited to annuity policyholder account balances	$ 3,316,221	$ 5,910,024	$ 3,648,936
Coinsurance deposits	(186,637)	(3,187,332)	430,644
Return of annuity policyholder account balances	(5,257,487)	(5,145,193)	(4,040,054)
Repayment of loan payable	(3,750)	—	—
Proceeds from issuance of loan payable	300,000	—	—
Repayment of subordinated debentures	—	—	(81,450)
Proceeds from issuance of common stock, net	253,978	4,854	338,061
Acquisition of treasury stock	(566,567)	(99,415)	(165,094)
Proceeds from issuance of preferred stock, net	—	—	290,260
Change in checks in excess of cash balance	39,901	(3,210)	3,611
Dividends paid on common stock	(30,567)	(31,450)	(28,859)
Dividends paid on preferred stock	(43,675)	(43,675)	(33,515)
Net cash provided by (used in) financing activities	(2,178,583)	(2,595,397)	362,540
Increase (decrease) in cash and cash equivalents	(2,589,313)	(4,586,540)	6,802,130
Cash and cash equivalents at beginning of year	4,508,982	9,095,522	2,293,392
Cash and cash equivalents at end of year	$ 1,919,669	$ 4,508,982	$ 9,095,522
Supplemental disclosures of cash flow information			
Cash paid during the year for:			
Interest expense	$ 36,289	$ 30,000	$ 31,427
Income taxes	4,873	165,537	4,842
Income tax refunds received	98,644	—	—
Non-cash operating activity:			
Deferral of sales inducements	107,691	95,160	93,610

See accompanying notes to consolidated financial statements.

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Significant Accounting Policies

Nature of Operations

American Equity Investment Life Holding Company ("we", "us", "our" or "parent company"), through its wholly-owned subsidiaries, American Equity Investment Life Insurance Company ("American Equity Life"), American Equity Investment Life Insurance Company of New York ("American Equity Life of New York") and Eagle Life Insurance Company ("Eagle Life"), is licensed to sell insurance products in 50 states and the District of Columbia at December 31, 2022. We operate solely in the insurance business.

We market fixed index and fixed rate annuities. Annuity deposits (net of coinsurance) collected in 2022, 2021 and 2020, by product type were as follows:

	Year Ended December 31,		
Product Type	**2022**	**2021**	**2020**
	(Dollars in thousands)		
Fixed index annuities	$ 2,202,688	$ 3,026,211	$ 2,309,580
Annual reset fixed rate annuities	5,535	6,000	7,846
Multi-year fixed rate annuities	139,092	2,452,994	1,295,843
Single premium immediate annuities (SPIA)	18,935	59,816	33,461
	$ 2,366,250	$ 5,545,021	$ 3,646,730

Agents contracted with us through four national marketing organizations accounted for more than 10% of annuity deposits we collected during 2022 representing 22%, 16%, 10%, and 10% individually, of the annuity deposits collected. Agents contracted with us through two national marketing organization accounted for more than 10% of annuity deposits we collected during 2021 representing 14% and 11%, individually, of the annuity deposits collected. Agents contracted with us through two national marketing organization accounted for more than 10% of annuity deposits we collected during 2020 representing 17% and 10%, individually, of the annuity deposits collected.

Consolidation and Basis of Presentation

The consolidated financial statements include our accounts and our wholly-owned subsidiaries: American Equity Life, American Equity Life of New York, Eagle Life, AERL, L.C., AE Capital, LLC., American Equity Investment Properties, L.C., High Trestle Investment Management, LLC., AEL RE Vermont, Inc., AEL Re Bermuda, Ltd, NC Securities Holdco, LLC, AEL Financial Services, LLC, and North Wolf Bay Holdings, LLC. All significant intercompany accounts and transactions have been eliminated.

In addition, our consolidated financial statements include variable interest entities ("VIE"s) in which we are the primary beneficiary. We have relationships with various special purpose entities and other legal entities that must be evaluated to determine if the entities meet the criteria of a VIE. This assessment is performed by reviewing contractual, ownership and other rights and requires use of judgment. First, we determine if we hold a variable interest in an entity by assessing if we have the right to receive expected losses and expected residual returns of the entity. If we hold a variable interest, then the entity is assessed to determine if it is a VIE. An entity is a VIE if the equity at risk is not sufficient to support its activities, if the equity holders lack a controlling financial interest or if the entity is structured with non-substantive voting rights. In addition to the previous criteria, if the entity is a limited partnership or similar entity, it is a VIE if the limited partners do not have the power to direct the entity's most significant activities through substantive kick-out rights or participating rights. A VIE is evaluated to determine the primary beneficiary. The primary beneficiary of a VIE is the enterprise with (1) the power to direct the activities of a VIE that most significantly impact the entity's economic performance and (2) the obligation to absorb losses of the entity or the right to receive benefits from the entity that could potentially be significant to the VIE. When we are the primary beneficiary, we are required to consolidate the entity in our financial statements. We reassess our involvement with VIEs on a quarterly basis. For further information about VIEs, refer to *Note 5 – Variable Interest Entities*.

Estimates and Assumptions

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates and assumptions are utilized in the calculation of deferred policy acquisition costs, deferred sales inducements, policy benefit reserves, including the liability for lifetime income benefit riders and the fair value of embedded derivatives in fixed index annuity contracts, valuation of derivatives, valuation of investments, valuation of real estate, allowances for credit losses on available-for-sale fixed maturity securities, allowances for loan losses on mortgage loans and valuation allowances on deferred tax assets. A description of each critical estimate is incorporated within the discussion of the related accounting policies which follow. It is reasonably possible that actual experience could differ from the estimates and assumptions utilized.

Investments

Fixed maturity securities (bonds maturing more than one year after issuance) that may be sold prior to maturity are classified as available for sale. Available for sale securities are reported at fair value and unrealized gains and losses, if any, on these securities are included directly in a separate component of stockholders' equity, net of income taxes and certain adjustments for assumed changes in amortization of deferred policy acquisition costs, deferred sales inducements and policy benefit reserves. Fair values, as reported herein, of fixed maturity securities are based on quoted market prices in active markets when available, or for those fixed maturity securities not actively traded, yield data and other factors relating to instruments or securities with similar characteristics are used. See *Note 2 - Fair Value of Financial Instruments* for more information on the determination of fair value. Premiums and discounts are amortized/accrued using methods which result in a constant yield over the securities' expected lives. Amortization/accrual of premiums and discounts on residential and commercial mortgage backed securities incorporate prepayment assumptions to estimate the securities' expected lives. Interest income is recognized as earned.

Available-for-sale fixed maturity securities are subject to an allowance for credit loss and changes in the allowance are reported in net income as a component of net realized losses on investments. See *Note 3 - Investments* for further discussion of the allowance for credit losses on available-for-sale fixed maturity securities.

Mortgage loans on real estate are reported at cost adjusted for amortization of premiums and accrual of discounts and net of valuation allowances. Interest income is recorded when earned; however, interest ceases to accrue for loans on which interest is more than 90 days past due based upon contractual terms and/or when the collection of interest is not considered probable. Interest income on impaired loans is recorded on a cash basis. Any changes in the loan valuation allowances are reported in net realized losses on investments. See *Note 4 - Mortgage Loans on Real Estate* for further discussion of the valuation allowance on the mortgage loan portfolios.

Beginning in 2021, we held residential real estate investments through consolidation of an investment company VIE. As this is an investment company VIE, the residential real estate investments are reported at fair value and the change in fair value on these investments is reported in net income as a component of net investment income. Fair values of residential real estate investments are initially based on the cost to purchase the properties and subsequently based on a discounted cash flow methodology. See *Note 2 – Fair Values of Financial Instruments* for more information on the determination of fair value. The residential real estate investments are leased to renters through operating lease arrangements. Rental income is recognized on a straight-line basis over the term of the respective leases.

Beginning in 2022, we held a commercial real estate investment in the ultra-luxury hospitality sector through consolidation of a VIE that is not an investment company. The commercial real estate investment is held at depreciated cost and was initially held at the cost to purchase the property.

Our limited partnerships and limited liability companies are accounted for either using the equity method of accounting, NAV as a practical expedient, or fair value. For our equity method investments, we record our share of earnings and losses of the limited partnership or limited liability company as a component of net investment income. Our consolidated limited partnerships are measured using NAV as a practical expedient, as the investments do not have a readily determinable fair value and the investments are in an investment company within scope of Topic 946. Our consolidated real estate limited liability companies are fair valued on a recurring basis using the methods described in *Note 2 – Fair Values of Financial Instruments*. For all of our limited partnerships and limited liability company investments, recognition of income is reported on a quarter lag due to the availability of the related financial statements of the limited partnerships and limited liability companies.

Other invested assets include company owned life insurance, equity securities, short-term debt securities with maturities of greater than three months but less than twelve months when purchased, and short-term loans and collateral loans with maturities less than one year. Company owned life insurance is recorded at the amount that can be realized under the insurance contract at the end of the reporting period, which is the cash surrender value adjusted for other charges or other amounts due that are probable at settlement. Dividends are recognized when declared.

Realized gains and losses on sales of investments are determined on the basis of specific identification based on the trade date.

Federal Home Loan Bank

During the first quarter of 2022, American Equity Life became a member of the Federal Home Loan Bank ("FHLB") which provides access to collateralized borrowings and other FHLB products. We may also issue funding agreements to the FHLB. Both the collateralized borrowings and funding agreements require us to pledge qualified assets as collateral. Obligations arising from funding agreements are used in investment spread activities and reported in Other policy funds and contract claims on the Consolidated Balance Sheets. See *Note 14 - Commitments and Contingencies* for more information on the funding agreements issued. Entering into FHLB membership, borrowings and funding agreements requires the ownership of FHLB stock and the pledge of assets as collateral. See *Note 2 - Fair Value of Financial Instruments* and *Note 14 - Commitments and Contingencies* for more information on the common stock purchased and assets pledged as collateral.

Derivative Instruments

Our derivative instruments include call options used to fund fixed index annuity credits and interest rate swaps which were designated as fair value hedges. Our call option derivative instruments are recognized in the balance sheet at fair value and changes in fair value are recognized immediately in operations.

A fair value hedge is a hedge of the exposure to changes in the fair value of a recognized asset or liability, or of an unrecognized firm commitment, that are attributable to a particular risk. The accounting for a fair value hedge is determined at hedge inception. Hedge accounting can be applied if, at inception, and throughout the hedging period, the changes in the fair value of the derivative are highly effective at offsetting the changes in fair value of the hedged asset, liability or unrecognized firm commitment that are attributable to the risk being hedged. When hedge accounting is applied, the change in fair value of the hedged asset, liability or unrecognized firm commitment attributable to the hedged risk are reported in the same line item in the Consolidated Statements of Operations as the changes in fair value of the derivative instrument. For fair value hedges of fixed maturity securities, the change in fair value attributable to the risk being hedged is recognized in the Change in fair value of derivatives line item of the Consolidated Statements of Operations. For any change in fair value of our interest rate swaps that are excluded from hedge effectiveness, we have elected to recognize the change immediately in earnings rather than amortizing over the life of the hedge.

At hedge inception, we formally document our risk management objective and strategy for entering into hedging relationships for any fair value hedge. We also quantitatively test for hedge effectiveness using statistical regression analysis on both a prospective and retrospective basis. The results of the testing determine whether we have a highly effective hedging relationship and can apply hedge accounting.

Prior to the redemption of our floating rate subordinated debentures in 2020, our derivative instruments also included an interest rate swap and interest rate caps which were used to manage interest rate risk associated with the floating rate component on certain of our subordinated debentures. These interest rate swaps and interest rate caps were recognized in the balance sheet at fair value and changes in fair value were recognized immediately in operations.

See *Note 6 - Derivative Instruments* for more information on derivative instruments.

Cash and Cash Equivalents

We consider all highly liquid debt instruments purchased with an original maturity of three months or less to be cash equivalents.

Book Overdrafts

Under our cash management system, checks issued but not yet presented to banks frequently result in overdraft balances for accounting purposes and are classified as Other liabilities on our consolidated balance sheets. We report the changes in the amount of the overdraft balance as a financing activity in our consolidated statement of cash flows as Change in checks in excess of cash balance.

Deferred Policy Acquisition Costs and Deferred Sales Inducements

For annuity products, these costs are being amortized in proportion to actual and expected gross profits. Actual and expected gross profits include the excess of net investment income earned over the interest credited or the cost of providing index credits to the policyholders, or the "investment spread"; and to a lesser extent, product charges and fees net of expected excess payments for lifetime income benefit riders and certain policy expenses. Actual and expected gross profits for fixed index annuities also include the impact of amounts recorded for the change in fair value of derivatives and the change in fair value of embedded derivatives. Current period amortization is adjusted retrospectively through an unlocking process when estimates of actual and expected gross profits (including the impact of net realized gains (losses) on investments) to be realized from a group of products are revised. Deferred policy acquisition costs and deferred sales inducements are also adjusted for the change in amortization that would have occurred if available for sale fixed maturity securities had been sold at their aggregate fair value at the end of the reporting period and the proceeds reinvested at current yields. The impact of this adjustment is included in accumulated other comprehensive income (loss) within consolidated stockholders' equity, net of applicable taxes. See *Note 7 - Deferred Policy Acquisition Costs, Deferred Sales Inducements and Liability for Lifetime Income Benefit Riders* for more information on deferred policy acquisition costs and deferred sales inducements.

Policy Benefit Reserves

Policy benefit reserves for fixed index annuities with returns linked to the performance of a specified market index are equal to the sum of the fair value of the embedded derivatives and the host (or guaranteed) component of the contracts. The host value is established at inception of the contract and accreted over the policy's life at a constant rate of interest. Future policy benefit reserves for fixed index annuities earning a fixed rate of interest and other deferred annuity products are computed under a retrospective deposit method and represent policy account balances before applicable surrender charges. For the years ended December 31, 2022, 2021 and 2020, interest crediting rates for these products ranged from 1.45% to 2.65%.

The liability for lifetime income benefit riders is based on the actual and present value of expected benefit payments to be paid in excess of projected policy values recognizing the excess over the expected lives of the underlying policies based on the actual and present value of expected assessments including investment spreads, product charges and fees. The inputs used in the calculation of the liability for lifetime income benefit riders include actual policy values, actual income account values, actual payout factors, actual roll-up rates and our best estimate assumptions for future policy growth, expected utilization of lifetime income benefit riders, which includes the ages at which policyholders are expected to elect to begin to receive lifetime income benefit payments and the percentage of policyholders who elect to receive lifetime income benefit payments, the type of income benefit payments selected upon election and future assumptions for lapse, partial withdrawal and mortality rates. See *Note 7 - Deferred Policy Acquisition Costs, Deferred Sales Inducements and Liability for Lifetime Income Benefit Riders* for more information on lifetime income benefit rider reserves.

Policy benefit reserves are not reduced for amounts ceded under coinsurance agreements which are reported as coinsurance deposits on our consolidated balance sheets. See *Note 8 - Reinsurance and Policy Provisions* for more information on reinsurance.

Deferred Income Taxes

Deferred income tax assets or liabilities are computed based on the temporary differences between the financial statement and income tax bases of assets and liabilities using the enacted marginal tax rate. The effect on deferred income tax assets and liabilities resulting from a change in the enacted marginal tax rate is recognized in income in the period that includes the enactment date. Deferred income tax expenses or benefits are based on the changes in the asset or liability from period to period. Deferred income tax assets are subject to ongoing evaluation of whether such assets will more likely than not be realized. The realization of deferred income tax assets primarily depends on generating future taxable income during the periods in which temporary differences become deductible. Deferred income tax assets are reduced by a valuation allowance if, based on the weight of available evidence, it is more likely than not that some portion or all of the deferred tax asset will not be realized. In making such a determination, all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies and recent financial operations, is considered. The realization of deferred income tax assets related to unrealized losses on available-for-sale fixed maturity securities is also based upon our intent and ability to hold those securities for a period of time sufficient to allow for a recovery in fair value and not realize the unrealized loss. See *Note 9 - Income Taxes* for more information on deferred income taxes.

Recognition of Premium Revenues and Costs

Revenues for annuity products include surrender and living income benefit rider charges assessed against policyholder account balances during the period. Interest sensitive and index product benefits related to annuity products include interest credited or index credits to policyholder account balances pursuant to accounting by insurance companies for certain long-duration contracts. The change in fair value of the embedded derivatives for fixed index annuities equals the change in the difference between policy benefit reserves for fixed index annuities computed under the derivative accounting standard and the long-duration contracts accounting standard at each balance sheet date.

Considerations from immediate annuities and supplemental contract annuities with life contingencies are recognized as revenue when the policy is issued.

All insurance-related revenues, including the change in the fair value of derivatives for call options related to the business ceded under coinsurance agreements (see *Note 8 - Reinsurance and Policy Provisions*), benefits, losses and expenses are reported net of reinsurance ceded. Revenue and fees associated with reinsurance agreements (see *Note 8 - Reinsurance and Policy Provisions*) are recognized in Other revenue when earned over the life of the reinsured policies or when service is performed.

Other Comprehensive Income (Loss)

Other comprehensive income (loss) includes all changes in stockholders' equity during a period except those resulting from investments by and distributions to stockholders. Other comprehensive income (loss) excludes net realized investment gains (losses) included in net income which represents transfers from unrealized to realized gains and losses.

Reclassifications

Certain amounts in the prior years' consolidated financial statements and related footnotes thereto have been reclassified to conform with the current year presentation.

Adopted Accounting Pronouncements

In June 2016, the Financial Accounting Standards Board ("FASB") issued an accounting standards update ("ASU") that significantly changed the impairment model for most financial assets that are measured at amortized cost and certain other instruments from an incurred loss model to an expected loss model that requires these assets be presented at the net amount expected to be collected. In addition, credit losses on available-for-sale debt securities are recorded through an allowance account subsequent to the adoption of this ASU. We adopted this ASU on January 1, 2020. The adoption of this ASU resulted in an increase in our mortgage loan allowance for credit losses of $8.6 million and the recognition of an allowance for credit losses on our reinsurance recoverable/coinsurance deposits balances of $3.2 million on the date of adoption. Retained earnings was decreased by $9.3 million, which reflects the net of tax impact of the increase in the mortgage loan allowance for credit losses and the recognition of an allowance for credit losses on our reinsurance recoverable/coinsurance deposits balances on the date of adoption.

New Accounting Pronouncements

In August 2018, the FASB issued an ASU that revises certain aspects of the measurement models and disclosure requirements for long duration insurance and investment contracts. The FASB's objective in issuing this ASU is to improve, simplify, and enhance the accounting for long-duration contracts. The revisions include updating cash flow assumptions in the calculation of the liability for traditional life products, introducing the term 'market risk benefit' ("MRB") and requiring all contract features meeting the definition of an MRB to be measured at fair value with the change in fair value recognized in net income excluding the change in fair value related to our own-credit risk which is recognized in AOCI and simplifying the method used to amortize deferred policy acquisition costs and deferred sales inducements to a constant level basis over the expected term of the related contracts rather than based on actual and estimated gross profits and enhancing disclosure requirements. While this ASU is effective for us January 1, 2023, the transition date (the remeasurement date) is January 1, 2021. We will adopt the guidance on a modified retrospective basis related to the future policy benefit and deferred acquisition costs. The guidance for market risk benefits will be applied retrospectively.

While we continue to evaluate the impact of adopting this standard, we expect the adoption to have a material impact to our financial condition, results of operations, statements of cash flows, and disclosures. The estimated impact to stockholders' equity at January 1, 2021 is an increase between $1.5 billion and $2.0 billion, with most of this impact reflected in accumulated other comprehensive income ("AOCI"). The impact to retained earnings is expected to be less than $100.0 million.

