UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

The registrant meets the conditions set forth in General Instruction (I)(1)(a) and (b) of Form 10-K and is therefore filing this Form with the reduced disclosure format.

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

For the fiscal year ended December 31, 2019
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 0-31248

ALLSTATE LIFE INSURANCE COMPANY
(Exact name of registrant as specified in its charter)

Illinois	**36-2554642**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

3075 Sanders Road, Northbrook, Illinois 60062
(Address of principal executive offices) (Zip Code)

(847) 402-5000
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: None
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities.

Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 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 (§ 232.405 of this chapter) 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, a 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 is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

None of the common equity of the registrant is held by non-affiliates. Therefore, the aggregate market value of the common equity held by non-affiliates of the registrant is zero.

As of February 28, 2020, the registrant had 23,800 common shares, $227 par value, outstanding, all of which are held by Allstate Insurance Company.

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* Omitted pursuant to General Instruction I(2) of Form 10-K

Part I

Item 1. Business

Allstate Life Insurance Company was organized in 1957 as a stock life insurance company under the laws of the State of Illinois. Allstate Life Insurance Company, together with its subsidiaries, provides life insurance and voluntary accident and health insurance. In this document, we refer to Allstate Life Insurance Company as “Allstate Life” or “ALIC” and to Allstate Life and its wholly owned subsidiaries as the “Allstate Life Group” or the “Company”.

Allstate Life is a wholly owned subsidiary of Allstate Insurance Company, a stock property-liability insurance company organized under the laws of the State of Illinois. All of the outstanding stock of Allstate Insurance Company is owned by Allstate Insurance Holdings, LLC, which is wholly owned by The Allstate Corporation, a publicly owned holding company incorporated under the laws of the State of Delaware. In this document, we refer to Allstate Insurance Company as “AIC” and to The Allstate Corporation and its consolidated subsidiaries as “Allstate”, the “Parent Group” or the “Corporation”. The Allstate Corporation is one of the largest publicly held personal lines insurers in the United States. Widely known through the “You’re In Good Hands With Allstate®” slogan, Allstate is the third largest personal property and casualty insurer in the United States on the basis of 2018 statutory direct premiums written according to A.M. Best.

In this annual report on Form 10-K, we occasionally refer to statutory financial information. All domestic United States insurance companies are required to prepare statutory-basis financial statements. As a result, industry data is available that enables comparisons between insurance companies, including competitors that are not required to prepare financial statements in conformity with accounting principles generally accepted in the United States of America (“GAAP”). We frequently use industry publications containing statutory financial information to assess our competitive position.

Products and distribution

The Allstate Life Group sells life insurance through Allstate exclusive agencies and exclusive financial specialists. We also sell voluntary accident and health insurance through workplace enrolling independent agents in New York. We previously offered and continue to have in force deferred fixed annuities and immediate fixed annuities (including standard and sub-standard structured settlements). We also previously offered variable annuities and substantially all of this business is reinsured. Allstate exclusive agents and exclusive financial specialists also sell certain non-proprietary products, including mutual funds, fixed and variable annuities, disability insurance, and long-term care insurance to provide a broad suite of protection and retirement products.

The table below lists our current distribution channels with the associated products and target customers.

Distribution Channels	Proprietary Products	Target Customers
Allstate exclusive agencies and exclusive financial specialists	Term life insurance (in New York only effective June 2019) Whole life insurance (in New York only effective October 2018) Interest-sensitive life insurance (in New York only except term conversion countrywide) Variable life insurance (in New York only effective September 2017)	Middle market consumers with family and financial protection needs
Workplace enrolling independent agents and benefits brokers in New York	Workplace voluntary accident and health insurance: Short-term disability income insurance Accident and critical illness insurance	Middle market consumers in New York with family financial protection needs employed by small, medium, and large size firms

Competition

We compete on a variety of factors, including product offerings, brand recognition, financial strength and ratings, price, distribution and customer service. The market for life insurance continues to be highly fragmented and competitive. As of December 31, 2018, there were approximately 350 groups of life insurance companies in the United States. According to A.M. Best, as of December 31, 2018, the Allstate Life Group is the nation’s 21st largest issuer of life insurance and related business on the basis of 2018 ordinary life insurance in force and 42nd largest on the basis of 2018 statutory admitted assets.