The most significant drivers of the transition adjustment include changes related to MRBs including the impacts of our own-credit risk adjustment and removal of the deferred acquisition cost, deferred sales inducement, and policy benefit reserve balances recorded in AOCI related to changes in unrealized appreciation (depreciation) on available for sale fixed maturity securities.

We have created a governance framework and implementation plan for the adoption of this standard. We have designed internal controls related to the new processes created as part of implementing the updated standard, and we will continue to execute the controls through the implementation and first reporting date.

2. Fair Values of Financial Instruments

The following sets forth a comparison of the carrying amounts and fair values of our financial instruments:

	December 31,			
	2022		2021	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
	(Dollars in thousands)			
Assets				
Fixed maturity securities, available for sale	$ 39,804,617	$ 39,804,617	$ 51,305,943	$ 51,305,943
Mortgage loans on real estate	6,949,027	6,502,463	5,687,998	5,867,227
Real estate investments	1,056,063	1,056,063	337,939	337,939
Limited partnerships and limited liability companies	684,835	684,835	168,711	168,711
Derivative instruments	431,727	431,727	1,277,480	1,277,480
Other investments	1,817,085	1,817,085	1,247,024	1,247,024
Cash and cash equivalents	1,919,669	1,919,669	4,508,982	4,508,982
Coinsurance deposits	13,208,399	12,000,116	8,850,608	7,938,292
Liabilities				
Policy benefit reserves	60,743,370	55,572,896	65,076,041	56,375,076
Single premium immediate annuity (SPIA) benefit reserves	212,119	221,130	226,207	235,891
Other policy funds - FHLB	300,000	300,000	—	—
Notes and loan payable	792,073	774,220	496,250	569,485
Subordinated debentures	78,753	87,293	78,421	93,721

Fair value is the price that would be received to sell an asset or paid to transfer a liability (exit price) in an orderly transaction between market participants at the measurement date. The objective of a fair value measurement is to determine that price for each financial instrument at each measurement date. We meet this objective using various methods of valuation that include market, income and cost approaches.

We categorize our financial instruments into three levels of fair value hierarchy based on the priority of inputs used in determining fair value. The hierarchy defines the highest priority inputs (Level 1) as quoted prices in active markets for identical assets or liabilities. The lowest priority inputs (Level 3) are our own assumptions about what a market participant would use in determining fair value such as estimated future cash flows. In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, a financial instrument's level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. Our assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the financial instrument. We categorize financial assets and liabilities recorded at fair value in the consolidated balance sheets as follows:

Level 1 – Quoted prices are available in active markets for identical financial instruments as of the reporting date. We do not adjust the quoted price for these financial instruments, even in situations where we hold a large position and a sale could reasonably impact the quoted price.

Level 2 – Quoted prices in active markets for similar financial instruments, quoted prices for identical or similar financial instruments in markets that are not active; and models and other valuation methodologies using inputs other than quoted prices that are observable.

Level 3 – Models and other valuation methodologies using significant inputs that are unobservable for financial instruments and include situations where there is little, if any, market activity for the financial instrument. The inputs into the determination of fair value require significant management judgment or estimation. Financial instruments that are included in Level 3 are securities for which no market activity or data exists and for which we used discounted expected future cash flows with our own assumptions about what a market participant would use in determining fair value.

NAV – Our consolidated limited partnership funds are typically measured using NAV as a practical expedient in determining fair value and are not classified in the fair value hierarchy. Our carrying value reflects our pro rata ownership percentage as indicated by NAV in the investment fund financial statements and is recorded on a quarter lag due to the timing of when financial statements are available.

Transfers of securities among the levels occur at times and depend on the type of inputs used to determine fair value of each security.

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Our assets and liabilities which are measured at fair value on a recurring basis as of December 31, 2022 and 2021 are presented below based on the fair value hierarchy levels:

	Total Fair Value	NAV	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(Dollars in thousands)				
December 31, 2022					
Assets					
Fixed maturity securities, available for sale:					
U.S. Government and agencies	$ 169,071	$ —	$ 26,184	$ 142,887	$ —
States, municipalities and territories	3,822,982	—	—	3,822,982	—
Foreign corporate securities and foreign governments	676,852	—	—	676,852	—
Corporate securities	24,161,921	—	—	23,759,573	402,348
Residential mortgage backed securities	1,377,611	—	—	1,377,611	—
Commercial mortgage backed securities	3,687,478	—	—	3,687,478	—
Other asset backed securities	5,908,702	—	—	5,465,784	442,918
Other investments	1,013,297	—	398,280	615,017	—
Real estate investments	940,559	—	—	—	940,559
Limited partnerships and limited liability companies	684,835	620,626	—	—	64,209
Derivative instruments	431,727	—	—	431,727	—
Cash and cash equivalents	1,919,669	—	1,919,669	—	—
	$ 44,794,704	$ 620,626	$ 2,344,133	$ 39,979,911	$ 1,850,034
Liabilities					
Funds withheld liability - embedded derivative	$ (441,864)	$ —	$ —	$ —	$ (441,864)
Fixed index annuities - embedded derivatives	4,820,845	—	—	—	4,820,845
	$ 4,378,981	$ —	$ —	$ —	$ 4,378,981
December 31, 2021					
Assets					
Fixed maturity securities, available for sale:					
U.S. Government and agencies	$ 1,078,746	$ —	$ 32,737	$ 1,046,009	$ —
States, municipalities and territories	3,927,201	—	—	3,927,201	—
Foreign corporate securities and foreign governments	402,545	—	—	402,545	—
Corporate securities	34,660,234	—	32,700	34,627,534	—
Residential mortgage backed securities	1,125,049	—	—	1,125,049	—
Commercial mortgage backed securities	4,840,311	—	—	4,840,311	—
Other asset backed securities	5,271,857	—	—	5,271,857	—
Other investments	12,226	—	—	5,877	6,349
Real estate investments	337,939	—	—	—	337,939
Limited partnerships and limited liability companies	168,711	168,711	—	—	—
Derivative instruments	1,277,480	—	—	1,277,480	—
Cash and cash equivalents	4,508,982	—	4,508,982	—	—
	$ 57,611,281	$ 168,711	$ 4,574,419	$ 52,523,863	$ 344,288
Liabilities					
Funds withheld liability - embedded derivative	$ (2,362)	$ —	$ —	$ (2,362)	$ —
Fixed index annuities - embedded derivatives	7,964,961	—	—	—	7,964,961
	$ 7,962,599	$ —	$ —	$ (2,362)	$ 7,964,961

The following methods and assumptions were used in estimating the fair values of financial instruments during the periods presented in these consolidated financial statements.

Fixed maturity securities

The fair values of fixed maturity securities in an active and orderly market are determined by utilizing independent pricing services. The independent pricing services incorporate a variety of observable market data in their valuation techniques, including:

- reported trading prices,
- benchmark yields,
- broker-dealer quotes,
- benchmark securities,
- bids and offers,
- credit ratings,
- relative credit information, and
- other reference data.

The independent pricing services also take into account perceived market movements and sector news, as well as a security's terms and conditions, including any features specific to that issue that may influence risk and marketability. Depending on the security, the priority of the use of observable market inputs may change as some observable market inputs may not be relevant or additional inputs may be necessary.

The independent pricing services provide quoted market prices when available. Quoted prices are not always available due to market inactivity. When quoted market prices are not available, the third parties use yield data and other factors relating to instruments or securities with similar characteristics to determine fair value for securities that are not actively traded. We generally obtain one value from our primary external pricing service. In situations where a price is not available from this service, we may obtain quotes or prices from additional parties as needed. Market indices of similar rated asset class spreads are considered for valuations and broker indications of similar securities are compared. Inputs used by the broker include market information, such as yield data and other factors relating to instruments or securities with similar characteristics. Valuations and quotes obtained from third party commercial pricing services are non-binding and do not represent quotes on which one may execute the disposition of the assets.

We validate external valuations at least quarterly through a combination of procedures that include the evaluation of methodologies used by the pricing services, comparison of the prices to a secondary pricing source, analytical reviews and performance analysis of the prices against trends, and maintenance of a securities watch list. Additionally, as needed we utilize discounted cash flow models or perform independent valuations on a case-by-case basis using inputs and assumptions similar to those used by the pricing services. Although we do identify differences from time to time as a result of these validation procedures, we did not make any significant adjustments as of December 31, 2022 and 2021.

Fixed maturity security valuations that include at least one significant unobservable input are reflected in Level 3 in the fair value hierarchy and can include fixed maturity securities across all asset classes. Quantitative information about the significant unobservable inputs used are provided below for fixed maturity securities that were either valued internally or were valued by a third party and the inputs were reasonably available. The fair value of corporate securities that utilized at least one significant unobservable input was $84.7 million and $0 million as of December 31, 2022 and 2021, respectively. A discounted cash flow methodology was utilized in the valuation, which included an unobservable liquidity premium of 20 basis points being incorporated along with other observable market data. The fair value of other asset backed securities that utilized at least one significant unobservable input was $296.8 million and $0 million as of December 31, 2022 and 2021, respectively. A discounted cash flow methodology was utilized in the valuation, which included unobservable discount rates and weighted average lives being incorporated along with other observable market data. At December 31, 2022, the discount rates used in the fair value calculations ranged from 4.04% to 28.58% with a weighted average rate of 4.36%. At December 31, 2022, the weighted average lives used in the fair value calculations ranged from 8.79 years to 12.48 years with a weighted average of 9.29 years.

Mortgage loans on real estate

Mortgage loans on real estate are not measured at fair value on a recurring basis. The fair values of mortgage loans on real estate are calculated using discounted expected cash flows using competitive market interest rates currently being offered for similar loans. The fair values of impaired mortgage loans on real estate that we have considered to be collateral dependent are based on the fair value of the real estate collateral (based on appraised values) less estimated costs to sell. The inputs utilized to determine fair value of all mortgage loans are unobservable market data (competitive market interest rates); therefore, fair value of mortgage loans falls into Level 3 in the fair value hierarchy.

Real estate investments

The fair values of residential real estate investments held through consolidation of investment company VIEs are initially calculated based on the cost to purchase the properties and subsequently calculated based on a discounted cash flow methodology. Under the discounted cash flow method, net operating income is forecasted assuming a 10-year hold period commencing as of the valuation date. An additional year is forecasted in order to determine the residual sale price at the end of the hold period, using a residual (terminal) capitalization rate. The significant inputs into the fair value calculation under the discounted cash flow method include the residual capitalization rate and discount rate. These inputs are unobservable market data; therefore, fair value of residential real estate investments falls into Level 3 in the fair value hierarchy. At December 31, 2022, the residual capitalization rates used in the fair value calculations ranged from 4.75% to 6.50% with an average rate of 5.44%. At December 31, 2022, the discount rates used in the fair value calculations ranged from 6.00% to 8.00% with an average rate of 6.91%. At December 31, 2021, the residual capitalization rates used in the fair value calculations ranged from 5.00% to 6.25% with an average rate of 5.72%. At December 31, 2021, the discount rates used in the fair value calculations ranged from 6.25% to 7.50% with an average rate of 6.97%.

In Q4 2022, we purchased one real estate investment through consolidation of a VIE that is not measured at fair value on a recurring basis. Due to the proximity of the purchase date to year end, the cost to purchase the property approximates fair value.

Limited partnerships and limited liability companies

Two of our consolidated variable interest entities, which are fair valued on a recurring basis, invest in limited liability companies that invest in operating entities which hold multifamily real estate properties. The fair value of our variable interest entities was $64.2 million as of December 31, 2022 and falls within Level 3 of the fair value hierarchy. The fair value of the limited liability companies was obtained from a third party and is based on the fair value of the underlying real estate held by the various operating entities. The real estate is initially calculated based on the cost to purchase the properties and subsequently calculated based on a discounted cash flow methodology. At December 31, 2022, the residual capitalization rates used in the fair value calculations of the underlying real estate ranged from 4.25% to 4.75% with a weighted average rate of 4.46%. The discount rates used in the fair value calculations of the underlying real estate ranged from 5.75% to 6.00% with a weighted average rate of 5.86%. The fair value of this investment falls within Level 3 of the fair value hierarchy.

Each of our consolidated limited partnership funds, which are measured using NAV as a practical expedient, are closed-end funds that invest in infrastructure credit assets and tech-centric middle-market loans, respectively. Redemptions are not allowed until the funds' termination dates and liquidations begin. At December 31, 2022, our unfunded commitments for our consolidated limited partnership funds are $926.3 million.

Derivative instruments

The fair values of our call options are based upon the amount of cash that we will receive to settle each derivative instrument on the reporting date. These amounts are determined by our investment team using industry accepted valuation models and are adjusted for the nonperformance risk of each counterparty net of any collateral held. Inputs include market volatility and risk free interest rates and are used in income valuation techniques in arriving at a fair value for each option contract. The nonperformance risk for each counterparty is based upon its credit default swap rate. We have no performance obligations related to the call options purchased to fund our fixed index annuity policy liabilities.

The fair values of our pay fixed/receive float interest rate swaps are determined using internal valuation models that generate discounted expected future cash flows by constructing a projected Secured Overnight Financing Rate (SOFR) curve over the term of the swap.

Other investments

Equity securities and short-term debt securities with maturities of greater than three months but less than twelve months when purchased are the only financial instruments included in other investments that are measured at fair value on a recurring basis. The fair value for these investments are determined using the same methods discussed above for fixed maturity securities. Financial instruments included in other investments that are not measured at fair value on a recurring basis are FHLB common stock, short-term loans, collateral loans and company owned life insurance ("COLI"). FHLB common stock is carried at cost which approximates fair value. FHLB common stock was $22.0 million as of December 31, 2022 and falls within Level 2 of the fair value hierarchy. Due to the short-term nature of the investments, the fair value of a portion of our short-term loans approximates the carrying value. The fair value of short-term loans was $316.4 million and $320.0 million as of December 31, 2022 and December 31, 2021, respectively. Our short-term loans fall within Level 2 of the fair value hierarchy. For our collateral loans, we have concluded the fair value approximates carrying value and falls within Level 2 of the fair value hierarchy. The fair value of collateral loans was $64.6 million and $0 million as of December 31, 2022 and December 31, 2021, respectively. The fair value of our COLI approximates the cash surrender value of the policies and falls within Level 2 of the fair value hierarchy. The fair value of COLI was $397.7 million and $384.3 million as of December 31, 2022 and December 31, 2021, respectively.

Cash and cash equivalents

Amounts reported in the consolidated balance sheets for these instruments are reported at their historical cost which approximates fair value due to the nature of the assets assigned to this category.

Policy benefit reserves, coinsurance deposits and SPIA benefit reserves

The fair values of the liabilities under contracts not involving significant mortality or morbidity risks (principally deferred annuities), are stated at the cost we would incur to extinguish the liability (i.e., the cash surrender value) as these contracts are generally issued without an annuitization date. The coinsurance deposits related to the annuity benefit reserves have fair values determined in a similar fashion. For period-certain annuity benefit contracts, the fair value is determined by discounting the benefits at the interest rates currently in effect for newly issued immediate annuity contracts. We are not required to and have not estimated the fair value of the liabilities under contracts that involve significant mortality or morbidity risks, as these liabilities fall within the definition of insurance contracts that are exceptions from financial instruments that require disclosures of fair value. Policy benefit reserves, coinsurance deposits and SPIA benefit reserves are not measured at fair value on a recurring basis. All of the fair values presented within these categories fall within Level 3 of the fair value hierarchy as most of the inputs are unobservable market data.

Other policy funds - FHLB

The fair values of the Company's funding agreements with the FHLB are estimated using discounted cash flow calculations based on interest rates currently being offered for similar agreements with similar maturities.

Notes and loan payable

The fair value of our senior unsecured notes is based upon quoted market price. The carrying value of the term loan approximates fair value as the interest rate is reset on a quarterly basis utilizing SOFR adjusted for a credit spread. Both of these are categorized as Level 2 within the fair value hierarchy and are not remeasured at fair value on a recurring basis.

Subordinated debentures

Fair values for subordinated debentures are estimated using discounted cash flow calculations based principally on observable inputs including our incremental borrowing rates, which reflect our credit rating, for similar types of borrowings with maturities consistent with those remaining for the debt being valued. These fair values are categorized as Level 2 within the fair value hierarchy. Subordinated debentures are not measured at fair value on a recurring basis..

Funds withheld liability - embedded derivative

We estimate the fair value of the embedded derivative based on the fair value of the assets supporting the funds withheld payable under modified coinsurance and funds withheld coinsurance reinsurance agreements. The fair value of the embedded derivative is classified as Level 3 based on valuation methods used for the assets held supporting the reinsurance agreements.

Fixed index annuities - embedded derivatives

We estimate the fair value of the embedded derivative component of our fixed index annuity policy benefit reserves at each valuation date by (i) projecting policy contract values and minimum guaranteed contract values over the expected lives of the contracts and (ii) discounting the excess of the projected contract value amounts at the applicable risk free interest rates adjusted for our nonperformance risk related to those liabilities. The projections of policy contract values are based on our best estimate assumptions for future policy growth and future policy decrements. Our best estimate assumptions for future policy growth include assumptions for the expected index credit on the next policy anniversary date which are derived from the fair values of the underlying call options purchased to fund such index credits and the expected costs of annual call options we will purchase in the future to fund index credits beyond the next policy anniversary. The projections of minimum guaranteed contract values include the same best estimate assumptions for policy decrements as were used to project policy contract values.

Within this determination we have the following significant unobservable inputs: 1) the expected cost of annual call options we will purchase in the future to fund index credits beyond the next policy anniversary and 2) our best estimates for future policy decrements, primarily lapse, partial withdrawal and mortality rates. As of December 31, 2022 and 2021, we utilized an estimate of 2.40% and 2.10%, respectively, for the expected cost of annual call options, which is based on estimated long-term account value growth and a historical review of our actual option costs.

Our best estimate assumptions for lapse, partial withdrawal and mortality rates are based on our actual experience and our outlook as to future expectations for such assumptions. These assumptions, which are consistent with the assumptions used in calculating deferred policy acquisition costs and deferred sales inducements, are reviewed on a quarterly basis and are updated as our experience develops and/or as future expectations change. The following table presents average lapse rate and partial withdrawal rate assumptions, by contract duration, used in estimating the fair value of the embedded derivative component of our fixed index annuity policy benefit reserves at each reporting date:

	Average Lapse Rates		Average Partial Withdrawal Rates	
Contract Duration (Years)	December 31, 2022	December 31, 2021	December 31, 2022	December 31, 2021
1 - 5	2.17%	3.04%	1.86%	2.19%
6 - 10	3.28%	2.84%	1.97%	2.26%
11 - 15	3.63%	4.47%	1.86%	2.14%
16 - 20	8.55%	8.93%	2.96%	1.33%
20+	4.90%	4.93%	1.81%	—%

Lapse rates are generally expected to increase as surrender charge percentages decrease for policies without a lifetime income benefit rider. Lapse expectations reflect a significant increase in the year in which the surrender charge period on a contract ends.