Geographic markets

We sell life insurance throughout the United States (all 50 states and D.C.). We also sell voluntary accident and health insurance in New York.

The following table reflects, in percentages, the principal geographic distribution of direct statutory premiums and annuity considerations for the Allstate Life Group for 2019, based on information contained in statements filed with state insurance departments. Direct statutory premiums and annuity considerations exclude reinsurance assumed. No other jurisdiction accounted for more than 5 percent of the direct statutory premiums and annuity considerations.

New York	26.4%
California	8.8
Texas	8.0
Florida	5.8
Illinois	5.5

Strategy

Our overall strategy is to broaden Allstate's customer relationships and value proposition. We also distribute non-proprietary retirement products offered by third-party providers. Our target customers are middle market consumers with family and financial protection needs.

Our product positioning provides solutions to help meet customer needs during various phases of life. Term and whole life insurance products offer basic life protection solutions. Universal life and retirement products cover more advanced needs. The broad suite of life insurance products are provided primarily in New York. Allstate uses a separate subsidiary company to write the majority of new life insurance business countrywide and that is not included in ALIC's results. Allstate exclusive agencies partner with exclusive financial specialists to deliver life and retirement solutions to their customers. These specialists have expertise with advanced life and retirement cases and other more complex customer needs. Successful partnerships assist agencies with building stronger and deeper customer relationships. Improvements in sales education and technology are being made to ensure agencies have the tools and information needed to help customers meet their needs and build personal relationships.

We discontinued the sale of annuities over an eight-year period from 2006 to 2014, reflecting our expectations of declining returns. As a result, the declining volume of business is managed with a focus on increasing lifetime economic value. Both the deferred and immediate annuity businesses have been adversely impacted by the historically low interest rate environment. Our immediate annuity business has also been impacted by medical advancements that have resulted in annuitants living longer than anticipated when many of these contracts were originated. We focus on the distinct risk and return profiles of the specific products when developing investment and liability management strategies. The level of legacy deferred annuities in force has been significantly reduced and the investment portfolio and crediting rates are proactively managed to improve profitability of the business while providing appropriate levels of liquidity. The investment portfolio supporting our immediate annuities is managed to ensure the assets match the characteristics of the liabilities and provide the long-term returns needed to support this business. To better match the long-term nature of our immediate annuities, we use performance-based investments (primarily limited partnership investments) in which we have ownership interests and a greater proportion of return is derived from idiosyncratic assets or operating performance. We continue to review strategic options to reduce exposure and improve returns of the business. As a result, we may take additional operational and financial actions that offer return improvement and risk reduction opportunities.

REGULATION

The Allstate Life Group is subject to extensive regulation, primarily at the state level. The method, extent and substance of such regulation vary by state but generally have their source in statutes that establish standards and requirements for conducting the business of insurance and that also delegate regulatory authority to a state agency. These rules have a substantial effect on our business and relate to a wide variety of matters, including insurer solvency and statutory surplus sufficiency, reserve adequacy, insurance company licensing and examination, agent licensing, agent and broker compensation, policy forms, rate setting, the nature and amount of investments, claims practices, participation in guaranty funds, transactions with affiliates, the payment of dividends, underwriting standards, statutory accounting methods, trade practices, privacy regulation and data security, corporate governance and risk management. In addition, state legislators and insurance regulators continue to examine the appropriate nature and scope of state insurance regulation. For a discussion of statutory financial information, see Note 14 of the consolidated financial statements. For a discussion of regulatory contingencies, see Note 11 of the consolidated financial statements. Notes 11 and 14 are incorporated in this Part I, Item 1 by reference.

As part of an effort to strengthen the regulation of the financial services market, the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank") was enacted in 2010. Dodd-Frank created the Federal Insurance Office ("FIO") within the U.S. Department of the Treasury. The FIO monitors the insurance industry, provides advice to the Financial Stability Oversight Council ("FSOC"), represents the U.S. on international insurance matters, and studies the current regulatory system.

Additional regulations or new requirements may emerge from the activities of various regulatory entities, including the Federal Reserve Board, FIO, FSOC, the National Association of Insurance Commissioners ("NAIC"), and the International Association of Insurance Supervisors ("IAIS"), that are evaluating solvency and capital standards for insurance company groups. In addition, the NAIC has adopted amendments to its model holding company law that have been adopted by some jurisdictions. The outcome of these actions is uncertain; however, these actions may result in changes in the level of capital and liquidity required by insurance holding companies.

We cannot predict whether any specific state or federal measures will be adopted to change the nature or scope of the regulation of insurance or what effect any such measures would have on Allstate.

Limitations on Dividends by Insurance Subsidiaries. Allstate Life may receive dividends from time to time from its subsidiaries. When received, these dividends represent a source of cash from which Allstate Life may meet some of its obligations. If a subsidiary is an insurance company, its ability to pay dividends may be restricted by state laws regulating insurance companies. For additional information regarding those restrictions, see Note 14 of the consolidated financial statements.

Guaranty Funds. Under state insurance guaranty fund laws, insurers doing business in a state can be assessed, up to prescribed limits, in order to cover certain obligations of insolvent insurance companies. We do not anticipate any material adverse financial impact from these assessments.

Investment Regulation. Our insurance subsidiaries are subject to state regulation that specifies the types of investments that can be made and concentration limits of invested assets. Failure to comply with these rules leads to the treatment of non-conforming investments as non-admitted assets for purposes of measuring statutory surplus. Further, in some instances, these rules require divestiture of non-conforming investments.

Variable Life Insurance and Registered Fixed Annuities. The sale and administration of variable life insurance and registered fixed annuities with market value adjustment features are subject to extensive regulatory oversight at the federal and state level, including regulation and supervision by the Securities and Exchange Commission ("SEC") and the Financial Industry Regulatory Authority ("FINRA").

Broker-Dealers, Investment Advisors and Investment Companies. The Allstate Life Group entities that operate as broker-dealers, registered investment advisors, and investment companies are subject to regulation and supervision by the SEC, FINRA and/or, in some cases, state securities administrators. The SEC has adopted a best interest standard that has a compliance effective date of June 30, 2020 and applies to recommendations of securities products to retail customers. Certain other state and federal regulators are considering or have implemented best interest or fiduciary standards. Such standards could impact products provided by Allstate agencies, their sales processes, sales volume, and producer compensation arrangements.

Division Statute. On November 27, 2018, the Illinois General Assembly passed legislation authorizing a statute that makes available a process by which a domestic insurance company may divide into two or more domestic insurance companies. The statute which became effective January 1, 2019, can be used to divide continuing blocks of insurance business from insurance business no longer marketed, or otherwise has been discontinued, into separate companies with separate capital. The statute can also be used for sale to a third party. Before a plan of division can be effected, it must be approved according to the organizational documents of the dividing insurer and submitted for approval by the Illinois Department of Insurance.

Privacy Regulation and Data Security. Federal law and the laws of many states require financial institutions to protect the security and confidentiality of consumer information and to notify consumers about their policies and practices relating to collection, use, and disclosure of consumer information and their policies relating to protecting the security and confidentiality of that information. Federal law and the laws of many states also regulate disclosures and disposal of consumer information. Congress, state legislatures, and regulatory authorities are expected to consider additional regulation relating to privacy and other aspects of consumer information.

For example, the European Commission adopted the General Data Protection Regulation, which greatly increases the jurisdictional reach of its laws and adds a broad array of requirements for handling personal data, such as the public disclosure of significant data breaches, privacy impact assessments, data portability and the appointment of data protection officers. The California Consumer Privacy Act, which took effect in January 2020, adopted similar compliance requirements for businesses that collect personal information on California residents. Additional states are likely to adopt similarly themed privacy requirements in the future. Further, several state departments of insurance have issued cybersecurity regulations for financial services institutions, including banking and insurance entities, that impose a variety of detailed security measures on covered entities. The NAIC has also adopted the Insurance Data Security Model Law, which, if adopted as state legislation, would establish standards for data security and for the investigation of and notification to insurance commissioners of cybersecurity events. We cannot predict the impact on our business of possible future legislative measures regarding privacy or cybersecurity.