The following table provides a reconciliation of the beginning and ending balances for our Level 3 assets and liabilities, which are measured at fair value on a recurring basis using significant unobservable inputs for the years ended December 31, 2022 and 2021:

	Year Ended December 31,	
	2022	2021
Fixed maturity securities, available for sale - Corporate securities		
Beginning balance	$ —	$ —
Purchases	2,233	—
Transfers in	391,702	—
Transfers out	—	—
Total realized/unrealized gains (losses):		
Included in net income	—	—
Included in other comprehensive income (loss)	8,413	—
Ending balance	$ 402,348	$ —
Fixed maturity securities, available for sale - Other asset backed securities		
Beginning balance	$ —	$ —
Purchases	296,800	—
Transfers in	153,669	—
Transfers out	—	—
Total realized/unrealized gains (losses):		
Included in net income	—	—
Included in other comprehensive income (loss)	(7,551)	—
Ending balance	$ 442,918	$ —
Other investments		
Beginning balance	$ 6,349	$ —
Transfers in	—	6,349
Transfers out	(3,867)	—
Total realized/unrealized gains (losses):		
Included in net income	(2,482)	—
Included in other comprehensive income (loss)	—	—
Ending balance	$ —	$ 6,349

	Year Ended December 31,	
	2022	2021
Real estate investments		
Beginning balance	$ 337,939	$ —
Purchases and sales, net	602,298	335,767
Change in fair value	322	2,172
Ending balance	$ 940,559	$ 337,939
Limited partnerships and limited liability companies		
Beginning balance	$ —	$ —
Purchases and sales, net	57,574	—
Change in fair value	6,635	—
Ending balance	$ 64,209	$ —
Funds withheld liability - embedded derivative		
Beginning balance	$ —	$ —
Transfers in	(441,864)	—
Change in fair value	—	—
Ending balance	$ (441,864)	$ —
Fixed index annuities - embedded derivatives		
Beginning balance	$ 7,964,961	$ 7,938,281
Premiums less benefits	(125,940)	1,424,372
Change in fair value, net	(2,561,676)	(876,803)
Reserve release related to in-force ceded reinsurance	(456,500)	(520,889)
Ending balance	$ 4,820,845	$ 7,964,961

Transfers into Level 3 during the years ended December 31, 2022 and 2021 were the result of changes in observable pricing information for certain fixed maturity securities.

The fair value of our fixed index annuities embedded derivatives is net of coinsurance ceded of $1,173.4 million and $1,245.0 million as of December 31, 2022 and 2021, respectively. Change in fair value, net for each period in our embedded derivatives is included in Change in fair value of embedded derivatives in the Consolidated Statements of Operations.

Certain derivatives embedded in our fixed index annuity contracts are our most significant financial instrument measured at fair value that are categorized as Level 3 in the fair value hierarchy. The contractual obligations for future annual index credits within our fixed index annuity contracts are treated as a "series of embedded derivatives" over the expected life of the applicable contracts. We estimate the fair value of these embedded derivatives at each valuation date by the method described above under **fixed index annuities - embedded derivatives.** The projections of minimum guaranteed contract values include the same best estimate assumptions for policy decrements as were used to project policy contract values.

The most sensitive assumption in determining policy liabilities for fixed index annuities is the rates used to discount the excess projected contract values. As indicated above, the discount rate reflects our nonperformance risk. If the discount rates used to discount the excess projected contract values at December 31, 2022, were to increase by 100 basis points, the fair value of the embedded derivatives would decrease by $336.2 million recorded through operations as a decrease in the change in fair value of embedded derivatives and there would be a corresponding decrease of $124.3 million to our combined balance for deferred policy acquisition costs and deferred sales inducements recorded through operations as an increase in amortization of deferred policy acquisition costs and deferred sales inducements. A decrease by 100 basis points in the discount rates used to discount the excess projected contract values would increase the fair value of the embedded derivatives by $386.4 million recorded through operations as an increase in the change in fair value of embedded derivatives and there would be a corresponding increase of $147.0 million to our combined balance for deferred policy acquisition costs and deferred sales inducements recorded through operations as a decrease in amortization of deferred policy acquisition costs and deferred sales inducements.

We review these assumptions quarterly and as a result of these reviews, we made updates to assumptions in 2022, 2021 and 2020.

The most significant assumption update to the calculation of the fair value of the embedded derivative component of our fixed index annuity policy benefit reserves in 2022 was the change in the discount rate. The discount rate assumption was increased, and the period over which the discount rate assumption grades to an ultimate assumption was adjusted. This resulted in a decrease in the fair value of the embedded derivative.

The most significant assumption update to the calculation of the fair value of the embedded derivative component of our fixed index annuity benefit policy reserves in 2021 was changes in lapse rate assumptions. For certain annuity products without a lifetime income benefit rider, the lapse rate assumption was increased in more recent cohorts to reflect higher lapses on policies with a market value adjustment ("MVA") feature. For other annuity products with a lifetime income benefit rider, the population was bifurcated based on whether policies had utilized the rider. For those policies which had utilized the rider, the lapse rate assumption was decreased in later durations. The net impact of the updates to the lapse rate assumption resulted in a decrease in the embedded derivative component of our fixed index annuity policy benefit reserves as less funds ultimately qualify for excess benefits.

The most significant assumption update to the calculation of the fair value of the embedded derivative component of our fixed index annuity policy benefit reserves in 2020 was a decrease in the crediting rate/option budget to 2.10% from 2.90% as a result of a revised estimate of the cost of options. This assumption change resulted in a decrease in the fair value of the embedded derivative component of our fixed index annuity policy benefit reserves due to a reduction in the projected policy contract values over the expected lives of the contracts. During 2020, we revised the derivation of the discount rate used in calculating the fair value of embedded derivatives which increased the discount rate and resulted in a decrease in the change in fair value of embedded derivatives. The net impact of the updates to lapse and partial withdrawal assumptions resulted in an increase in the embedded derivative component of our fixed index annuity policy benefit reserves as more funds ultimately qualify for excess benefits.

3. Investments

At December 31, 2022 and 2021, the amortized cost and fair value of fixed maturity securities were as follows:

	Amortized Cost (1)	Gross Unrealized Gains	Gross Unrealized Losses (2)	Allowance for Credit Losses	Fair Value
	(Dollars in thousands)				
December 31, 2022					
Fixed maturity securities, available for sale:					
U.S. Government and agencies	$ 173,638	$ 70	$ (4,637)	$ —	$ 169,071
States, municipalities and territories	4,356,251	41,565	(574,834)	—	3,822,982
Foreign corporate securities and foreign governments	748,770	11,661	(83,579)	—	676,852
Corporate securities	27,706,440	146,065	(3,687,370)	(3,214)	24,161,921
Residential mortgage backed securities	1,492,242	11,870	(126,368)	(133)	1,377,611
Commercial mortgage backed securities	4,098,755	493	(411,770)	—	3,687,478
Other asset backed securities	6,289,923	14,068	(395,289)	—	5,908,702
	$ 44,866,019	$ 225,792	$ (5,283,847)	$ (3,347)	$ 39,804,617
December 31, 2021					
Fixed maturity securities, available for sale:					
U.S. Government and agencies	$ 1,046,029	$ 32,841	$ (124)	$ —	$ 1,078,746
States, municipalities and territories	3,495,563	437,456	(3,042)	(2,776)	3,927,201
Foreign corporate securities and foreign governments	380,646	22,742	(843)	—	402,545
Corporate securities	31,084,629	3,614,047	(38,442)	—	34,660,234
Residential mortgage backed securities	1,056,778	70,434	(2,093)	(70)	1,125,049
Commercial mortgage backed securities	4,708,878	149,152	(17,719)	—	4,840,311
Other asset backed securities	5,226,660	95,304	(50,107)	—	5,271,857
	$ 46,999,183	$ 4,421,976	$ (112,370)	$ (2,846)	$ 51,305,943

(1) Amortized cost excludes accrued interest receivable of $425.4 million and $400.7 million as of December 31, 2022 and 2021, respectively.

(2) Gross unrealized losses are net of allowance for credit losses.

The amortized cost and fair value of fixed maturity securities at December 31, 2022, by contractual maturity are shown below. Actual maturities will differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties. All of our mortgage and other asset backed securities provide for periodic payments throughout their lives and are shown below as separate lines.

	Available for sale	
	Amortized Cost	Fair Value
	(Dollars in thousands)	
Due in one year or less	$ 1,184,147	$ 1,180,124
Due after one year through five years	5,641,072	5,406,059
Due after five years through ten years	6,254,569	5,672,730
Due after ten years through twenty years	9,853,998	8,817,815
Due after twenty years	10,051,313	7,754,098
	32,985,099	28,830,826
Residential mortgage backed securities	1,492,242	1,377,611
Commercial mortgage backed securities	4,098,755	3,687,478
Other asset backed securities	6,289,923	5,908,702
	$ 44,866,019	$ 39,804,617

Net unrealized gains (losses) on available for sale fixed maturity securities reported as a separate component of stockholders' equity were comprised of the following:

	December 31,	
	2022	2021
	(Dollars in thousands)	
Net unrealized gains (losses) on available for sale fixed maturity securities	$ (5,065,422)	$ 4,309,606
Adjustments for assumed changes in amortization of deferred policy acquisition costs, deferred sales inducements and policy benefit reserves	2,309,357	(1,993,869)
Deferred income tax valuation allowance reversal	22,534	22,534
Deferred income tax expense	578,476	(489,482)
Net unrealized gains (losses) reported as accumulated other comprehensive income (loss)	$ (2,155,055)	$ 1,848,789

The National Association of Insurance Commissioners ("NAIC") assigns designations to fixed maturity securities. These designations range from Class 1 (highest quality) to Class 6 (lowest quality). In general, securities are assigned a designation based upon the ratings they are given by the Nationally Recognized Statistical Rating Organizations ("NRSRO's"). The NAIC designations are utilized by insurers in preparing their annual statutory statements. NAIC Class 1 and 2 designations are considered "investment grade" while NAIC Class 3 through 6 designations are considered "non-investment grade." Based on the NAIC designations, we had 98% of our fixed maturity portfolio rated investment grade at both December 31, 2022 and 2021, respectively.

The following table summarizes the credit quality, as determined by NAIC designation, of our fixed maturity portfolio as of the dates indicated:

	December 31,			
	2022		2021	
NAIC Designation	Amortized Cost	Fair Value	Amortized Cost	Fair Value
	(Dollars in thousands)			
1	$ 27,061,903	$ 24,211,086	$ 26,157,531	$ 28,785,839
2	17,023,157	14,944,131	19,758,594	21,396,020
3	595,193	510,392	909,311	941,210
4	109,409	91,495	133,070	147,160
5	61,721	36,738	16,496	15,357
6	14,636	10,775	24,181	20,357
	$ 44,866,019	$ 39,804,617	$ 46,999,183	$ 51,305,943

The following table shows our investments' gross unrealized losses and fair value, aggregated by investment category and length of time that individual securities (consisting of 4,510 and 1,427 securities, respectively) have been in a continuous unrealized loss position, at December 31, 2022 and 2021:

	Less than 12 months		12 months or more		Total	
	Fair Value	Unrealized Losses (1)	Fair Value	Unrealized Losses (1)	Fair Value	Unrealized Losses (1)
	(Dollars in thousands)					
December 31, 2022						
Fixed maturity securities, available for sale:						
U.S. Government and agencies	$ 160,201	$ (4,512)	$ 908	$ (125)	$ 161,109	$ (4,637)
States, municipalities and territories	2,595,122	(537,313)	95,184	(37,521)	2,690,306	(574,834)
Foreign corporate securities and foreign governments	522,826	(76,957)	21,816	(6,622)	544,642	(83,579)
Corporate securities	18,784,181	(3,218,323)	1,411,177	(469,047)	20,195,358	(3,687,370)
Residential mortgage backed securities	992,783	(101,100)	116,388	(25,268)	1,109,171	(126,368)
Commercial mortgage backed securities	2,941,293	(302,513)	651,923	(109,257)	3,593,216	(411,770)
Other asset backed securities	2,561,390	(162,821)	1,924,026	(232,468)	4,485,416	(395,289)
	$ 28,557,796	$ (4,403,539)	$ 4,221,422	$ (880,308)	$ 32,779,218	$ (5,283,847)
December 31, 2021						
Fixed maturity securities, available for sale:						
U.S. Government and agencies	$ 760,977	$ (124)	$ —	$ —	$ 760,977	$ (124)
States, municipalities and territories	168,942	(2,468)	15,711	(3,350)	184,653	(5,818)
Foreign corporate securities and foreign governments	42,861	(843)	—	—	42,861	(843)
Corporate securities	2,375,603	(30,070)	116,819	(8,372)	2,492,422	(38,442)
Residential mortgage backed securities	250,964	(1,408)	26,917	(755)	277,881	(2,163)
Commercial mortgage backed securities	784,464	(5,500)	142,224	(12,219)	926,688	(17,719)
Other asset backed securities	1,351,324	(11,345)	1,771,182	(38,762)	3,122,506	(50,107)
	$ 5,735,135	$ (51,758)	$ 2,072,853	$ (63,458)	$ 7,807,988	$ (115,216)

(1) Unrealized losses have not been reduced to reflect the allowance for credit losses of $3.3 million and $2.8 million as of December 31, 2022 and 2021, respectively.

The unrealized losses at December 31, 2022 are principally related to the timing of the purchases of certain securities, which carry less yield than those available at December 31, 2022. Approximately 98% and 85% of the unrealized losses on fixed maturity securities shown in the above table for December 31, 2022 and 2021, respectively, are on securities that are rated investment grade, defined as being the highest two NAIC designations.

We expect to recover our amortized cost on all securities except for those securities on which we recognized an allowance for credit loss. In addition, because we did not have the intent to sell fixed maturity securities with unrealized losses and it was not more likely than not that we would be required to sell these securities prior to recovery of the amortized cost, which may be maturity, we did not write down these investments to fair value through the consolidated statements of operations.

Changes in net unrealized gains/losses on investments for the years ended December 31, 2022, 2021 and 2020 are as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Fixed maturity securities available for sale carried at fair value	$ (9,375,028)	$ (987,434)	$ 1,955,496
Adjustment for effect on other balance sheet accounts:			
Deferred policy acquisition costs, deferred sales inducements and policy benefit reserves	4,303,226	542,382	(880,517)
Deferred income tax asset/liability	1,067,958	90,284	(225,746)
	5,371,184	632,666	(1,106,263)
Change in net unrealized gains/losses on investments carried at fair value	$ (4,003,844)	$ (354,768)	$ 849,233

Components of net investment income are as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Fixed maturity securities	$ 1,849,915	$ 1,772,675	$ 2,035,762
Real estate investments	40,243	14,138	—
Mortgage loans on real estate	301,118	215,138	170,749
Cash and cash equivalents	24,985	3,385	4,871
Limited partnerships and limited liability companies	188,131	67,157	(12,204)
Other investments	49,537	29,399	15,372
	2,453,929	2,101,892	2,214,550
Less: investment expenses	(146,466)	(64,417)	(32,472)
Net investment income	$ 2,307,463	$ 2,037,475	$ 2,182,078

Proceeds from sales of available for sale fixed maturity securities for the years ended December 31, 2022, 2021 and 2020 were $7.8 billion, $0.8 billion and $5.4 billion, respectively. Scheduled principal repayments, calls and tenders for available for sale fixed maturity securities for the years ended December 31, 2022, 2021 and 2020 were $2.8 billion, $3.7 billion and $2.9 billion, respectively.

Net realized losses on investments for the years ended December 31, 2022, 2021 and 2020 are as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Fixed maturity securities, available for sale:			
Gross realized gains	$ 139,819	$ 10,167	$ 305,170
Gross realized losses	(153,712)	(19,140)	(276,847)
Net credit loss (provision) release	(15,536)	(6,241)	(94,560)
	(29,429)	(15,214)	(66,237)
Mortgage loans on real estate:			
Decrease (increase) in allowance for credit losses	(15,126)	7,005	(15,447)
Recovery of specific allowance	1,677	—	712
Gain (loss) on sale of mortgage loans	(4,970)	(5,033)	292
	(18,419)	1,972	(14,443)
Total net realized losses	$ (47,848)	$ (13,242)	$ (80,680)

Realized losses on available for sale fixed maturity securities in 2022, 2021 and 2020 were realized primarily due to strategies to reposition the fixed maturity security portfolio that result in improved net investment income, credit risk or duration profiles as they pertain to our asset liability management. In addition, certain realized gains and losses on available for sale fixed maturity securities in 2020 were realized as a result of efforts to de-risk the portfolio. Realized gains and losses on sales are determined on the basis of specific identification of investments based on the trade date.

The following table summarizes the carrying value of our investments that have been non-income producing for 12 consecutive months:

	December 31,	
	2022	2021
	(Dollars in thousands)	
Fixed maturity securities, available for sale	$ 10,708	$ 4,118
Mortgage loans on real estate	1,483	—
	$ 12,191	$ 4,118

We review and analyze all investments on an ongoing basis for changes in market interest rates and credit deterioration. This review process includes analyzing our ability to recover the amortized cost basis of each investment that has a fair value that is materially lower than its amortized cost and requires a high degree of management judgment and involves uncertainty. The evaluation of securities for credit loss is a quantitative and qualitative process, which is subject to risks and uncertainties.

We have a policy and process to identify securities that could potentially have credit loss. This process involves monitoring market events and other items that could impact issuers. The evaluation includes but is not limited to such factors as:

- the extent to which the fair value has been less than amortized cost or cost;
- whether the issuer is current on all payments and all contractual payments have been made as agreed;
- the remaining payment terms and the financial condition and near-term prospects of the issuer;
- the lack of ability to refinance due to liquidity problems in the credit market;
- the fair value of any underlying collateral;
- the existence of any credit protection available;
- our intent to sell and whether it is more likely than not we would be required to sell prior to recovery for debt securities;
- consideration of rating agency actions; and
- changes in estimated cash flows of mortgage and asset backed securities.

We determine whether an allowance for credit loss should be established for debt securities by assessing pertinent facts and circumstances surrounding each security. Where the decline in fair value of debt securities is attributable to changes in market interest rates or to factors such as market volatility, liquidity and spread widening, and we anticipate recovery of all contractual or expected cash flows, we do not consider these investments to have credit loss because we do not intend to sell these investments and it is not more likely than not we will be required to sell these investments before a recovery of amortized cost, which may be maturity.

If we intend to sell a debt security or if it is more likely than not that we will be required to sell a debt security before recovery of its amortized cost basis, credit loss has occurred and the difference between amortized cost and fair value will be recognized as a loss in operations.

If we do not intend to sell and it is not more likely than not we will be required to sell the debt security but also do not expect to recover the entire amortized cost basis of the security, a credit loss would be recognized in operations for the amount of the expected credit loss. We determine the amount of expected credit loss by calculating the present value of the cash flows expected to be collected discounted at each security's acquisition yield based on our consideration of whether the security was of high credit quality at the time of acquisition. The difference between the present value of expected future cash flows and the amortized cost basis of the security is the amount of credit loss recognized in operations. The recognized credit loss is limited to the total unrealized loss on the security (i.e., the fair value floor).

The determination of the credit loss component of a mortgage backed security is based on a number of factors. The primary consideration in this evaluation process is the issuer's ability to meet current and future interest and principal payments as contractually stated at time of purchase. Our review of these securities includes an analysis of the cash flow modeling under various default scenarios considering independent third party benchmarks, the seniority of the specific tranche within the structure of the security, the composition of the collateral and the actual default, loss severity and prepayment experience exhibited. With the input of third party assumptions for default projections, loss severity and prepayment expectations, we evaluate the cash flow projections to determine whether the security is performing in accordance with its contractual obligation.

We utilize models from a leading structured product software specialist serving institutional investors. These models incorporate each security's seniority and cash flow structure. In circumstances where the analysis implies a potential for principal loss at some point in the future, we use the "best estimate" cash flow projection discounted at the security's effective yield at acquisition to determine the amount of our potential credit loss associated with this security. The discounted expected future cash flows equates to our expected recovery value. Any shortfall of the expected recovery when compared to the amortized cost of the security will be recorded as credit loss.