EMPLOYEES AND OTHER SHARED SERVICES

The Allstate Life Group has no employees. Instead, we primarily use the services of employees of AIC, our direct parent. We also make use of other services and facilities provided by AIC and other members of the Parent Group. These services and facilities include space rental, utilities, building maintenance, human resources, investment management, finance, information technology and legal services. We reimburse our affiliates for these services and facilities under a variety of agreements.

OTHER INFORMATION

"Allstate®" is a very well-recognized brand name in the United States. We use the name "Allstate®" extensively in our business, along with related service marks, logos, and slogans, such as "You're In Good Hands With Allstate®". Our rights in the United States to these names, service marks, logos and slogans continue as long as we continue to use them in commerce. Many service marks used by Allstate are the subject of renewable U.S. and/or foreign service mark registrations. We believe that these service marks are important to our business and we intend to maintain our rights to them.

Forward-Looking Statements

This report contains "forward-looking statements" that anticipate results based on our estimates, assumptions and plans that are subject to uncertainty. These statements are made subject to the safe-harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements do not relate strictly to historical or current facts and may be identified by their use of words like "plans," "seeks," "expects," "will," "should," "anticipates," "estimates," "intends," "believes," "likely," "targets" and other words with similar meanings. These statements may address, among other things, our strategy for growth, product development, investment results, regulatory approvals, market position, expenses, financial results, litigation and reserves. We believe that these statements are based on reasonable estimates, assumptions and plans. Forward-looking statements speak only as of the date on which they are made, and we assume no obligation to update any forward-looking statements as a result of new information or future events or developments. In addition, forward-looking statements are subject to certain risks or uncertainties that could cause actual results to differ materially from those communicated in these forward-looking statements. These risks and uncertainties include, but are not limited to, those described in Part 1, "Item 1A. Risk Factors" and elsewhere in this report and those described from time to time in our other reports filed with the Securities and Exchange Commission.

Item 1A. Risk Factors

Risks are categorized by (1) insurance and financial services, (2) business, strategy and operations and (3) macro, regulatory and risk environment. Many risks may affect more than one category and are included where the impact is most significant. Consider these cautionary statements carefully together with other factors discussed elsewhere in this document, in filings with the Securities and Exchange Commission ("SEC") or in materials incorporated therein by reference.

Insurance and financial services

Changes in reserve estimates and amortization of deferred acquisition costs ("DAC") could materially affect our results of operations and financial condition

We use long-term assumptions, including future investment yields, mortality, morbidity, persistency and expenses in pricing and valuation. If experience differs significantly from assumptions, adjustments to reserves and amortization of DAC may be required that could have a material adverse effect on our results of operations and financial condition.

See MD&A, Application of Critical Accounting Estimates and Note 2 of the consolidated financial statements for further details.

We may not be able to mitigate the capital impact associated with statutory reserving and capital requirements

Regulatory capital and reserving requirements affect the amount of capital required to be maintained by our insurance companies. Changes to capital or reserving requirements or regulatory interpretations may result in additional capital held in our insurance companies and could require us to increase prices, reduce our sales of certain products, and/or accept a return on equity below original levels assumed in pricing.

A downgrade in financial strength ratings may have an adverse effect on our business

Financial strength ratings are important factors in establishing the competitive position of insurance companies. Rating agencies could downgrade or change the outlook on our ratings due to:

- Changes in the financial profile of one of our insurance companies
- Changes in a rating agency's determination of the amount of capital required to maintain a particular rating
- Increases in the perceived risk of our investment portfolio, a reduced confidence in management or our business strategy, as well as a number of other considerations that may or may not be under our control

A downgrade in our ratings could have a material effect on our sales, competitiveness, retention, the marketability of our product offerings, liquidity, results of operations and financial condition.

Changes in tax laws may adversely affect profitability of life insurance products

Changes in taxation of life insurance products could reduce sales and result in the surrender of some existing contracts and policies, which may have a material effect on our profitability and financial condition.

Our investment portfolio is subject to market risk and declines in quality which may adversely affect investment income and cause realized and unrealized losses

We continually evaluate investment management strategies since we are subject to risk of loss due to adverse changes in interest rates, credit spreads, equity prices, real estate values, currency exchange rates and liquidity. Adverse changes may occur due to changes in monetary and fiscal policy and the economic climate, liquidity of a market or market segment, investor return expectations and/or risk tolerance, insolvency or financial distress of key market makers or participants, or changes in market perceptions of credit worthiness. Adverse changes in market conditions could cause the value of our investments to decrease significantly and impact our results of operations and financial condition.

Our investments are subject to risks associated with economic and capital market conditions and factors that may be unique to our portfolio, including:

- General weakening of the economy, which is typically reflected through higher credit spreads and lower equity valuations
- Declines in credit quality
- Declines in market interest rates, credit spreads or sustained low interest rates could lead to further declines in portfolio yields and investment income
- Increases in market interest rates, credit spreads or a decrease in liquidity could have an adverse effect on the value of our fixed income securities that form a substantial majority of our investment portfolio
- Weak performance of general partners and underlying investments unrelated to general market or economic conditions could lead to declines in investment income and cause realized losses in our limited partnership interests
- Concentration in any particular issuer, industry, collateral type, group of related industries, geographic sector or risk type

The amount and timing of net investment income, capital contributions and distributions from our performance-based investments, which primarily includes limited partnership interests, can fluctuate significantly due to the underlying investments' performance or changes in market or economic conditions. Additionally, these investments are less liquid than similar, publicly-traded investments and a decline in market liquidity could impact our ability to sell them at their current carrying values.

Determination of the fair value and the amount of realized capital losses recorded for impairments of investments includes subjective judgments and could materially impact our results of operations and financial condition

The valuation of the portfolio is subjective, and the value of assets may differ from the actual amount received upon the sale of an asset. The degree of judgment required in determining fair values increases when:

- Market observable information is less readily available
- The use of different valuation assumptions may have a material effect on the assets' fair values
- Changing market conditions could materially affect the fair value of investments

The determination of the amount of realized capital losses recorded for impairments varies by investment type and is based on ongoing evaluation and assessment of known and inherent risks associated with the respective asset class or investment.

Such evaluations and assessments are highly judgmental and are revised as conditions change and new information becomes available.

We update our evaluations regularly and reflect changes in other-than-temporary impairments in our results of operations. Our conclusions may ultimately prove to be incorrect as assumptions, facts and circumstances change. Historical trends may not be indicative of future impairments and additional impairments may need to be recorded in the future.

Changes in market interest rates or performance-based investment returns may lead to a significant decrease in the profitability of our spread-based products

Spread-based products, such as fixed annuities, are dependent upon maintaining profitable spreads between investment returns and interest crediting rates. When market interest rates decrease or remain at low levels, investment income may decline. Lowering interest crediting rates on some products in such an environment can partially offset decreases in investment yield. However, these changes could be limited by regulatory minimum rates or contractual minimum rate guarantees on many contracts and may not match the timing or magnitude of changes in investment yields.

Increases in market interest rates can lead to increased surrenders at a time when fixed income investment asset values are lower due to the increase in interest rates. Liquidating investments to fund surrenders could result in a loss that would adversely impact results of operations.

Business, strategy and operations

We operate in markets that are highly competitive and may be impacted by new or changing technologies

Markets in which we operate are highly competitive, and we must continually allocate resources to refine and improve products and services to remain competitive.

There is a significant competition for producers such as exclusive financial specialists. Growth and retention may be materially affected if we are unable to attract and retain effective producers or if those producers further emphasize sales of non-life insurance products. Similarly, growth and retention may be impacted if customer preferences change, including customer demand for direct distribution channels or an increase in point-of-sale distribution channels.