The determination of the credit loss component of a corporate bond is based on the underlying financial performance of the issuer and their ability to meet their contractual obligations. Considerations in our evaluation include, but are not limited to, credit rating changes, financial statement and ratio analysis, changes in management, significant changes in credit spreads, breaches of financial covenants and a review of the economic outlook for the industry and markets in which they trade. In circumstances where an issuer appears unlikely to meet its future obligation, an estimate of credit loss is determined. Credit loss is calculated using default probabilities as derived from the credit default swaps markets in conjunction with recovery rates derived from independent third party analysis or a best estimate of credit loss. This credit loss rate is then incorporated into a present value calculation based on an expected principal loss in the future discounted at the yield at the date of purchase and compared to amortized cost to determine the amount of credit loss associated with the security.

We do not measure a credit loss allowance on accrued interest receivable as we write off any accrued interest receivable balance to net investment income in a timely manner when we have concerns regarding collectability.

Amounts on available for sale fixed maturities that are deemed to be uncollectible are written off and removed from the allowance for credit loss. A write-off may also occur if we intend to sell a security or when it is more likely than not we will be required to sell the security before the recovery of its amortized cost.

The following table provides a rollforward of the allowance for credit loss:

	Year Ended December 31, 2022			
	States, Municipalities and Territories	Corporate Securities	Residential Mortgage Backed Securities	Total
	(Dollars in thousands)			
Beginning balance	$ 2,776	$ —	$ 70	$ 2,846
Additions for credit losses not previously recorded	—	3,825	1,070	4,895
Change in allowance on securities with previous allowance	(2,776)	(611)	(579)	(3,966)
Reduction for securities with credit losses due to intent to sell	—	—	—	—
Reduction for securities sold during the period	—	—	(428)	(428)
Write-offs charged against the allowance	—	—	—	—
Recoveries of amounts previously written off	—	—	—	—
Ending balance	$ —	$ 3,214	$ 133	$ 3,347

	Year Ended December 31, 2021			
	States, Municipalities and Territories	Corporate Securities	Residential Mortgage Backed Securities	Total
	(Dollars in thousands)			
Beginning balance	$ 2,844	$ 60,193	$ 1,734	$ 64,771
Additions for credit losses not previously recorded	—	705	407	1,112
Change in allowance on securities with previous allowance	(68)	443	(857)	(482)
Reduction for securities with credit losses due to intent to sell	—	(209)	—	(209)
Reduction for securities sold during the period	—	(50,758)	—	(50,758)
Write-offs charged against the allowance	—	(10,032)	—	(10,032)
Recoveries of amounts previously written off	—	(342)	(1,214)	(1,556)
Ending balance	$ 2,776	$ —	$ 70	$ 2,846

At December 31, 2022 and 2021, cash and invested assets of $51.0 billion and $49.3 billion, respectively, were on deposit with state agencies to meet regulatory requirements including deposits for the benefit of all policyholders. There are no restrictions on these assets.

At December 31, 2022 and 2021, we had no investment in any person or its affiliates, other than U.S. Government and its agencies, that exceeded 10% of stockholders' equity.

4. Mortgage Loans on Real Estate

Our financing receivables consist of the following three portfolio segments: commercial mortgage loans, agricultural mortgage loans and residential mortgage loans. Our mortgage loan portfolios are summarized in the following table. There were commitments outstanding of $420.2 million at December 31, 2022.

	December 31,	
	2022	2021
	(Dollars in thousands)	
Commercial mortgage loans:		
Principal outstanding	$ 3,560,903	$ 3,633,131
Deferred fees and costs, net	(6,345)	(4,629)
Amortized cost	3,554,558	3,628,502
Valuation allowance	(22,428)	(17,926)
Commercial mortgage loans, carrying value	3,532,130	3,610,576
Agricultural mortgage loans:		
Principal outstanding	567,630	408,135
Deferred fees and costs, net	(1,667)	(1,136)
Amortized cost	565,963	406,999
Valuation allowance	(1,021)	(519)
Agricultural mortgage loans, carrying value	564,942	406,480
Residential mortgage loans:		
Principal outstanding	2,807,652	1,652,910
Deferred fees and costs, net	1,909	1,468
Unamortized discounts and premiums, net	55,917	22,143
Amortized cost	2,865,478	1,676,521
Valuation allowance	(13,523)	(5,579)
Residential mortgage loans, carrying value	2,851,955	1,670,942
Mortgage loans, carrying value	$ 6,949,027	$ 5,687,998

Our commercial mortgage loan portfolio consists of loans collateralized by the related properties and diversified as to property type, location and loan size. Our lending policies establish limits on the amount that can be loaned to one borrower and other criteria to attempt to reduce the risk of default. The commercial mortgage loan portfolio is summarized by geographic region and property type as follows:

	December 31,			
	2022		2021	
	Principal	Percent	Principal	Percent
	(Dollars in thousands)			
Geographic distribution				
East	$ 502,659	14.1 %	$ 614,406	16.9 %
Middle Atlantic	280,993	7.9 %	293,494	8.1 %
Mountain	416,307	11.7 %	452,818	12.5 %
New England	73,631	2.1 %	60,172	1.6 %
Pacific	858,812	24.1 %	863,879	23.8 %
South Atlantic	934,007	26.2 %	785,679	21.6 %
West North Central	205,568	5.8 %	235,864	6.5 %
West South Central	288,926	8.1 %	326,819	9.0 %
	$ 3,560,903	100.0 %	$ 3,633,131	100.0 %
Property type distribution				
Office	$ 378,713	10.6 %	$ 315,374	8.7 %
Medical Office	10,265	0.3 %	10,827	0.3 %
Retail	896,351	25.2 %	1,016,101	28.0 %
Industrial/Warehouse	866,623	24.3 %	924,779	25.4 %
Apartment	912,984	25.6 %	864,580	23.8 %
Hotel	285,271	8.0 %	283,500	7.8 %
Mixed Use/Other	210,696	6.0 %	217,970	6.0 %
	$ 3,560,903	100.0 %	$ 3,633,131	100.0 %

Our agricultural mortgage loan portfolio consists of loans with an outstanding principal balance of $567.6 million and $408.1 million as of December 31, 2022 and 2021, respectively. These loans are collateralized by agricultural land and are diversified as to location within the United States. Our residential mortgage loan portfolio consists of loans with an outstanding principal balance of $2.8 billion and $1.7 billion as of December 31, 2022 and 2021, respectively. These loans are collateralized by the related properties and diversified as to location within the United States.

Mortgage loans on real estate are generally reported at cost adjusted for amortization of premiums and accrual of discounts, computed using the interest method and net of valuation allowances. Interest income is accrued on the principal amount of the loan based on the loan's contractual interest rate. Interest income is included in Net investment income on our Consolidated Statements of Operations. Accrued interest receivable, which was $58.2 million and $37.0 million as of December 31, 2022 and 2021, respectively, is included in Accrued investment income on our consolidated balance sheets.

Loan Valuation Allowance

We establish a valuation allowance to provide for the risk of credit losses inherent in our mortgage loan portfolios. The valuation allowance is maintained at a level believed adequate by management to absorb estimated expected credit losses. The valuation allowance is based on amortized cost, which excludes accrued interest receivable. We do not measure a credit loss allowance on accrued interest receivable as we write off any uncollectible accrued interest receivable balances to net investment income in a timely manner. We did not charge off any uncollectible accrued interest receivable on our commercial, agricultural or residential mortgage loan portfolios for the years ended December 31, 2022 or 2021, respectively.

The valuation allowances for each of our mortgage loan portfolios are estimated by deriving probability of default and recovery rate assumptions based on the characteristics of the loans in each portfolio, historical economic data and loss information, and current and forecasted economic conditions. Key loan characteristics impacting the estimate for our commercial mortgage loan portfolio include the current state of the borrower's credit quality, which considers factors such as loan-to-value ("LTV") and debt service coverage ("DSC") ratios, loan performance, underlying collateral type, delinquency status, time to maturity, and original credit scores. Key loan characteristics impacting the estimate for our agricultural and residential mortgage loan portfolios include the current state of the borrowers' credit quality, delinquency status, time to maturity and original credit scores.

The following table represents a rollforward of the valuation allowance on our mortgage loan portfolios:

	Year Ended December 31, 2022			
	Commercial	Agricultural	Residential	Total
	(Dollars in thousands)			
Beginning allowance balance	$ (17,926)	$ (519)	$ (5,579)	$ (24,024)
Charge-offs	501	—	—	501
Recoveries	1,677	—	—	1,677
Change in provision for credit losses	(6,680)	(502)	(7,944)	(15,126)
Ending allowance balance	$ (22,428)	$ (1,021)	$ (13,523)	$ (36,972)

	Year Ended December 31, 2021			
	Commercial	Agricultural	Residential	Total
	(Dollars in thousands)			
Beginning allowance balance	$ (25,529)	$ (2,130)	$ (3,370)	$ (31,029)
Charge-offs	—	—	—	—
Recoveries	—	—	—	—
Change in provision for credit losses	7,603	1,611	(2,209)	7,005
Ending allowance balance	$ (17,926)	$ (519)	$ (5,579)	$ (24,024)

Charge-offs include allowances that have been established on loans that were satisfied either by taking ownership of the collateral or by some other means such as discounted pay-off or loan sale. When ownership of the property is taken it is recorded at the lower of the loan's carrying value or the property's fair value (based on appraised values) less estimated costs to sell. The real estate owned is recorded as a component of Real estate investments and the loan is recorded as fully paid, with any allowance for credit loss that has been established charged off. Fair value of the real estate is determined by third party appraisal. There is no real estate in which ownership of the property was taken to satisfy an outstanding loan held in Real estate investments as of December 31, 2022 or December 31, 2021. Recoveries are situations where we have received a payment from the borrower in an amount greater than the carrying value of the loan (principal outstanding less specific allowance).

Credit Quality Indicators

We evaluate the credit quality of our commercial and agricultural mortgage loans by analyzing LTV and DSC ratios and loan performance. We evaluate the credit quality of our residential mortgage loans by analyzing loan performance.

LTV and DSC ratios for our commercial mortgage loans are originally calculated at the time of loan origination and are updated annually for each loan using information such as rent rolls, assessment of lease maturity dates and property operating statements, which are reviewed in the context of current leasing and in place rents compared to market leasing and market rents. A DSC ratio of less than 1.0 indicates that a property's operations do not generate sufficient income to cover debt payments. An LTV ratio in excess of 100% indicates the unpaid loan amount exceeds the value of the underlying collateral. All of our commercial mortgage loans that have a debt service coverage ratio of less than 1.0 are performing under the original contractual loan terms at December 31, 2022 and 2021.

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The amortized cost of our commercial mortgage loan portfolio by LTV and DSC ratios based on the most recent information collected was as follows at December 31, 2022 and 2021 (by year of origination):

	2022		2021		2020		2019		2018		Prior		Total	
As of December 31, 2022:	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**
Debt Service Coverage Ratio:							**(Dollars in thousands)**							
Greater than or equal to 1.5	$ 249,328	63 %	$ 257,746	61 %	$ 421,391	57 %	$ 429,596	58 %	$ 325,117	53 %	$ 813,319	44 %	$ 2,496,497	53 %
Greater than or equal to 1.2 and less than 1.5	6,488	70 %	123,038	55 %	46,804	58 %	115,977	66 %	67,642	67 %	145,703	60 %	505,652	62 %
Greater than or equal to 1.0 and less than 1.2	170,059	52 %	211,684	43 %	18,144	79 %	39,396	73 %	10,348	76 %	58,021	47 %	507,652	51 %
Less than 1.0	—	— %	—	— %	—	— %	6,107	64 %	13,025	70 %	25,625	65 %	44,757	66 %
Total	$ 425,875	59 %	$ 592,468	53 %	$ 486,339	58 %	$ 591,076	61 %	$ 416,132	57 %	$ 1,042,668	47 %	$ 3,554,558	54 %

	2021		2020		2019		2018		2017		Prior		Total	
As of December 31, 2021:	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**
Debt Service Coverage Ratio:							**(Dollars in thousands)**							
Greater than or equal to 1.5	$ 260,623	64 %	$ 454,828	60 %	$ 464,059	61 %	$ 344,170	58 %	$ 246,854	52 %	$ 758,494	45 %	$ 2,529,028	55 %
Greater than or equal to 1.2 and less than 1.5	12,836	67 %	58,960	66 %	128,301	70 %	89,293	66 %	135,818	66 %	129,833	57 %	555,041	65 %
Greater than or equal to 1.0 and less than 1.2	318,636	45 %	17,762	82 %	69,684	72 %	11,937	75 %	6,343	60 %	42,125	58 %	466,487	53 %
Less than 1.0	—	— %	3,289	61 %	26,147	63 %	14,051	76 %	13,385	73 %	21,074	54 %	77,946	65 %
Total	$ 592,095	54 %	$ 534,839	61 %	$ 688,191	64 %	$ 459,451	60 %	$ 402,400	58 %	$ 951,526	47 %	$ 3,628,502	56 %

LTV and DSC ratios for our agricultural mortgage loans are calculated at the time of loan origination and are evaluated annually for each loan using land value averages. A DSC ratio of less than 1.0 indicates that a property's operations do not generate sufficient income to cover debt payments. An LTV ratio in excess of 100% indicates the unpaid loan amount exceeds the value of the underlying collateral. All of our agricultural mortgage loans that have a debt service coverage ratio of less than 1.0 are performing under the original contractual loan terms at December 31, 2022 and 2021.

The amortized cost of our agricultural mortgage loan portfolio by LTV and DSC ratios based on the most recent information collected was as follows at December 31, 2022 and 2021 (by year of origination):

	2022		2021		2020		2019		2018		Prior		Total	
As of December 31, 2022:	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**
Debt Service Coverage Ratio:							**(Dollars in thousands)**							
Greater than or equal to 1.5	$ 85,367	47 %	$ 84,186	46 %	$ 97,143	41 %	$ —	— %	$ —	— %	$ —	— %	$ 266,696	45 %
Greater than or equal to 1.2 and less than 1.5	107,856	54 %	67,630	52 %	61,103	32 %	—	— %	—	— %	—	— %	236,589	48 %
Greater than or equal to 1.0 and less than 1.2	3,124	56 %	8,825	38 %	3,125	25 %	—	— %	—	— %	—	— %	15,074	39 %
Less than 1.0	—	— %	—	— %	7,975	35 %	5,629	41 %	34,000	31 %	—	— %	47,604	33 %
Total	$ 196,347	51 %	$ 160,641	48 %	$ 169,346	37 %	$ 5,629	41 %	$ 34,000	31 %	$ —	— %	$ 565,963	45 %

	2021		2020		2019		2018		2017		Prior		Total	
As of December 31, 2021:	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**	**Amortized Cost**	**Average LTV**
Debt Service Coverage Ratio:							**(Dollars in thousands)**							
Greater than or equal to 1.5	$ 62,548	54 %	$ 80,919	56 %	$ 11,645	49 %	$ 25,000	11 %	$ —	— %	$ —	— %	$ 180,112	49 %
Greater than or equal to 1.2 and less than 1.5	95,738	55 %	102,958	43 %	3,335	22 %	—	— %	—	— %	—	— %	202,031	48 %
Greater than or equal to 1.0 and less than 1.2	7,478	44 %	4,092	36 %	4,734	50 %	—	— %	—	— %	—	— %	16,304	44 %
Less than 1.0	—	— %	8,552	59 %	—	— %	—	— %	—	— %	—	— %	8,552	59 %
Total	$ 165,764	54 %	$ 196,521	49 %	$ 19,714	45 %	$ 25,000	11 %	$ —	— %	$ —	— %	$ 406,999	48 %

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

We closely monitor loan performance for our commercial, agricultural and residential mortgage loan portfolios. Aging of financing receivables is summarized in the following table (by year of origination):

	2022	2021	2020	2019	2018	Prior	Total
As of December 31, 2022:				(Dollars in thousands)			
Commercial mortgage loans							
Current	$ 425,875	$ 592,468	$ 486,339	$ 591,076	$ 416,132	$ 1,042,668	$ 3,554,558
30 - 59 days past due	—	—	—	—	—	—	—
60 - 89 days past due	—	—	—	—	—	—	—
Over 90 days past due	—	—	—	—	—	—	—
Total commercial mortgage loans	$ 425,875	$ 592,468	$ 486,339	$ 591,076	$ 416,132	$ 1,042,668	$ 3,554,558
Agricultural mortgage loans							
Current	$ 196,347	$ 160,641	$ 166,211	$ 5,629	$ 34,000	$ —	$ 562,828
30 - 59 days past due	—	—	—	—	—	—	—
60 - 89 days past due	—	—	—	—	—	—	—
Over 90 days past due	—	—	3,135	—	—	—	3,135
Total agricultural mortgage loans	$ 196,347	$ 160,641	$ 169,346	$ 5,629	$ 34,000	$ —	$ 565,963
Residential mortgage loans							
Current	$ 1,915,169	$ 595,363	$ 211,119	$ 27,483	$ 1,710	$ 417	$ 2,751,261
30 - 59 days past due	39,179	8,238	13,073	1,960	—	—	62,450
60 - 89 days past due	6,668	7,165	3,034	57	—	—	16,924
Over 90 days past due	9,702	14,068	6,515	1,762	2,796	—	34,843
Total residential mortgage loans	$ 1,970,718	$ 624,834	$ 233,741	$ 31,262	$ 4,506	$ 417	$ 2,865,478

	2021	2020	2019	2018	2017	Prior	Total
As of December 31, 2021:				(Dollars in thousands)			
Commercial mortgage loans							
Current	$ 592,095	$ 534,839	$ 688,191	$ 459,451	$ 402,400	$ 951,526	$ 3,628,502
30 - 59 days past due	—	—	—	—	—	—	—
60 - 89 days past due	—	—	—	—	—	—	—
Over 90 days past due	—	—	—	—	—	—	—
Total commercial mortgage loans	$ 592,095	$ 534,839	$ 688,191	$ 459,451	$ 402,400	$ 951,526	$ 3,628,502
Agricultural mortgage loans							
Current	$ 165,764	$ 196,521	$ 19,714	$ 25,000	$ —	$ —	$ 406,999
30 - 59 days past due	—	—	—	—	—	—	—
60 - 89 days past due	—	—	—	—	—	—	—
Over 90 days past due	—	—	—	—	—	—	—
Total agricultural mortgage loans	$ 165,764	$ 196,521	$ 19,714	$ 25,000	$ —	$ —	$ 406,999
Residential mortgage loans							
Current	$ 1,092,438	$ 454,532	$ 67,380	$ 16,898	$ 751	$ —	$ 1,631,999
30 - 59 days past due	10,284	12,363	11,373	427	—	—	34,447
60 - 89 days past due	1,838	1,090	102	—	—	—	3,030
Over 90 days past due	679	5,459	907	—	—	—	7,045
Total residential mortgage loans	$ 1,105,239	$ 473,444	$ 79,762	$ 17,325	$ 751	$ —	$ 1,676,521

Commercial, agricultural and residential mortgage loans are considered nonperforming when they become 90 days or more past due. When loans become nonperforming, we place them on non-accrual status and discontinue recognizing interest income. If payments are received on a nonperforming loan, interest income is recognized to the extent it would have been recognized if normal principal and interest would have been received timely. If payments are received to bring a nonperforming loan back to less than 90 days past due, we will resume accruing interest income on that loan. There were 59 loans in non-accrual status at December 31, 2022 and 13 loans in non-accrual status at December 31, 2021. During the years ended December 31, 2022 and 2021, we recognized interest income of $670 thousand and $36 thousand, respectively, on loans which were in non-accrual status at the respective period end. During the year ended December 31, 2020 we recognized no interest income on loans which were in non-accrual status at the respective period end.