Technological changes may also impact the ways in which we interact and do business with our customers. For example, changing customer preferences may drive a need to redesign our products or distribution model and the way we interact with

customers. We may not be able to respond effectively to these changes, which could have a material effect on our results of operations and financial condition.

Many voluntary benefits contracts are renewed annually. There is a risk that employers may be able to obtain more favorable terms from competitors than they could by renewing coverage with us. These competitive pressures may adversely affect the renewal of these contracts, as well as our ability to sell products.

Reinsurance may be unavailable at current levels and prices, which may limit our ability to write new business

Market conditions beyond our control impact the availability and cost of the reinsurance we purchase. Reinsurance may not remain continuously available to us to the same extent and on the same terms and rates as is currently available. If we cannot maintain our current level of reinsurance or purchase new reinsurance protection in amounts we consider sufficient at acceptable prices, we would have to either accept an increase in our risk exposure, reduce our insurance exposure or seek other alternatives.

Reinsurance subjects us to counterparty risk and may not be adequate to protect us against losses arising from ceded insurance

Collecting from reinsurers is subject to uncertainty arising from whether reinsurers or their affiliates have the financial capacity and willingness to make payments under the terms of a reinsurance treaty or contract. Our inability to recover from a reinsurer could have a material effect on our results of operations and financial condition.

Divestitures of businesses may not produce anticipated benefits resulting in operating difficulties

We may divest portions of our businesses either through a sale or financial arrangements. These transactions may result in continued financial involvement in the divested businesses, such as through reinsurance, guarantees or other financial arrangements, following the transaction. If the acquiring companies do not perform under the arrangements, our financial results could be negatively impacted.

We may be subject to the risks and costs associated with intellectual property infringement, misappropriation and third-party claims

We rely on a combination of contractual rights and copyright, trademark, patent and trade secret laws to establish and protect our intellectual property. Third parties may infringe or misappropriate our intellectual property. We may have to litigate to enforce and protect intellectual property and to determine its scope, validity or enforceability, which could divert significant resources and prove unsuccessful. An inability to protect intellectual property or an inability to successfully defend against a claim of intellectual property infringement could have a material effect on our business.

We may be subject to claims by third parties for patent, trademark or copyright infringement or breach of usage rights. Any such claims and any resulting litigation could result in significant expense and liability. If third-party providers or we are found to have infringed a third-party intellectual property right, either of us could be enjoined from providing certain products or services or from utilizing and benefiting from certain methods, processes, copyrights, trademarks, trade secrets or licenses. Alternatively, we could be required to enter into costly licensing arrangements with third parties or implement a costly work-around. Any of these scenarios could have a material effect on our business and results of operations.

Macro, regulatory and risk environment

Conditions in the global economy and capital markets could adversely affect our business and results of operations

Global economic and capital market conditions could adversely impact demand for our products, returns on our investment portfolio and results of operations. The conditions that would have the largest impact on our business include;

- Low or negative economic growth
- Sustained low interest rates
- Rising inflation
- Substantial increases in delinquencies or defaults on debt
- Significant downturns in the market value or liquidity of our investment portfolio
- Reduced consumer spending and business investment

Stressed conditions, volatility and disruptions in global capital markets or financial asset classes could adversely affect our investment portfolio.

Adverse capital and credit market conditions may significantly affect our ability to meet liquidity needs or obtain credit on acceptable terms

In periods of extreme volatility and disruption in the capital and credit markets, liquidity and credit capacity may be severely restricted. Our and the Corporation’s access to additional financing depends on a variety of factors such as market conditions, the

general availability of credit, the overall availability of credit to our industry, our credit ratings and credit capacity, as well as lenders' perception of our and the Corporation's long- or short-term financial prospects. In such circumstances, our ability to obtain capital to fund operating expenses, financing costs, capital expenditures or acquisitions may be limited, and the cost of any such capital may be significant.