Troubled Debt Restructuring

A Troubled Debt Restructuring ("TDR") is a situation where we have granted a concession to a borrower for economic or legal reasons related to the borrower's financial difficulties that we would not otherwise consider. A mortgage loan that has been granted new terms, including workout terms as described previously, would be considered a TDR if it meets conditions that would indicate a borrower is experiencing financial difficulty and the new terms constitute a concession on our part. We analyze all loans where we have agreed to workout terms and all loans that we have refinanced to determine if they meet the definition of a TDR. We consider the following factors in determining whether or not a borrower is experiencing financial difficulty:

- borrower is in default,
- borrower has declared bankruptcy,
- there is growing concern about the borrower's ability to continue as a going concern,
- borrower has insufficient cash flows to service debt,
- borrower's inability to obtain funds from other sources, and
- there is a breach of financial covenants by the borrower.

If the borrower is determined to be in financial difficulty, we consider the following conditions to determine if the borrower is granted a concession:

- assets used to satisfy debt are less than our recorded investment,
- interest rate is modified,
- maturity date extension at an interest rate less than market rate,
- capitalization of interest,
- delaying principal and/or interest for a period of three months or more, and
- partial forgiveness of the balance or charge-off.

Mortgage loan workouts, refinances or restructures that are classified as TDRs are individually evaluated and measured for impairment. There were no mortgage loans that we determined to be a TDR at December 31, 2022 and 2021, respectively.

5. Variable Interest Entities

We have relationships with various types of entities which may be VIEs. Certain VIEs are consolidated in our financial results. See *Note 1 - Significant Accounting Policies* for further details on our consolidation accounting policies.

Consolidated Variable Interest Entities

We are invested in four investment company real estate limited partnerships which own various limited liability companies that invest in residential real estate properties and one real estate limited liability company that invests in a commercial real estate property. These entities are VIE's as the legal entities equity investors have insufficient equity at risk and lack of power to direct the activities that most significantly impact the economic performance. We determined we are the primary beneficiary as a result of our power to control the entities through our significant ownership. Due to the nature of the investment company real estate investments, the investments balance will fluctuate based on changes in the fair value of the properties as well as when purchases and sales of properties are made. The investment balance in the commercial real estate property is held at depreciated cost, and is expected to decrease over time.

We are invested in two limited liability companies that invest in operating entities which hold multifamily real estate properties. The entity is a VIE and we have determined we are the primary beneficiary as a result of our power to control the entity through our significant ownership. The investment balance, which represents an equity interest in the limited liability company, fluctuates based on changes in the fair value of the properties and the performance of the operating entities.

We are invested in two limited partnership feeder funds which each invest in a separate limited partnership fund. One fund holds infrastructure credit assets and the other holds tech-centric middle-market loans. In both cases, the feeder fund limited partnerships are VIEs, and we determined we are the primary beneficiary as a result of our significant ownership of the limited partnerships and our obligation to absorb losses or receive benefits from the VIEs. We have consolidated the assets and liabilities of the limited partnerships, which primarily consist of equity interests in limited partnerships.

The carrying amounts of our consolidated VIE assets, which can only be used to settle obligations of the consolidated VIEs, and liabilities of consolidated VIEs for which creditors do not have recourse were as follows:

	December 31,			
	2022		2021	
	Total Assets	Total Liabilities	Total Assets	Total Liabilities
	(Dollars in thousands)			
Real estate investments	$ 1,095,267	$ 78,244	$ 363,229	$ 20,168
Real estate limited liability companies	66,258	287	—	—
Limited partnership funds	620,741	113	168,711	—
	$ 1,782,266	$ 78,644	$ 531,940	$ 20,168

Unconsolidated Variable Interest Entities

We provided debt funding to various special purpose vehicles, which are used to acquire and hold various types of loans or receivables. These legal entities are deemed VIEs because there is insufficient equity at risk. We have determined we are not the primary beneficiary as we do not control the activities that most significantly impact the economic performance of the VIEs. Our investments in these VIEs are reported in Fixed maturity securities, available for sale in the Consolidated Balance Sheets.

In 2021, we provided funding to a limited partnership which purchased a residential business purpose loan originator. The limited partnership was deemed a VIE based on insufficient equity at risk, however, we are not the primary beneficiary due to our lack of control of the limited partnership. In Q4 2022, as a result of equity capital raised from third party investors, the debt funding was repaid to us. We have reassessed the VIE conclusion and concluded the limited partnership no longer meets the definition of a variable interest entity. The unconsolidated VIE disclosures are no longer applicable. The investment will be accounted for as an equity method investment and still be reported in Limited partnerships and limited liability companies in the Consolidated Balance Sheets.

The carrying value and maximum loss exposure for our unconsolidated VIEs were as follows:

	December 31,			
	2022		2021	
	Asset Carrying Value	Maximum Exposure to Loss	Asset Carrying Value	Maximum Exposure to Loss
	(Dollars in thousands)			
Fixed maturity securities, available for sale	$ 1,178,110	$ 1,178,110	$ 459,681	$ 459,681
Other investments	—	—	345,000	345,000

6. Derivative Instruments

We use derivative instruments to manage risks. We have derivatives that are designated as hedging instruments and others that are not designated as hedging instruments. Any change in the fair value of the derivatives is recognized immediately in the Consolidated Statements of Operations.

The notional and fair values of our derivative instruments, including derivative instruments embedded in fixed index annuity contracts, presented in the Consolidated Balance Sheets are as follows:

	December 31, 2022		December 31, 2021	
	Notional	Fair Value	Notional	Fair Value
	(Dollars in thousands)			
Derivatives designated as hedging instruments				
Assets				
Derivative instruments				
Interest rate swaps	$ 408,369	$ 32,769	$ —	$ —
Derivatives not designated as hedging instruments				
Assets				
Derivative instruments				
Call options	$ 38,927,534	$ 397,789	$ 40,091,353	$ 1,276,574
Warrants	2,020	1,169	2,020	906
	$ 38,929,554	$ 398,958	$ 40,093,373	$ 1,277,480
Liabilities				
Policy benefit reserves - annuity products				
Fixed index annuities - embedded derivatives, net		$ 4,820,845		$ 7,964,961
Funds withheld for reinsurance liabilities				
Reinsurance related embedded derivative		(441,864)		(2,362)
		$ 4,378,981		$ 7,962,599

Derivatives Designated as Hedging Instruments

We use interest rate swaps that are designated and accounted for as fair value hedges to protect a portfolio of fixed-rate fixed maturity securities against changes in fair value due to changes in interest rates. Our interest rate swap contracts allow us to pay a fixed rate and receive a floating rate utilizing the Secured Overnight Financing Rate at specified intervals based on a notional amount. Interest rate swaps are carried at fair value and presented as Derivative instruments on the Consolidated Balance Sheets.

For derivative instruments that are designated and qualify as a fair value hedge, the gain or loss on the portion of the derivative instrument included in the assessment of hedge effectiveness and the offsetting gain or loss on the hedged item attributable to the hedged risk are recognized in the same line item in the Consolidated Statements of Operations. The change in unrealized gain or loss attributable to interest rate changes on the fixed maturity securities that are designated as part of the hedge are reclassified out of Accumulated other comprehensive income (loss) into Change in fair value of derivatives in the Consolidated Statements of Operations. The remaining change in unrealized gain or loss on the hedged item not associated with the risk being hedged is recognized as a component of Other comprehensive income.

The following represents the amortized cost and cumulative fair value hedging adjustments included in the hedged assets:

Line Item in the Consolidated Balance Sheets in Which Hedged Item is Included	Amortized Cost of Hedged Item		Cumulative Amount of Fair Value Basis Adjustment Gain (Loss)	
	December 31, 2022	December 31, 2021	December 31, 2022	December 31, 2021
	(Dollars in thousands)			
Fixed maturities, available for sale:				
Current hedging relationships	$ 389,060	$ —	$ (39,128)	$ —
Discontinued hedging relationships	1,594,736	—	(94,681)	—

The following represents a summary of the gains (losses) related to the derivatives and hedged items that qualify for fair value hedge accounting:

	Derivative	Hedged Item	Net	Amount Excluded: Recognized in Income Immediately
	(Dollars in thousands)			
For the year ended December 31, 2022				
Interest rate swaps	$ 215,587	$ (249,168)	$ (33,581)	$ 13,957
For the year ended December 31, 2021				
Interest rate swaps	$ —	$ —	$ —	$ —
For the year ended December 31, 2020				
Interest rate swaps	$ —	$ —	$ —	$ —

Derivatives Not Designated as Hedging Instruments

We have fixed index annuity products that guarantee the return of principal to the policyholder and credit interest based on a percentage of the gain in a specified market index. When fixed index annuity deposits are received, a portion of the deposit is used to purchase derivatives consisting of call options on the applicable market indices to fund the index credits due to fixed index annuity policyholders. Substantially all such call options are one year options purchased to match the funding requirements of the underlying policies. The call options are marked to fair value with the change in fair value included as a component of revenues. The change in fair value of derivatives includes the gains or losses recognized at the expiration of the option term and the changes in fair value for open positions. On the respective anniversary dates of the index policies, the index used to compute the index credit is reset and we purchase new call options to fund the next index credit. We manage the cost of these purchases through the terms of our fixed index annuities, which permit us to change caps, participation rates, and/or asset fees, subject to guaranteed minimums on each policy's anniversary date. By adjusting caps, participation rates, or asset fees, we can generally manage option costs except in cases where the contractual features would prevent further modifications.

The changes in fair value of derivatives not designated as hedging instruments included in the Consolidated Statements of Operations are as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Change in fair value of derivatives:			
Call options	$ (1,118,768)	$ 1,347,925	$ 34,604
Warrants	264	810	—
Interest rate swaps	13,957	—	—
Interest rate caps	—	—	62
	$ (1,104,547)	$ 1,348,735	$ 34,666
Change in fair value of embedded derivatives:			
Fixed index annuities - embedded derivatives	$ (2,561,676)	$ (876,803)	$ (1,922,085)
Other changes in difference between policy benefit reserves computed using derivative accounting vs. long-duration contracts accounting	648,580	520,863	635,298
Reinsurance related embedded derivative	(439,502)	(2,362)	—
	$ (2,352,598)	$ (358,302)	$ (1,286,787)

The amounts presented as "Other changes in difference between policy benefit reserves computed using derivative accounting vs. long-duration contracts accounting" represents the total change in the difference between policy benefit reserves for fixed index annuities computed under the derivative accounting standard and the long-duration contracts accounting standard at each balance sheet date, less the change in fair value of our fixed index annuities embedded derivatives that is presented as Level 3 liabilities in *Note 2 - Fair Values of Financial Instruments*.

Derivative Exposure

We attempt to mitigate potential risk of loss due to the nonperformance of the counterparties through a regular monitoring process which evaluates the program's effectiveness. We do not purchase derivative instruments that would require payment or collateral to another institution and our derivative instruments do not contain counterparty credit-risk-related contingent features. We are exposed to risk of loss in the event of nonperformance by the counterparties and, accordingly, we purchase our derivative instruments from multiple counterparties and evaluate the creditworthiness of all counterparties prior to purchase of the contracts. All non-exchange traded derivative instruments have been purchased from nationally recognized financial institutions with a Standard and Poor's credit rating of A- or higher at the time of purchase and the maximum credit exposure to any single counterparty is subject to concentration limits. Both our call options and interest rate swaps fall under the same credit support agreements with each counterparty that allow us to request the counterparty to provide collateral to us when the fair value of our exposure to the counterparty exceeds specified amounts.

The notional amount and fair value of our call options and interest rate swaps by counterparty and each counterparty's current credit rating are as follows:

			December 31,			
			2022		2021	
Counterparty	Credit Rating (S&P)	Credit Rating (Moody's)	Notional Amount	Fair Value	Notional Amount	Fair Value
			(Dollars in thousands)			
Bank of America	A+	Aa2	$ 3,574,125	$ 26,080	$ 3,556,256	$ 99,229
Barclays	A	A1	3,686,896	39,657	4,213,658	157,865
Canadian Imperial Bank of Commerce	A+	Aa2	2,707,734	34,218	3,956,329	141,540
Citibank, N.A.	A+	Aa3	3,748,162	29,873	3,190,833	115,860
Credit Suisse	A-	A3	2,086,470	20,691	3,716,868	113,295
J.P. Morgan	A+	Aa2	6,501,103	69,006	4,482,832	105,899
Morgan Stanley	A+	Aa3	2,957,389	38,470	2,223,743	47,950
Royal Bank of Canada	AA-	A2	4,378,132	58,026	3,567,972	100,472
Societe Generale	A	A1	2,099,081	17,157	2,548,072	86,494
Truist	A	A2	1,960,787	32,885	2,547,808	94,924
Wells Fargo	A+	Aa2	5,436,824	61,840	5,820,381	206,403
Exchange traded			199,200	2,655	266,601	6,643
			$ 39,335,903	$ 430,558	$ 40,091,353	$ 1,276,574

As of December 31, 2022 and 2021, we held $0.4 billion and $1.3 billion, respectively, of cash and cash equivalents and other investments from counterparties for derivative collateral, which is included in Other liabilities on our Consolidated Balance Sheets. This derivative collateral limits the maximum amount of economic loss due to credit risk that we would incur if the counterparties failed completely to perform according to the terms of the contracts to $3.3 million and $8.5 million at December 31, 2022 and 2021, respectively.

The future index credits on our fixed index annuities are treated as a "series of embedded derivatives" over the expected life of the applicable contract. We do not purchase call options to fund the index liabilities which may arise after the next policy anniversary date. We must value both the call options and the related forward embedded options in the policies at fair value.

We cede certain fixed index annuity product liabilities to third party reinsurers on a modified coinsurance basis which results in an embedded derivative. The obligation to pay the total return on the assets supporting liabilities associated with this reinsurance agreement represents a total return swap. The fair value of the total return swap is based on the unrealized gains and losses of the underlying assets held in the modified coinsurance portfolio. The reinsurance related embedded derivative is reported in Funds withheld for reinsurance liabilities on the Consolidated Balance Sheets and the change in the fair value of the embedded derivative is reported in Change in fair value of embedded derivatives on the Consolidated Statements of Operations. See *Note 8 – Reinsurance and Policy Provisions* for further discussion on these reinsurance agreements.

7. Deferred Policy Acquisition Costs, Deferred Sales Inducements and Liability for Lifetime Income Benefit Riders

Policy acquisition costs deferred and amortized are as follows:

	December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Balance at beginning of year	$ 2,222,769	$ 2,225,199	$ 3,033,649
Costs deferred during the year:			
Commissions	194,856	303,192	251,428
Policy issue costs	3,767	4,665	3,725
Amortization:			
Amortization	(558,447)	(313,990)	(2,769)
Impact of unlocking	(56,853)	45,662	(646,785)
Effect of net unrealized gains/losses	1,944,039	299,478	(414,049)
Write-off related to in-force ceded reinsurance	(188,056)	(341,437)	—
Balance at end of year	$ 3,562,075	$ 2,222,769	$ 2,225,199

Sales inducements deferred and amortized are as follows:

	December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Balance at beginning of year	$ 1,546,073	$ 1,448,375	$ 2,042,060
Costs deferred during the year	107,691	95,160	93,610
Amortization:			
Amortization	(362,866)	(197,799)	(10,063)
Impact of unlocking	(45,682)	45,107	(428,101)
Effect of net unrealized gains/losses	1,348,134	155,230	(249,131)
Balance at end of year	$ 2,593,350	$ 1,546,073	$ 1,448,375

The following table presents a rollforward of the liability for lifetime income benefit riders (net of coinsurance ceded):

	December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Balance at beginning of year	$ 2,794,629	$ 2,485,123	$ 1,670,750
Benefit expense accrual	387,821	206,180	311,211
Impact of unlocking	(53,042)	243,658	285,825
Effect of net unrealized gains/losses	(996,876)	(101,848)	217,337
Reduction related to in-force ceded reinsurance	(403,406)	(38,484)	—
Claim payments	—	—	—
Balance at end of year	$ 1,729,126	$ 2,794,629	$ 2,485,123

We periodically update the key assumptions used in the calculation of amortization of deferred policy acquisition costs and deferred sales inducements retrospectively through an unlocking process when estimates of current or future gross profits/margins (including the impact of realized investment gains and losses) to be realized from a group of products are revised. In addition, we periodically update the assumptions used in determining the liability for lifetime income benefit riders.

We review these assumptions quarterly and as a result of these reviews, we made updates to assumptions in 2022, 2021 and 2020.

During 2022 and 2021, American Equity Life entered into reinsurance agreements which ceded in-force fixed index annuity product liabilities. As a result, there was a write-off of deferred acquisition costs and a reduction of the liability for lifetime income benefit riders associated with the blocks of in-force liabilities ceded under the agreements. See *Note 8 - Reinsurance and Policy Provisions* for further discussion of these reinsurance agreements.

2022 Assumption Updates

The most significant assumption updates made in 2022 were to investment spread assumptions, including the net investment earned rate and crediting rate on policies, lapse rate and partial withdrawal assumptions, and lifetime income benefit rider utilization assumptions.

We updated our assumption for investment spread for American Equity Life to remain steady at 2.60% through an eight-year reversion period. We increased our long-term net investment earned rate assumption by 40 basis points with an assumption of 4.25% in the near term increasing to 5.00% over the eight-year reversion period, and we increased our long-term crediting/discount rate assumption by 30 basis points with an assumption of 1.65% in the near term increasing to 2.40% over the eight-year reversion period. In addition, we adjusted the grading of the discount rate assumption in the embedded derivative calculation. This change results in an increase in expected future gross profits and therefore a slight increase in the deferred policy acquisition costs and deferred sales inducements balances. This also results in a decrease in the liability for lifetime income benefit riders due to a higher discount rate.

We updated lapse rate and partial withdrawal assumptions based on actual historical experience. We refreshed lapse tables based on 5 years of lapse experience and implemented a 1% lapse floor. For policies with a lifetime income benefit rider that does not charge a fee, we increased the lapse rates. For policies with a lifetime income benefit rider that has been utilized, we decreased the lapse rates. We expanded our partial withdrawal assumptions to include scalars in our assumptions during the surrender charge period, shock period, and post-shock period. This resulted in partial withdrawals extending beyond the surrender charge period. The net impact of the lapse rate and partial withdrawal assumptions resulted in a decrease in expected future gross profits and a decrease in the deferred policy acquisition costs and deferred sales inducements balances. The net impact of these changes resulted in an increase in the liability for lifetime income benefit riders due to higher excess claims and lower gross profits.

We updated our lifetime income benefit rider utilization assumption structure to capture policyholder characteristics at a more granular level. This resulted in an increase in the number of policies utilizing and increased the excess claims. The impact of this change results in an increase in the liability for lifetime income benefit riders and an increase in the deferred policy acquisition costs and deferred sales inducements balances.

2021 Assumption Updates

The most significant assumption updates made in 2021 were to investment spread assumptions, including the net investment earned rate and crediting rate on policies, lifetime income benefit rider utilization assumptions, mortality assumptions, and lapse rate assumptions as discussed below.

Due to the continued low interest rate environment, we updated our assumption for investment spread for American Equity Life to 2.25% in the near term and increasing to 2.50% over an eight-year reversion period and our assumption for crediting/discount rate to 1.55% increasing to 2.10% over an eight-year reversion period. Prior to these assumption updates, our long-term assumption for aggregate investment spread was at 2.60% at then end of an eight-year reversion period, with a near term crediting/discount rate of 1.60% increasing to 2.10% over an eight-year reversion period. The assumption change to decrease aggregate investment spread resulted in lower expected future gross profits as compared to previous estimates and a decrease in the balances of deferred policy acquisition costs and deferred sales inducements.

We updated lapse rate and mortality assumptions based on historical experience. For certain annuity products without a lifetime income benefit rider, the lapse rate assumption was increased in more recent cohorts to reflect higher lapses on polices with a market value adjustment ("MVA") feature. For other annuity products with a lifetime income benefit rider, the population was bifurcated based on whether policies had utilized the rider. For those policies which had utilized the rider, the lapse rate assumption was decreased in later durations. The overall mortality assumption was lowered to reflect historical experience. The net impact of the updates to the lapse rate and mortality assumptions resulted in higher expected future gross profits as compared to previous estimates and an increase in the balances of deferred policy acquisition costs and deferred sales inducements. The net impact of the updates to lapse rate and mortality assumptions resulted in an increase in the liability for lifetime income benefit riders due to a greater amount of expected benefit payments in excess of account values.

We updated the lifetime income benefit rider utilization assumption based on historical experience. The ultimate utilization assumption was lowered for policies with a fee rider and certain policies with a no-fee rider. In addition, the utilization assumption was changed to reflect seasonality with higher utilization rates during the first quarter of each year. The net impact of the updates to the utilization assumption resulted in a decrease in the liability for lifetime income benefit riders due to a lower amount of expected benefits payments due to lower expected utilization. The net impact of the updates to the utilization assumption resulted in higher expected future gross profits as compared to previous estimates and an increase in the balances of deferred policy acquisition costs and deferred sales inducements.

2020 Assumption Updates

The most significant assumption updates made in 2020 were to investment spread assumptions, including the net investment earned rate and crediting rates on policies, as well as updates to lapse rate and partial withdrawal assumptions.

Due to the economic and low interest rate environments, we updated our assumption for aggregate investment spread to 2.40% in the near-term increasing to 2.60% over an eight-year reversion period and our assumption for crediting/discount rate to 1.60% increasing to 2.10% over an eight-year reversion period. Prior to these assumption updates, our long-term assumption for aggregate investment spread was steady

at 2.60%, with a near term crediting/discount rate of 1.90% increasing to 2.90% over a 20 year reversion period. The assumption update to decrease aggregate investment spread resulted in lower expected future gross profits as compared to previous estimates and a decrease in the balances of deferred policy acquisition costs and deferred sales inducements. The decrease in the crediting rate, which is used as the discount rate in the calculation of the liability for lifetime income benefit riders, resulted in an increase in the liability for lifetime income benefit riders.

We updated lapse rate and partial withdrawal assumptions based on actual historical experience. For certain annuity products without a lifetime income benefit rider, lapse rate and partial withdrawal assumptions were increased while for certain annuity products with a lifetime income benefit rider, lapse rate and partial withdrawal assumptions were decreased. The net impact of the updates to lapse rate and partial withdrawal assumptions resulted in lower expected future gross profits as compared to previous estimates and a decrease in the balances of deferred policy acquisition costs and deferred sales inducements. The net impact of the updates to lapse rate and partial withdrawal assumptions resulted in an increase in the liability for lifetime income benefit riders due to a greater amount of expected benefit payments in excess of account values.

8. Reinsurance and Policy Provisions

Coinsurance

We have two coinsurance agreements with EquiTrust Life Insurance Company ("EquiTrust"), covering 70% of certain of American Equity Life's fixed index and fixed rate annuities issued from August 1, 2001 through December 31, 2001, 40% of those contracts issued during 2002 and 2003, and 20% of those contracts issued from January 1, 2004 to July 31, 2004. The business reinsured under these agreements may not be recaptured. Coinsurance deposits (aggregate policy benefit reserves transferred to EquiTrust under these agreements) were $323.7 million and $381.4 million at December 31, 2022 and 2021, respectively. We remain liable to policyholders with respect to the policy liabilities ceded to EquiTrust should EquiTrust fail to meet the obligations it has coinsured. The balance due from or due to EquiTrust under these agreements was a $0.8 million receivable and $7.8 million payable at December 31, 2022 and 2021, respectively, and represents the fair value of call options held by us to fund index credits related to the ceded business net of cash due to or from EquiTrust related to monthly settlements of policy activity and other expenses.

We have three coinsurance agreements with Athene Life Re Ltd. ("Athene"), an unauthorized life reinsurer domiciled in Bermuda. One agreement ceded 20% of certain of American Equity Life's fixed index annuities issued from January 1, 2009 through March 31, 2010. The second agreement ceded 80% of American Equity Life's multi-year rate guaranteed annuities issued from July 1, 2009 through December 31, 2013 and 80% of Eagle Life's multi-year rate guaranteed annuities issued from November 20, 2013 through December 31, 2013. The third agreement ceded 80% of certain of American Equity Life's and Eagle Life's multi-year rate guaranteed annuities issued on or after January 1, 2014 through December 31, 2020, 80% of Eagle Life's fixed index annuities issued prior to January 1, 2017, 50% of certain of Eagle Life's fixed index annuities issued from January 1, 2017 through December 31, 2018, 20% of certain of Eagle Life's fixed index annuities issued on or after January 1, 2019 through December 31, 2020 and 80% of certain of American Equity Life's fixed index annuities issued from August 1, 2016 through December 31, 2016. Effective January 1, 2021, no new business is being ceded to Athene. The business reinsured under any of the Athene agreements may not be recaptured. Coinsurance deposits (aggregate policy benefit reserves transferred to Athene under these agreements) were $3.1 billion and $3.7 billion at December 31, 2022 and 2021, respectively. American Equity Life is an intermediary for reinsurance of Eagle Life's business ceded to Athene. American Equity Life and Eagle Life remain liable to policyholders with respect to the policy liabilities ceded to Athene should Athene fail to meet the obligations it has coinsured. The annuity deposits that have been ceded to Athene are secured by assets held in trusts and American Equity Life is the sole beneficiary of the trusts. The assets in the trusts are required to remain at a value that is sufficient to support the current balance of policy benefit liabilities of the ceded business on a statutory basis. If the value of the trust accounts would ever be less than the amount of the ceded policy benefit liabilities on a statutory basis, Athene is required to either establish a letter of credit or deposit securities in the trusts for the amount of any shortfall. The balance due under these agreements to Athene was $16.9 million and $74.8 million at December 31, 2022 and 2021, respectively, and represents the fair value of call options held by us to fund index credits related to the ceded business net of cash due from Athene related to monthly settlements of policy activity.

Effective July 1, 2021 American Equity Life entered into a reinsurance agreement with North End Re (North End Re reinsurance treaty), a wholly-owned subsidiary of Brookfield Asset Management Reinsurance Partners Ltd. (“Brookfield Reinsurance” or “Brookfield”) to reinsure approximately $4.3 billion of in-force fixed indexed annuity product liabilities as of the effective date of the reinsurance agreement, 70% on a modified coinsurance (“modco”) basis and 30% on a coinsurance basis. The liabilities reinsured on a coinsurance basis are secured by assets held in both a statutory and supplemental trust (collectively referred to as the “trusts”). The liabilities reinsured on a modco basis are secured by a segregated modco account in which the assets are maintained by American Equity Life. American Equity Life transferred cash of $2.6 billion to the segregated modco account and $1.1 billion to the statutory trust at close of this reinsurance agreement on October 8, 2021. American Equity Life will receive an annual ceding commission equal to 49 basis points and the Company will receive an annual asset liability management fee equal to 30 basis points calculated based on the initial cash surrender value of liabilities ceded. Such fees are fixed and contractually guaranteed for six years with the additional and final seventh year payment partially contingent on certain performance obligations for both parties. The initial net present value of the ceding commission related to the in-force business was $114.1 million.

As part of the North End Re reinsurance treaty, American Equity Life is also ceding 75% of certain fixed index annuities issued after the effective date of the agreement, 70% on a modco basis and 30% on a coinsurance basis to North End Re. Effective July 1, 2022, the North End Re reinsurance treaty was amended to include additional fixed index annuity products. As part of this amendment, 75% of an additional block of in-force fixed indexed annuity product liabilities issued after July 1, 2021 was ceded, 70% on a modco basis and 30% on a coinsurance basis. On sales subsequent to the effective date of the North End Re reinsurance treaty, American Equity Life will receive an annual ceding commission equal to 140 basis points and the Company will receive an annual asset liability management fee equal to 30 basis points calculated based on the initial cash surrender value of liabilities ceded. Such fees are fixed and contractually guaranteed for six years with the additional and final seventh year payment being contingent on certain performance obligations for both parties. The initial net present value of the ceding commission related to the flow business ceded in 2022 and 2021 was $67.7 million and $27.1 million, respectively. The asset liability management fee recognized in Other revenue in 2022 and 2021 was $12.7 million and $5.5 million, respectively.

In addition, American Equity Life will receive certain acquisition cost reimbursements and an on-going annual expense reimbursement on each policy subject to the reinsurance agreement for the entirety of the policy duration. Acquisition cost reimbursements will reduce policy acquisition costs deferred.

As a result of the North End Re reinsurance treaty, there is a deferred gain of $481.2 million and $321.7 million which is recorded in Other liabilities as of December 31, 2022 and 2021, respectively. This deferred gain represents the unamortized portion of the cost of reinsurance related to the in-force business and new business which will be amortized over the life of the underlying reinsured policies. The deferred gain consists primarily of the difference between liabilities ceded and assets transferred as part of the reinsurance agreement and the present value of the ceding commissions previously noted offset by a reduction in deferred policy acquisition costs associated with the the in-force business ceded. The amortization of the deferred gain recognized in Other revenue in 2022 and 2021 was $28.4 million and $10.2 million, respectively.

American Equity Life remains liable to policyholders with respect to the policy liabilities ceded to North End Re should North End Re fail to meet the obligations it has reinsured.

The assets in the trusts and modco account are required to remain at a value that is sufficient to support the current balance of policy benefit liabilities of the ceded business on a statutory basis. The assets in the trusts and modco account are subject to investment management agreements between American Equity Life and North End Re. The assets in the modco account earned net investment income of $95.4 million and $11.4 million during 2022 and 2021, respectively, which are reflected within the Net investment income line in the Consolidated Statements of Operations and presented net of amounts earned for the benefit of the reinsurer.

As of December 31, 2022 and 2021, coinsurance deposits (aggregate policy benefits reserves transferred to North End Re under these agreements) were $5.7 billion and $4.6 billion, respectively. The balance due under these agreements to North End Re was $124.2 million and $127.9 million which is recorded in Other liabilities at December 31, 2022 and 2021, respectively.

Separate from the reinsurance transaction, Brookfield Reinsurance, has an approximate 18.7% interest in the Company's outstanding common stock as of December 31, 2022. See *Note 15 - Earnings Per Common Share and Stockholders' Equity* for further discussion of Brookfield's ownership.

Effective October 1, 2022 American Equity Life entered into a reinsurance agreement with an unaffiliated reinsurer AeBe ISA LTD ("AeBe"), a Bermuda exempted company affiliated with 26North Holdings LP ("26North"), that is an incorporated segregated account licensed as a Class E reinsurer. Under the agreement, American Equity Life ceded $4.3 billion of certain in-force fixed indexed and fixed rate annuity product liabilities as of October 3, 2022, the effective date of the reinsurance agreement, 75% on a funds withheld coinsurance basis and 25% on a coinsurance basis. The liabilities reinsured on a coinsurance basis are secured by assets held in both a statutory and supplemental trust (collectively referred to as the "trusts"). The liabilities reinsured on a funds withheld basis are secured by a segregated funds withheld account in which the assets are maintained by American Equity Life. American Equity Life transferred cash and investments with a fair value of $3.0 billion to the segregated funds withheld account and $1.0 billion to the statutory trust at close of this reinsurance agreement on October 3, 2022. At the close of the reinsurance agreement, American Equity Life received a closing ceding commission of $70.0 million. American Equity Life will also receive certain acquisition cost reimbursements and an on-going annual expense reimbursement on each policy subject to the reinsurance agreement for the entirety of the policy duration.

As a result of the AeBe reinsurance treaty, there is a deferred gain of $126.3 million which is recorded in Other liabilities as of December 31, 2022. This deferred gain represents the unamortized portion of the cost of reinsurance related to the in-force business which will be amortized over the life of the underlying reinsured policies. The deferred gain consists primarily of the difference between liabilities ceded and assets transferred as part of the reinsurance agreement and the closing ceding commission previously noted offset by a reduction in deferred policy acquisition costs associated with the in-force business ceded. The amortization of the deferred gain recognized in Other revenue in 2022 was $2.8 million.

American Equity Life remains liable to policyholders with respect to the policy liabilities ceded to AeBe should AeBe fail to meet the obligations it has reinsured.

The assets in the trusts and funds withheld account are required to remain at a value that is sufficient to support the current balance of policy benefit liabilities of the ceded business on a statutory basis. The assets in the trusts and funds withheld account are subject to investment management agreements between American Equity Life and 26North. The assets in the funds withheld account earned net investment income of $42.3 million during 2022, which is reflected within the Net investment income line in the Consolidated Statements of Operations and presented net of amounts earned for the benefit of the reinsurer.

As of December 31, 2022, coinsurance deposits (aggregate policy benefits reserves transferred to AeBe under these agreements) were $4.2 billion. The balance due under these agreements to AeBe was $38.0 million which is recorded in Other liabilities at December 31, 2022.

American Equity Life has the option to cede liabilities of certain single premium fixed deferred annuities, or policies as otherwise agreed to by parties issued after the treaty effective date, at risk adjusted pricing terms that may be acceptable to American Equity Life at that time. For flow business ceded, American Equity Life will receive an annual ceding commission over the term of the policy of up to 0.50% of the premium received.

Amounts ceded to EquiTrust, Athene, North End Re and AeBe under these agreements are as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Consolidated Statements of Operations			
Annuity product charges	$ 49,093	$ 20,351	$ 7,021
Change in fair value of derivatives	(184,388)	140,641	43,080
	$ (135,295)	$ 160,992	$ 50,101
Interest sensitive and index product benefits	$ 103,542	$ 303,035	$ 152,485
Change in fair value of embedded derivatives	81,907	(76,915)	4,352
Other operating costs and expenses	18,318	16,440	17,663
	$ 203,767	$ 242,560	$ 174,500
Consolidated Statements of Cash Flows			
Annuity deposits	$ (982,176)	$ (424,819)	$ (35,667)
Cash payments to policyholders	1,029,667	984,260	466,311
	$ 47,491	$ 559,441	$ 430,644

We calculate estimated losses on reinsurance recoverable balances by determining an expected loss ratio. The expected loss ratio is based on industry historical loss experience and expected recovery timing adjusted for certain current and forecasted environmental factors management believes to be relevant. Estimated losses related to our reinsurance recoverable balances were $8.7 million and $2.3 million as of December 31, 2022 and 2021, respectively.

We monitor concentration of reinsurance risk with third party reinsurers and monitor concentration as well as financial strength ratings of our reinsurers.

Financing Arrangements

Effective April 1, 2019, we entered into a reinsurance agreement with Hannover Life Reassurance Company of America ("Hannover"), which was treated as reinsurance under statutory accounting practices and as a financing arrangement under GAAP. The statutory surplus benefit under this agreement was eliminated under GAAP and the associated charges were recorded as risk charges and included in Other operating costs and expenses in the Consolidated Statements of Operations. The 2019 Hannover Agreement was a coinsurance funds withheld reinsurance agreement for statutory purposes covering 80% of lifetime income benefit rider payments in excess of policy fund values and waived surrender charges related to penalty free withdrawals on certain business.

We paid a quarterly risk charge based on the pretax statutory benefit as of the end of each calendar quarter. Risk charges attributable to our 2019 agreement with Hannover were $33.1 million and $44.7 million during 2021 and 2020, respectively. Effective October 1, 2021, we recaptured the 2019 Hannover agreement.

Intercompany Reinsurance Agreements

Effective October 1, 2021, American Equity Life entered into a reinsurance agreement with AEL Re Vermont, a wholly-owned captive reinsurance company, to cede a portion of lifetime income benefit rider payments in excess of policy fund values on a funds withheld basis ("The AEL Re Vermont Agreement"). In connection with the agreement, AEL Re Vermont entered into an excess of loss ("XOL") reinsurance agreement with Hannover to retrocede the lifetime income benefit rider payments in excess of the policy fund values ceded under the AEL Re Vermont Agreement after the funds withheld account balance is exhausted. AEL Re Vermont is permitted to carry the XOL treaty as an admitted asset on the AEL Re Vermont statutory balance sheet. The effects of this agreement are not accounted for as reinsurance as it does not satisfy the risk transfer requirements for GAAP. AEL Re Vermont incurred risk charges of $11.7 million and $2.8 million during the years ended December 31, 2022 and 2021, respectively, in relation to this XOL agreement with Hannover. The risk charges are included in Other operating costs and expenses in the Consolidated Statements of Operations.

Effective December 31, 2021, American Equity Life executed a coinsurance agreement with AEL Re Bermuda, an affiliated Bermuda reinsurer, wholly-owned by American Equity Investment Life Holding Company, to reinsure a quota share of fixed index annuities issued from January 1, 1997 through December 31, 2007. The treaty is maintained on a funds withheld basis.

All intercompany balances have been eliminated in the preparation of the accompanying financial statements.

9. Income Taxes

We file consolidated federal income tax returns that include all of our wholly-owned subsidiaries. Our income tax expense as presented in the consolidated financial statements is summarized as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Consolidated statements of operations:			
Current income taxes	$ 20,209	$ 332	$ 3,430
Deferred income taxes	304,946	128,423	141,071
Total income tax expense included in consolidated statements of operations	325,155	128,755	144,501
Stockholders' equity:			
Expense (benefit) relating to:			
Adoption of expected credit loss model	—	—	(2,543)
Change in net unrealized investment losses	(1,067,791)	(90,284)	225,746
Total income tax expense included in consolidated financial statements	$ (742,636)	$ 38,471	$ 367,704

Income tax expense in the consolidated statements of operations differed from the amount computed at the applicable statutory federal income tax rates of 21% for the years ended December 31, 2022, 2021, and 2020 as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
Income before income taxes	$ 1,546,457	$ 602,747	$ 815,961
Income tax expense on income before income taxes	$ 324,756	$ 126,577	$ 171,352
Tax effect of:			
State income taxes	2,564	5,239	5,749
Tax exempt net investment income	(4,065)	(4,715)	(4,602)
Tax rate differential on net operating loss carryback	—	—	(30,041)
Other	1,900	1,654	2,043
Income tax expense	$ 325,155	$ 128,755	$ 144,501
Effective tax rate	21.0 %	21.4 %	17.7 %

The effective tax rate for the year ended December 31, 2020 was positively impacted by $30.0 million related to the provision of the CARES ACT which allowed net operating losses for 2018 through 2020 to be carried back to previous tax years in which a 35% statutory tax rate was in effect.