A large-scale pandemic, the occurrence of terrorism or military actions may have an adverse effect on our business

A large-scale pandemic, the occurrence of terrorism or military and other actions, may result in loss of life, property damage, and disruptions to commerce and reduced economic activity. Some of the assets in our investment portfolio may be adversely affected by declines in the equity markets, changes in interest rates, reduced liquidity and economic activity caused by a large-scale pandemic. Additionally, a large-scale pandemic or terrorist act could have a material effect on sales, liquidity and operating results.

The failure in cyber or other information security controls, as well as the occurrence of events unanticipated in our disaster recovery processes and business continuity planning, could result in a loss or disclosure of confidential information, damage to our reputation, additional costs and impair our ability to conduct business effectively

We depend heavily on computer systems, mathematical algorithms and data to perform necessary business functions. There are threats that could impact our ability to protect our data and systems; if the threats are successful, they could impact confidentiality, integrity and availability:

- Confidentiality - protecting our data from disclosure to unauthorized parties
- Integrity - ensuring data is not changed accidentally or without authorization and is accurate
- Availability - ensuring our data and systems are accessible to meet our business needs

We collect, use, store or transmit a large amount of confidential, proprietary and other information (including personal information of customers or employees) in connection with the operation of our business. Systems are subject to increased attempted cyberattacks and unauthorized access, such as physical and electronic break-ins or unauthorized tampering.

We constantly defend against threats to our data and systems, including malware and computer virus attacks, unauthorized access, system failures and disruptions. Events like these could jeopardize the information processed and stored in, and transmitted through, our computer systems and networks, or otherwise cause interruptions or malfunctions in our operations, which could result in damage to our reputation, financial losses, litigation, increased costs, regulatory penalties and/or customer dissatisfaction.

These risks may increase in the future as threats become more sophisticated and we develop additional remote connectivity solutions to serve our employees and customers and build and maintain an integrated digital enterprise. Our increased use of third-party services (e.g., cloud technology and software as a service) can make it more difficult to identify and respond to cyberattacks in any of the above situations. Third parties to whom we outsource certain functions are also subject to these risks.

Personal information is subject to an increasing number of federal, state, local and international laws and regulations regarding privacy and data security, as well as contractual commitments. Any failure or perceived failure by us to comply with such obligations may result in governmental enforcement actions and fines, litigation or public statements against us by consumer advocacy groups or others and could cause our employees and customers to lose trust in us, which could have an adverse effect on our reputation and business.

See the Regulation section for additional information.

The occurrence of a disaster, such as a natural catastrophe, pandemic, industrial accident, blackout, terrorist attack, war, cyberattack, computer virus, insider threat, unanticipated problems with our disaster recovery processes, or a support failure from external providers, could have an adverse effect on our ability to conduct business and on our results of operations and financial condition, particularly if those events affect our computer-based data processing, transmission, storage, and retrieval systems or destroy data. If a significant number of employees were unavailable in the event of a disaster, our ability to effectively conduct business could be severely compromised. Our systems are also subject to compromise from internal threats.

We are subject to extensive regulation, and potential further restrictive regulation may increase operating costs and limit growth

We operate in the highly regulated insurance sector and are subject to extensive laws and regulations that are complex and subject to change. Changes may lead to additional expenses, increased legal exposure, increased reserve or capital requirements limiting our ability to grow or to achieve targeted profitability. Moreover, laws and regulations are administered and enforced by governmental authorities that exercise interpretive latitude, including state insurance regulators; state securities administrators; state attorneys general as well as federal agencies including the SEC, the Financial Industry Regulatory Authority, the Department of Labor, and the U.S. Department of Justice. Consequently, compliance with one regulator’s or enforcement authority’s interpretation of a legal issue may not result in compliance with another’s interpretation of the same issue.

In addition, there is risk that one regulator’s or enforcement authority’s interpretation of a legal issue may change to our detriment. There is also a risk that changes in the overall legal environment may cause us to change our views regarding the actions we need to take from a legal risk management perspective. This could necessitate changes to our practices that may adversely impact our business. In some cases, state insurance laws and regulations are generally intended to protect or benefit purchasers or users of insurance products. These laws and regulations may limit our ability to grow or to improve the profitability of our business.