Deferred income tax assets or liabilities are established for temporary differences between the financial reporting amounts and tax bases of assets and liabilities that will result in deductible or taxable amounts, respectively, in future years. The tax effects of temporary differences that give rise to the deferred tax assets and liabilities at December 31, 2022 and 2021, are as follows:

	December 31,	
	2022	2021
	(Dollars in thousands)	
Deferred income tax assets:		
Policy benefit reserves	$ —	$ 524,412
Credit losses/impairments	10,531	15,275
Net unrealized losses on available for sale fixed maturity securities	578,476	—
Amounts due reinsurer	1,047,159	745,839
Other policyholder funds	358	3,332
Deferred compensation	3,866	3,434
Share-based compensation	422	5,171
Net operating loss carryforwards	50,913	87,314
Other	71,682	1,140
Gross deferred tax assets	1,763,407	1,385,917
Deferred income tax liabilities:		
Deferred policy acquisition costs and deferred sales inducements	(655,164)	(1,170,859)
Net unrealized gains on available for sale fixed maturity securities	—	(489,290)
Derivative instruments	(145,785)	(107,717)
Policy benefit reserves	(566,100)	(98,616)
Investment income items	(155,864)	(56,285)
Other	(19,621)	(5,124)
Gross deferred tax liabilities	(1,542,534)	(1,927,891)
Net deferred income tax asset (liability)	$ 220,873	$ (541,974)

Included in deferred income taxes is the expected income tax benefit attributable to unrealized losses on available for sale fixed maturity securities. There is no valuation allowance provided for the deferred income tax asset attributable to unrealized losses on available for sale fixed maturity securities. We have the intent and ability to hold these securities to maturity or recovery of value, whichever is sooner. Realization of our deferred income tax assets is more likely than not based on expectations as to our future taxable income and considering all other available evidence, both positive and negative. Therefore, no valuation allowance against deferred income tax assets has been established as of December 31, 2022 and 2021.

There were no material income tax contingencies requiring recognition in our consolidated financial statements as of December 31, 2022. Our tax returns are subject to audit by various federal, state and local tax authorities. The Company's income tax returns are subject to examination by the IRS and state tax authorities, generally for three years after they are due or filed, whichever is later. Tax years ended before December 31, 2019 are no longer open to examination by the IRS.

At December 31, 2022 and 2021, we had federal net operating losses of $170.5 million and $419.5 million, respectively, primarily related to a reinsurance transaction that occurred in 2021. The federal net operating losses are carried forward indefinitely. Additionally, at December 31, 2022 and 2021, we had $45.7 million and $0 million, respectively, of capital loss carryforwards for federal income tax purposes that can be carried forward for five years.

10. Notes and Loan Payable

Notes and loan payable includes the following:

	December 31,	
	2022	2021
	(Dollars in thousands)	
Senior notes due 2027		
Principal	$ 500,000	$ 500,000
Unamortized debt issue costs	(2,960)	(3,537)
Unamortized discount	(178)	(213)
Term loan due 2027		
Principal	300,000	—
Principal paydown	(3,750)	—
Unamortized debt issue costs	(1,039)	—
	$ 792,073	$ 496,250

On June 16, 2017, we issued $500 million aggregate principal amount of senior unsecured notes due 2027 which bear interest at 5.0% per year and will mature on June 15, 2027 (the “2027 Notes”). The 2027 Notes were issued at a $0.3 million discount, which is being amortized over the term of the 2027 Notes using the effective interest method. Contractual interest is payable semi-annually in arrears each June 15th and December 15th. The initial transaction fees and costs totaling $5.8 million were capitalized as deferred financing costs and are being amortized over the term of the 2027 Notes using the effective interest method.

On February 15, 2022, we entered into a five-year, $300 million unsecured delayed draw term loan credit agreement. On July 6, 2022, we borrowed $300 million under this agreement. We will pay a floating rate of interest on the term loan utilizing SOFR adjusted for a credit spread. The term loan matures on February 15, 2027 and is amortizing at 2.5% annually for the first three years and 5.0% for the last two years.

On September 30, 2016, we entered into a credit agreement with six banks that provided for a $150 million unsecured revolving line of credit that terminated on September 30, 2021 and a $100 million term loan that was scheduled to terminate on September 30, 2019 but was repaid on June 16, 2017 without penalty.

11. Subordinated Debentures

Our wholly-owned subsidiary trust (which is not consolidated) has issued fixed rate and floating rate trust preferred securities and has used the proceeds from these offerings to purchase subordinated debentures from us. We also issued subordinated debentures to the trust in exchange for all of the common securities of the trust. The sole assets of the trust are the subordinated debentures and any interest accrued thereon. The interest payment dates on the subordinated debentures correspond to the distribution dates on the trust preferred securities issued by the trust. The trust preferred securities mature simultaneously with the subordinated debentures. Our obligations under the subordinated debentures and related agreements provide a full and unconditional guarantee of payments due under the trust preferred securities.

Following is a summary of subordinated debt obligations to the trusts at December 31, 2022 and 2021:

	December 31,			
	2022	2021	Interest Rate	Due Date
	(Dollars in thousands)			
American Equity Capital Trust II	$ 78,753	$ 78,421	5%	June 1, 2047

The principal amount of the subordinated debentures issued by us to American Equity Capital Trust II ("Trust II") is $100.0 million. These debentures were assigned a fair value of $74.7 million at the date of issue (based upon an effective yield-to-maturity of 6.8%). The difference between the fair value at the date of issue and the principal amount is being accreted over the life of the debentures. The trust preferred securities issued by Trust II were issued to Iowa Farm Bureau Federation, which owns a majority of FBL Financial Group, Inc. ("FBL"). The consideration received by Trust II in connection with the issuance of its trust preferred securities consisted of fixed income securities of equal value which were issued by FBL.

12. Retirement and Share-based Compensation Plans

We have adopted a contributory defined contribution plan which is qualified under Section 401(k) of the Internal Revenue Code. The plan covers substantially all of our full-time employees subject to minimum eligibility requirements. Employees can contribute a percentage of their annual salary (up to a maximum annual contribution of $20,500 in 2022, $19,500 in 2021 and $19,500 in 2020) to the plan. We contribute an additional amount, subject to limitations, based on the voluntary contribution of the employee. Further, the plan provides for additional employer contributions based on the discretion of the Board of Directors. Plan contributions charged to expense were $3.3 million, $2.7 million and $2.4 million for the years ended December 31, 2022, 2021 and 2020, respectively.

The following table summarizes compensation expense recognized for employees and directors as a result of share-based compensation:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
ESOP	$ 4,152	$ 3,377	$ 2,908
Employee Incentive Plans	14,454	22,886	7,855
Director Equity Plans	1,053	1,262	1,056
	$ 19,659	$ 27,525	$ 11,819

ESOP

The principal purpose of the American Equity Investment Employee Stock Ownership Plan ("ESOP") is to provide each eligible employee with an equity interest in us. Employees become eligible once they have completed a minimum of six months of service. Employees become 100% vested after two years of service. Our contribution to the ESOP is determined by the Board of Directors.

Employee Incentive Plans

During 2020, the 2016 Employee Incentive Plan ("2016 Plan") was amended and renamed the American Equity Investment Life Holding Company Amended and Restated Equity Incentive Plan ("Amended Plan"). The Amended Plan increased the number of shares of Common stock reserved for issuance by 3,000,000 shares to 5,500,000 shares of our Common stock which may be issued in the form of grants of options, stock appreciation rights, restricted stock awards and restricted stock units. In addition, the Amended Plan allows for awards to be granted to members of the Board of Directors of the Company.

At December 31, 2022, we had 776,516 shares of common stock available for future grant under the Amended Plan.

We have a long-term performance incentive plan under which certain members of our management team are granted performance-based restricted stock units pursuant to the Amended Plan or the 2016 Plan. During 2022, 2021 and 2020, we granted 229,880, 186,091 and 217,781 restricted stock units under these plans, respectively. For the 2022 and 2021 grants, vesting is tied to threshold, target and maximum performance goals for the three year periods ending December 31, 2024 and December 31, 2023, respectively. Fifty percent of the restricted stock units will vest if we meet threshold goals, 100% of the restricted stock units will vest if we meet target performance goals and 200% of the restricted stock units will vest if we meet maximum performance goals. For the 2020 grant, vesting is tied to threshold, target and maximum performance goals for the three year period ending December 31, 2022. Fifty percent of the restricted stock units will vest if we meet threshold goals, 100% of the restricted stock units will vest if we meet target performance goals and 150% of the restricted stock units will vest if we meet maximum performance goals. Compensation expense is recognized over the three year vesting period based on the likelihood of meeting threshold, target and maximum goals. Restricted stock units that ultimately vest are payable in an equal number of shares of our common stock. Restricted stock units are accounted for as equity awards and the estimated fair value of restricted stock units is based upon the closing price of our common stock on the date of grant.

During 2022, 2021 and 2020 we granted 159,494, 199,597 and 133,429, respectively, time-based restricted stock units to employees under the Amended Plan or the 2016 Plan. These grants vest one to three years following the grant date provided the participant remains employed with us. Shares will vest early upon an employee reaching 65 years of age with 10 years of service with us. Compensation expense is recognized over the vesting period. Restricted stock units that ultimately vest are payable in an equal number of shares of our common stock. Restricted stock units are accounted for as equity awards and the estimated fair value of restricted stock units is based upon the closing price of our common stock on the date of grant.

During 2022, 2021 and 2020, we granted 0, 391,553 and 105,809, respectively, options to employees under the Amended Plan or the 2016 Plan at an exercise price equal to the fair market value of our common stock on the date of grant. These options vest over a period of one to five years and expire 10 years after the grant date. Compensation expense is recognized over the vesting period.

During 2022, a strategic incentive award was approved under the Amended Plan in which the Chief Executive Officer has the opportunity to earn the value of up to 1.2 million shares of AEL common stock based upon attainment of specified significant sustained increases in AEL's common stock price on or before December 31, 2027. The award has four tranches with a share value objective for each tranche based on AEL's 30-day volume weighted average common stock price. Fifty percent of each tranche is paid in shares of AEL common stock, subject

to a stay requirement up to 2 years, and fifty percent of each tranche is paid in cash upon attainment of the share value objective. The portion of the award payable in shares is accounted for as an equity award, and the portion of the award payable in cash is accounted for as a liability award. The fair value of both the equity award and liability award were calculated using a Monte Carlo simulation. Compensation expense is recognized over a service period which is the longer of the stay requirement, where applicable, or a derived service period calculated using a Monte Carlo simulation. There was $4.2 million of compensation expense recognized for the year ended December 31, 2022 for this award.

During 2021 and 2020, we granted 855,052 and 709,958 performance-based options ("Performance Options") to employees under the Amended Plan at an exercise price equal to the fair market value of our common stock on the date of grant. These Performance Options vest based upon the timing of meeting the market condition of a 30-day volume weighted average common stock price of $37.00 per common share. Fifty percent of the Performance Options granted vest upon the later of: (i) the market condition noted above being met; and (ii) the one year anniversary of the Grant Date. The remaining fifty percent of the Performance Options granted vest on the one year anniversary of the vesting of the initial fifty percent of the Performance Options. The market condition for these performance options was met on January 4, 2022. Compensation expense for the Performance Options is recognized over the requisite service period.

Director Equity Plans

During 2022, 2021 and 2020, we issued 32,409, 39,273 and 51,450 shares of common stock under the Amended Plan to our Directors, all of which are restricted stock, and which vest on the earlier of the next annual meeting date or one year from the grant date provided the individual remains a Director during that time period.

Changes in the number of stock options granted to employees outstanding during the years ended December 31, 2022, 2021 and 2020 are as follows:

	Number of Shares	Weighted-Average Exercise Price per Share	Total Exercise Price
	(Dollars in thousands, except per share data)		
Outstanding at January 1, 2020	828,913	$ 19.91	$ 16,506
Granted	815,767	26.70	21,778
Canceled	(31,200)	21.50	(670)
Exercised	(355,563)	16.98	(6,038)
Outstanding at December 31, 2020	1,257,917	25.10	31,576
Granted	1,246,605	29.15	36,336
Canceled	(146,803)	25.44	(3,735)
Exercised	(295,000)	22.88	(6,749)
Outstanding at December 31, 2021	2,062,719	27.84	57,428
Granted	—	—	—
Canceled	(102,143)	27.49	(2,808)
Exercised	(173,782)	24.59	(4,273)
Outstanding at December 31, 2022	1,786,794	28.18	$ 50,347

The following table summarizes information about stock options outstanding at December 31, 2022:

	Stock Options Outstanding			Stock Options Vested		
Range of Exercise Prices	Number of Awards	Remaining Life (yrs)	Weighted-Average Exercise Price Per Share	Number of Awards	Remaining Life (yrs)	Weighted-Average Exercise Price Per Share
$21.89 - $26.72	375,820	7.83	$ 26.07	126,224	8.01	$ 26.72
$27.05 - $32.58	1,410,974	8.10	28.74	606,322	8.09	28.71
$21.89 - $32.58	1,786,794	8.05	28.18	732,546	8.08	28.37

The aggregate intrinsic value for stock options outstanding and vested awards was $31.2 million and $12.6 million, respectively, at December 31, 2022. For the years ended December 31, 2022, 2021 and 2020, the total intrinsic value of options exercised by officers, directors and employees was $3.7 million, $1.2 million and $2.2 million, respectively. Intrinsic value for stock options is calculated as the difference between the exercise price of the underlying awards and the price of our common stock as of the reporting date. Cash received from stock options exercised for the years ended December 31, 2022, 2021 and 2020 was $4.3 million, $6.7 million and $6.0 million, respectively.

During 2022, a new incentive plan was approved under which certain members of management are awarded an initial cash grant that can accumulate additional value based on the performance of certain private asset investments during the vesting period. The cash grant cliff

vests after three years. Plan participants must remain employed during the three-year vesting period to earn the award. The award may continue to grow in value subsequent to the three-year vesting period, assuming the plan participant remains employed by the Company. Plan participants can elect either a lump sum cash payout or annual cash installments over time (up to 15 years). There was $6.7 million of compensation expense recognized for the year ended December 31, 2022 for these awards.

13. Statutory Financial Information and Dividend Restrictions

Statutory accounting practices prescribed or permitted by regulatory authorities for our life insurance subsidiaries differ from GAAP. Net income (loss) for our primary life insurance subsidiary as determined in accordance with statutory accounting practices was as follows:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands)		
American Equity Life	$ 151,857	$ (863,818)	$ (34,467)

Statutory capital and surplus for our primary life insurance subsidiary was as follows:

	December 31,	
	2022	2021
	(Dollars in thousands)	
American Equity Life	$ 3,692,602	$ 4,078,532

American Equity Life is domiciled in the State of Iowa and is regulated by the Iowa Insurance Division. In some instances, the Iowa Insurance Division has adopted prescribed or permitted statutory accounting practices that differ from the required accounting outlined in National Association of Insurance Commissioners ("NAIC") Statutory Accounting Principles ("SAP"). For the year ended December 31, 2022, American Equity Life's use of prescribed statutory accounting practices resulted in higher statutory capital and surplus of $83.0 million relative to NAIC SAP due to its accounting for call option derivative instruments and fixed index annuity reserves. For the year ended December 31, 2021, American Equity Life's use of the same prescribed statutory accounting practice resulted in lower statutory capital and surplus of $210.2 million. We purchase call options to hedge the growth in interest credited on fixed index products. The Iowa Insurance Division allows an insurer to elect (1) to use an amortized cost method to account for such call options and (2) to use a fixed index annuity reserve calculation methodology under which call options associated with the current index interest crediting term are valued at zero.

Prior approval of regulatory authorities is required for the payment of dividends to the parent company by American Equity Life which exceed an annual limitation. American Equity Life may pay dividends without prior approval, unless such payments, together with all other such payments within the preceding twelve months, exceed the greater of (1) net gain from operations before net realized capital gains/losses for the preceding calendar year or, (2) 10% of the American Equity Life's surplus at the preceding year-end. The amount of dividends permitted to be paid by American Equity Life to its parent company without prior approval of regulatory authorities is $369.3 million as of December 31, 2022.

The Parent Company relies on its subsidiaries for cash flow, which has primarily been in the form of investment management fees and dividends. Retained earnings in our consolidated financial statements primarily represent undistributed earnings of American Equity Life. As such, our ability to pay dividends is limited by the regulatory restriction placed upon insurance companies as described above. In addition, American Equity Life retains funds to allow for sufficient capital for growth.

14. Commitments and Contingencies

We lease our office spaces and certain equipment under various operating leases. Rent expense for the years ended December 31, 2022, 2021 and 2020 totaled $5.2 million, $3.8 million and $4.2 million, respectively. At December 31, 2022, the aggregate future minimum lease payments are $28.5 million. The following represents payments due by period for operating lease obligations as of December 31, 2022 (dollars in thousands):

Year Ending December 31:	
2023	$ 3,792
2024	4,112
2025	3,985
2026	3,587
2027	2,014
2028 and thereafter	11,013

We are occasionally involved in litigation, both as a defendant and as a plaintiff. In addition, state and federal regulatory bodies, such as state insurance departments, the Securities and Exchange Commission ("SEC") and the Department of Labor, regularly make inquiries and conduct

examinations or investigations concerning our compliance with, among other things, insurance laws, securities laws and the Employee Retirement Income Security Act of 1974, as amended.

In accordance with applicable accounting guidelines, we establish an accrued liability for litigation and regulatory matters when those matters present loss contingencies that are both probable and estimable. As a litigation or regulatory matter is developing we, in conjunction with outside counsel, evaluate on an ongoing basis whether the matter presents a loss contingency that meets conditions indicating the need for accrual and/or disclosure, and if not, the matter will continue to be monitored for further developments. If and when the loss contingency related to litigation or regulatory matters is deemed to be both probable and estimable, we will establish an accrued liability with respect to that matter and will continue to monitor the matter for further developments that may affect the amount of the accrued liability.

There can be no assurance that any pending or future litigation will not have a material adverse effect on our business, financial condition, or results of operations.

In addition to our commitments to fund mortgage loans, we have unfunded commitments at December 31, 2022 to limited partnerships of $1.7 billion and to fixed maturity securities of $237.4 million.

Through our FHLB membership, we have issued funding agreements to the FHLB in exchange for cash advances. As of December 31, 2022, we had $300.0 million of FHLB funding agreements outstanding. We are required to provide collateral in excess of the funding agreement amounts outstanding. The fixed maturity security investments pledged for collateral had a fair value of $1.2 billion at December 31, 2022.

15. Earnings Per Common Share and Stockholders' Equity

Earnings Per Common Share

The following table sets forth the computation of earnings per common share and earnings per common share - assuming dilution:

	Year Ended December 31,		
	2022	2021	2020
	(Dollars in thousands, except per share data)		
Numerator:			
Net income available to common stockholders - numerator for earnings per common share	$ 1,177,269	$ 430,317	$ 637,945
Denominator:			
Weighted average common shares outstanding	90,558,121	93,860,378	92,055,035
Effect of dilutive securities:			
Stock options and deferred compensation agreements	523,248	271,422	93,014
Restricted stock and restricted stock units	456,759	359,359	244,447
Denominator for earnings per common share - assuming dilution	91,538,128	94,491,159	92,392,496
Earnings per common share	$ 13.00	$ 4.58	$ 6.93
Earnings per common share - assuming dilution	$ 12.86	$ 4.55	$ 6.90

There were no options to purchase shares of our common stock outstanding excluded from the computation of diluted earnings per common share during the years ended December 31, 2022, 2021 and 2020, as the exercise price of all options outstanding was less than the average market price of our common shares for those periods.

Stockholders' Equity

On June 10, 2020, we issued 12,000 shares of 6.625% Fixed-Rate Reset Non-Cumulative Preferred Stock, Series B ("Series B") with a $1.00 par value per share and a liquidation preference of $25,000 per share, for aggregate net proceeds of $290.3 million.

On November 21, 2019 we issued 16,000 shares of 5.95% Fixed-Rate Reset Non-Cumulative Preferred Stock, Series A ("Series A") with a $1.00 par value per share and a liquidation preference of $25,000 per share, for aggregate net proceeds of $388.9 million.

Dividends on the Series A and Series B preferred stock are payable on a non-cumulative basis only when, as and if declared, quarterly in arrears on the first day of March, June, September and December of each year, commencing on March 1, 2020 for Series A and on December 1, 2020 for Series B. For the year ended December 31, 2022, 2021, and 2020, we paid dividends totaling $23.8 million, $23.8 million, and $24.5 million, respectively, for Series A preferred stock and $19.9 million, $19.9 million, and $9.0 million, respectively, for Series B preferred stock. The Series A and Series B preferred stock rank senior to our common stock with respect to dividends, to the extent declared, and in liquidation, to the extent of the liquidation preference. The Series A and Series B preferred stock are not subject to any mandatory redemption, sinking fund, retirement fund, purchase fund or similar provisions.

Brookfield Asset Management Equity Investment

On October 18, 2020, we announced an agreement with Brookfield Asset Management, Inc. and its affiliated entities (collectively, "Brookfield") under which Brookfield would acquire up to a 19.9% ownership interest of common stock in the Company. The equity investment by Brookfield took place in two stages: an initial purchase of a 9.9% equity interest at $37.00 per share which closed on November 30, 2020 with Brookfield purchasing 9,106,042 shares, and a second purchase of an additional 6,775,000 shares which were issued to Brookfield at $37.33 per share in January of 2022, resulting in total ownership of approximately 16%. Brookfield also received the right to nominate one candidate for the Company's Board of Directors following the initial equity investment.

Share Repurchase Program

As part of a share repurchase program, the Company's Board of Directors approved the repurchase of Company common stock of $500 million on October 18, 2020, an additional $500 million on November 19, 2021, and an additional $400 million on November 11, 2022. The share repurchase program has offset dilution from the issuance of shares to Brookfield, and its purpose remains to institute a regular cash return program for shareholders.

From the 2020 inception of the share repurchase program through December 31, 2022, we have repurchased approximately 23.9 million shares of our common stock at an average price of $34.74 per common share, including 14.8 million shares repurchased during the year ended December 31, 2022. As of December 31, 2022, we had $569 million remaining under our share repurchase program.

Treasury Stock

As of December 31, 2022, we held 24,590,353 shares of treasury stock with a carrying value of $823.1 million. As of December 31, 2021, we held 9,936,715 shares of treasury stock with a carrying value of $260.6 million.

Schedule I—Summary of Investments—
Other Than Investments in Related Parties

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY

December 31, 2022

Column A	Column B	Column C	Column D
Type of Investment	Amortized Cost (1)	Fair Value	Amount at which shown in the balance sheet
	(Dollars in thousands)		
Fixed maturity securities:			
Available for sale:			
U.S. Government and agencies	$ 173,638	$ 169,071	$ 169,071
States, municipalities and territories	4,356,251	3,822,982	3,822,982
Foreign corporate securities and foreign governments	748,770	676,852	676,852
Corporate securities	27,706,440	24,161,921	24,161,921
Residential mortgage backed securities	1,492,242	1,377,611	1,377,611
Commercial mortgage backed securities	4,098,755	3,687,478	3,687,478
Other asset backed securities	6,289,923	5,908,702	5,908,702
Total fixed maturity securities	44,866,019	39,804,617	39,804,617
Mortgage loans on real estate	6,949,027	6,502,463	6,949,027
Real estate investments	1,053,569	1,056,063	1,056,063
Derivative instruments	425,097	431,727	431,727
Limited partnerships and limited liability companies	1,266,779		1,266,779
Other investments	1,818,144		1,817,085
Total investments	$ 56,378,635		$ 51,325,298

(1) On the basis of cost adjusted for repayments and amortization of premiums and accrual of discounts for fixed maturity securities and short-term investments, unpaid principal balance less allowance for credit losses for mortgage loans, original cost reduced by impairments and/or depreciation for real estate investments, amortized cost for derivative instruments and original cost adjusted for equity in earnings and distributions for limited partnerships and limited liability companies.

See accompanying Report of Independent Registered Public Accounting Firm.

Schedule II—Condensed Financial Information of Registrant

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY (PARENT COMPANY)

Condensed Balance Sheets

(Dollars in thousands)

	December 31,	
	2022	2021
Assets		
Cash and cash equivalents	$ 531,347	$ 362,245
Equity securities of subsidiary trusts	2,360	2,353
Receivable from subsidiaries	8,868	2,783
Notes receivable from subsidiaries	85,654	165,000
Federal income tax recoverable, including amount from subsidiaries	267,076	217,174
Other assets	33,990	20,134
	929,295	769,689
Investment in and advances to subsidiaries	3,437,579	6,387,912
Total assets	$ 4,366,874	$ 7,157,601
Liabilities and Stockholders' Equity		
Liabilities:		
Notes and loan payable	$ 792,073	$ 496,250
Subordinated debentures payable to subsidiary trusts	78,753	78,421
Deferred income taxes	268,639	223,304
Other liabilities	58,186	36,499
Total liabilities	1,197,651	834,474
Stockholders' equity:		
Preferred stock, Series A	16	16
Preferred stock, Series B	12	12
Common stock	84,810	92,514
Additional paid-in capital	1,325,316	1,614,374
Accumulated other comprehensive income (loss)	(2,155,055)	1,848,789
Retained earnings	3,914,124	2,767,422
Total stockholders' equity attributable to American Equity Investment Life Holding Company	3,169,223	6,323,127
Total liabilities and stockholders' equity	$ 4,366,874	$ 7,157,601

See accompanying note to condensed financial statements.
See accompanying Report of Independent Registered Public Accounting Firm.

Schedule II—Condensed Financial Information of Registrant (Continued)

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY (PARENT COMPANY)

Condensed Statements of Operations

(Dollars in thousands)

	Year Ended December 31,		
	2022	**2021**	**2020**
Revenues:			
Net investment income	$ 6,733	$ 114	$ 1,115
Dividends from subsidiary trusts	155	159	167
Dividends from subsidiaries	325,000	250,000	—
Investment advisory fees	110,094	126,643	114,228
Surplus note interest from subsidiary	4,080	4,080	4,080
Change in fair value of derivatives	—	—	62
Loss on extinguishment of debt	—	—	(2,024)
Other revenue	19,153	8,511	346
Total revenues	465,215	389,507	117,974
Expenses:			
Interest expense on notes and loan payable	32,098	25,581	25,552
Interest expense on subordinated debentures issued to subsidiary trusts	5,331	5,324	5,557
Other operating costs and expenses	114,792	72,435	46,686
Total expenses	152,221	103,340	77,795
Income before income taxes and equity in undistributed income of subsidiaries	312,994	286,167	40,179
Income tax expense (benefit)	(1,067)	11,565	13,142
Income before equity in undistributed income of subsidiaries	314,061	274,602	27,037
Equity in undistributed income of subsidiaries	906,883	199,390	644,423
Net income available to American Equity Investment Life Holding Company stockholders	1,220,944	473,992	671,460
Less: Preferred stock dividends	43,675	43,675	33,515
Net income available to American Equity Investment Life Holding Company common stockholders	$ 1,177,269	$ 430,317	$ 637,945

See accompanying note to condensed financial statements.
See accompanying Report of Independent Registered Public Accounting Firm.

Schedule II—Condensed Financial Information of Registrant (Continued)

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY (PARENT COMPANY)

Condensed Statements of Cash Flows

(Dollars in thousands)

	Year Ended December 31,		
	2022	2021	2020
Operating activities			
Net income available to American Equity Investment Life Holding Company stockholders	$ 1,220,944	$ 473,992	$ 671,460
Adjustments to reconcile net income to net cash provided by operating activities:			
Provision for depreciation and amortization	4,925	1,232	1,138
Accrual of discount on equity security	(7)	(10)	(3)
Equity in undistributed income of subsidiaries	(906,883)	(199,390)	(644,423)
Non cash dividend from subsidiaries	—	(80,000)	—
Change in fair value of derivatives	—	—	(62)
Loss on extinguishment of debt	—	—	2,024
Accrual of discount on debenture issued to subsidiary trust	332	309	289
Share-based compensation	6,023	10,235	3,303
Deferred income taxes	45,335	222,714	6,408
Changes in operating assets and liabilities:			
Receivable from subsidiaries	(6,085)	(365)	(1,208)
Federal income tax recoverable/payable	(49,902)	(222,569)	(3,879)
Other assets	(16,363)	(5,054)	(320)
Other liabilities	21,687	21,819	7,617
Net cash provided by operating activities	320,006	222,913	42,344
Investing activities			
Change in notes receivable from subsidiaries	79,346	(165,000)	—
Repayment of equity securities	—	—	2,445
Contribution to subsidiaries	(137,002)	—	(210,000)
Purchases of property, plant and equipment	(1,432)	(12,642)	(48)
Net cash used in investing activities	(59,088)	(177,642)	(207,603)
Financing activities			
Financing fees incurred and deferred	(1,235)	—	—
Repayment of loan payable	(3,750)	—	—
Proceeds from issuance of loan payable	300,000	—	—
Repayment of subordinated debentures	—	—	(81,450)
Proceeds from issuance of common stock	253,978	4,844	338,061
Acquisition of treasury stock	(566,567)	(99,415)	(165,094)
Proceeds from issuance of preferred stock, net	—	—	290,260
Dividends paid on common stock	(30,567)	(31,450)	(28,859)
Dividends paid on preferred stock	(43,675)	(43,675)	(33,515)
Net cash provided by (used in) financing activities	(91,816)	(169,696)	319,403
Increase (decrease) in cash and cash equivalents	169,102	(124,425)	154,144
Cash and cash equivalents at beginning of year	362,245	486,670	332,526
Cash and cash equivalents at end of year	$ 531,347	$ 362,245	$ 486,670
Supplemental disclosures of cash flow information			
Cash paid during the year for:			
Interest on notes and loan payable	$ 31,288	$ 25,000	$ 25,000
Interest on subordinated debentures	5,000	5,000	6,181

See accompanying note to condensed financial statements.
See accompanying Report of Independent Registered Public Accounting Firm.

Schedule II—Condensed Financial Information of Registrant (Continued)

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY (PARENT COMPANY)

Note to Condensed Financial Statements

December 31, 2022

1. Basis of Presentation

The accompanying condensed financial statements should be read in conjunction with the consolidated financial statements and notes thereto of American Equity Investment Life Holding Company (Parent Company).

In the Parent Company financial statements, its investment in and advances to subsidiaries are stated at cost plus equity in undistributed income (losses) of subsidiaries since the date of acquisition and net unrealized gains/losses on the subsidiaries' fixed maturity securities classified as "available for sale" and equity securities.

See *Note 10- Notes and Loan Payable* and *Note 11 - Subordinated Debentures* to our audited consolidated financial statements in this Form 10-K for a description of the Parent Company's notes payable and subordinated debentures payable to subsidiary trusts.

Schedule III—Supplementary Insurance Information

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY

Column A	Column B	Column C	Column D	Column E
	Deferred policy acquisition costs	Future policy benefits, losses, claims and loss expenses	Unearned premiums	Other policy claims and benefits payable
	(Dollars in thousands)			
As of December 31, 2022:				
Life insurance	$ 3,562,075	$ 61,118,134	$ —	$ 512,790
As of December 31, 2021:				
Life insurance	$ 2,222,769	$ 65,477,778	$ —	$ 226,844
As of December 31, 2020:				
Life insurance	$ 2,225,199	$ 62,352,882	$ —	$ 240,904

Column A	Column F	Column G	Column H	Column I	Column J
	Premium revenue	Net investment income	Benefits, claims, losses and settlement expenses	Amortization of deferred policy acquisition costs	Other operating expenses
	(Dollars in thousands)				
For the year ended December 31, 2022:					
Life insurance	$ 250,093	$ 2,307,463	$ (1,023,301)	$ 615,300	$ 277,045
For the year ended December 31, 2021:					
Life insurance	$ 300,833	$ 2,037,475	$ 2,543,779	$ 268,328	$ 274,617
For the year ended December 31, 2020:					
Life insurance	$ 290,609	$ 2,182,078	$ 744,389	$ 649,554	$ 214,745

See accompanying Report of Independent Registered Public Accounting Firm.

Schedule IV—Reinsurance

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY

Column A	Column B	Column C	Column D	Column E	Column F
	Gross amount	Ceded to other companies	Assumed from other companies	Net amount	Percent of amount assumed to net
	(Dollars in thousands)				
Year ended December 31, 2022					
Life insurance in force, at end of year	$ 44,003	$ 4,761	$ 43,607	$ 82,849	52.63 %
Insurance premiums and other considerations:					
Annuity product charges	$ 279,447	$ 49,093	$ —	$ 230,354	—
Traditional life, accident and health insurance, and life contingent immediate annuity premiums	19,660	91	170	19,739	0.86 %
	$ 299,107	$ 49,184	$ 170	$ 250,093	0.07 %
Year ended December 31, 2021					
Life insurance in force, at end of year	$ 48,943	$ 5,131	$ 46,119	$ 89,931	51.28 %
Insurance premiums and other considerations:					
Annuity product charges	$ 262,982	$ 20,351	$ —	$ 242,631	—
Traditional life, accident and health insurance, and life contingent immediate annuity premiums	58,150	117	169	58,202	0.29 %
	$ 321,132	$ 20,468	$ 169	$ 300,833	0.06 %
Year ended December 31, 2020					
Life insurance in force, at end of year	$ 52,234	$ 5,925	$ 49,577	$ 95,886	51.70 %
Insurance premiums and other considerations:					
Annuity product charges	$ 258,248	$ 7,021	$ —	$ 251,227	—
Traditional life, accident and health insurance, and life contingent immediate annuity premiums	39,323	139	198	39,382	0.50 %
	$ 297,571	$ 7,160	$ 198	$ 290,609	0.07 %

See accompanying Report of Independent Registered Public Accounting Firm.

Exhibit 21.2

AMERICAN EQUITY INVESTMENT LIFE HOLDING COMPANY
Subsidiaries of American Equity Investment Life Holding Company

	State of Organization
Insurance Subsidiaries:	
American Equity Investment Life Insurance Company	Iowa
American Equity Investment Life Insurance Company of New York	New York
Eagle Life Insurance Company	Iowa
AEL Re Vermont Inc.	Vermont
AEL Re Bermuda Ltd.	Bermuda
Noninsurance Subsidiaries:	
AE Capital, LLC	Iowa
AEL Financial Services, LLC	North Carolina
AERL, L.C.	Iowa
American Equity Investment Properties, L.C.	Iowa
American Equity Capital Trust II	Delaware
BH JV (Berm FW) Multifamily Investors, LLC	Delaware
BH JV Multifamily Investors, LLC	Delaware
High Trestle Investment Management, LLC	Iowa
M-A LPI Holdings, LLC	Delaware
M-LPI Resort Holdings, LLC	Delaware
M-LPI Resort Owner, LLC	Delaware
NC Securities Holdco, LLC	North Carolina
North Wolf Bay Holdings, LLC	Delaware
PBH Stonecastle, LLC	Delaware
Residential Investment Trust	Delaware
Residential Investment Trust - Berm FW	Delaware
Residential Investment Trust II	Delaware
Residential Investment Trust III	Delaware
Residential Investment Trust III - Berm FW	Delaware
Residential Investment Trust III-E	Delaware
Residential Investment Trust III - Verm FW	Delaware
Residential Investment Trust IV	Delaware
Residential Investment Trust IV - Berm FW	Delaware
Residential Investment Trust V	Delaware
Stonecastle Apartments Holdings, LLC	Delaware
Vantage at Westover Owner, LLC	Delaware
Vantage at Westover Parent, LLC	Delaware

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following registration statements:

(1) Registration Statement (Form S-3 No.333-268611) of American Equity Investment Life Holding Company
(2) Registration Statement (Form S-3 No. 333-267065) of American Equity Investment Life Holding Company
(3) Registration Statement (Form S-3 No. 333-233544) of American Equity Investment Life Holding Company
(4) Registration Statement (Form S-8 No. 333-238940) pertaining to the American Equity Investment Life Holding Company Amended and Restated Equity Incentive Plan
(5) Registration Statement (Form S-8 No. 333-214885) pertaining to the American Equity Investment Life Holding Company 2013 Director Equity and Incentive Plan
(6) Registration Statement (Form S-8 No. 333-213545) pertaining to the American Equity Investment Life Holding Company 2016 Employee Incentive Plan
(7) Registration Statement (Form S-8 No. 333-175355) pertaining to the American Equity Investment Life Holding Company 2011 Director Stock Option Plan
(8) Registration Statement (Form S-8 No. 333-167755) pertaining to the American Equity Investment Life Holding Company 2009 Employee Incentive Plan, and
(9) Registration Statement (Form S-8 No. 333-127001) pertaining to the 1996 Stock Option Plan, 2000 Employee Stock Option Plan, 2000 Director Stock Option Plan, 1997 Management Subscription Rights Plan, and Restated and Amended Stock Option and Warrant Agreement with David J. Noble of American Equity Investment Life Holding Company

of our reports dated February 28, 2023, with respect to the consolidated financial statements and schedules of American Equity Investment Life Holding Company and subsidiaries and the effectiveness of internal control over financial reporting of American Equity Investment Life Holding Company and subsidiaries included in this Annual Report (Form 10-K) of American Equity Investment Life Holding Company for the year ended December 31, 2022.

/s/ Ernst & Young LLP

Des Moines, Iowa
February 28, 2023

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the registration statements (No. 333-268611, No. 333-267065, and No. 333-233544) on Form S-3 and the registration statements (No. 333-238940, No. 333-214885, No. 333-213545, No. 333-175355, No. 333-167755, and No. 333-127001) on Form S-8 of our report dated March 1, 2021, with respect to the consolidated financial statements and financial statement schedules II to IV of American Equity Investment Life Holding Company.

/s/ KPMG LLP

Des Moines, Iowa
February 28, 2023

Exhibit 31.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Anant Bhalla, certify that:

1. I have reviewed this annual report on Form 10-K of American Equity Investment Life Holding Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2023

By: /s/ Anant Bhalla
Anant Bhalla
Chief Executive Officer and President
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Axel Andre, certify that:

1. I have reviewed this annual report on Form 10-K of American Equity Investment Life Holding Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2023

By: /s/ Axel Andre
Axel Andre
Chief Financial Officer and Executive Vice President
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of American Equity Investment Life Holding Company (the "Company") on Form 10-K for the fiscal year ended December 31, 2022 as filed with the Securities and Exchange Commission on or about the date hereof (the "Report"), I, Anant Bhalla, Chief Executive Officer and President of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934;

and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 28, 2023

By: /s/ Anant Bhalla
Anant Bhalla
Chief Executive Officer and President
(Principal Executive Officer)

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of American Equity Investment Life Holding Company (the "Company") on Form 10-K for the fiscal year ended December 31, 2022 as filed with the Securities and Exchange Commission on or about the date hereof (the "Report"), I, Axel Andre, Chief Financial Officer and Executive Vice President of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934;

and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 28, 2023

By: /s/ Axel Andre
Axel Andre
Chief Financial Officer and Executive Vice President
(Principal Financial Officer)

At American Equity Investment Life Holding Company, our policyholders work with over 40,000 independent agents and advisors affiliated with independent marketing organizations (IMOs), banks and broker-dealers through our wholly-owned operating subsidiaries. Advisors and agents choose one of our leading annuity products best suited for their client's personal needs to create financial dignity in retirement. To deliver on its promises to policyholders, American Equity has re-framed its investments focus – building a stronger emphasis on insurance liability driven asset allocation and specializing in alternate, private asset management while partnering with world renowned, public fixed income asset managers. American Equity is headquartered in West Des Moines, Iowa with additional offices in Charlotte, NC, and New York, NY. For more information, please visit www.american-equity.com.

AEL™

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