Regulatory reforms, and the more stringent application of existing regulations, may make it more expensive for us to conduct our business

The federal government has enacted comprehensive regulatory reforms for financial services entities. As part of a larger effort to strengthen the regulation of the financial services market, certain reforms are applicable to the insurance industry.

The Federal Insurance Office (“FIO”) and Financial Stability Oversight Council (“FSOC”) were established and the federal government may enact reforms that affect the state insurance regulatory framework. The potential impact of state or federal measures that change the nature or scope of insurance and financial regulation is uncertain but may make it more expensive for us to conduct business and limit our ability to grow or achieve profitability.

Losses from legal and regulatory actions may be material to our results of operations, cash flows and financial condition

We are involved in various legal actions, which may include class action litigation, challenging a range of company practices and coverage provided by our insurance products, some of which involve claims for substantial or indeterminate amounts. We are also involved in various regulatory actions and inquiries, including market conduct exams by state insurance regulatory agencies. In the event of an unfavorable outcome in any of these matters, the ultimate liability may be more than amounts currently accrued, and may be material to our results of operations, cash flows and financial condition.

Changes in or the application of accounting standards issued by standard-setting bodies and changes in tax laws may adversely affect our results of operations and financial condition

Our financial statements are subject to the application of accounting principles generally accepted in the United States of America, which are periodically revised, interpreted and/or expanded. Accordingly, we may be required to adopt new guidance or interpretations, which may have a material effect on our results of operations and financial condition and could adversely impact financial strength ratings.

- Pending changes to accounting for long-duration insurance contracts such as traditional life, life-contingent immediate annuities and certain voluntary accident and health insurance products will have a material effect on reserves and could adversely impact financial strength ratings
- Realization of our deferred tax assets assumes that we can fully utilize the deductions recognized for tax purposes; we may recognize additional tax expense if these assets are not fully utilized
- New tax legislative initiatives may be enacted that may impact our effective tax rate and could adversely affect our tax positions or tax liabilities

See MD&A, Application of Critical Accounting Estimates and Note 2 of the consolidated financial statements for further details.

Loss of key vendor relationships or failure of a vendor to protect our data, confidential and proprietary information, or personal information of our customers or employees could adversely affect our operations

We rely on services and products provided by many vendors in the U.S. and abroad. These include, vendors of computer hardware, software, cloud technology and software as a service, as well as vendors and/or outsourcing of services such as:

- Call center services
- Human resource benefits management
- Information technology support
- Investment management services

If any vendor becomes unable to continue to provide products or services, or fails to protect our confidential, proprietary, and other information, we may suffer operational impairments and financial losses.

Our ability to attract, develop, and retain talent to maintain appropriate staffing levels, and establish a successful work culture is critical to our success

Competition from within the insurance industry and from other industries, including the technology sector, for qualified employees with highly specialized knowledge in areas such as underwriting, data and analytics, technology and e-commerce has often been intense and we have experienced increased competition in hiring and retaining employees.

Factors that affect our ability to attract and retain such employees include:

- Compensation and benefits
- Training and re-skilling programs
- Reputation as a successful business with a culture of fair hiring, and of training and promoting qualified employees
- Recognize and respond to changing trends and other circumstances that affect employees

The unexpected loss of key personnel could have a material adverse impact on our business because of the loss of their skills, knowledge of our products and offerings and years of industry experience and, in some cases, the difficulty of promptly finding qualified replacement personnel.

Misconduct or fraudulent acts by employees, agents and third parties may expose us to financial loss, disruption of business, regulatory assessments and reputational harm

The company and the insurance industry are inherently susceptible to past and future misconduct or fraudulent activities by employees, representative agents, vendors, customers and other third parties. These activities could include:

- Fraud against the company, its employees and its customers through illegal or prohibited activities
- Unauthorized acts or representations, unauthorized use or disclosure of personal or proprietary information, deception, and misappropriation of funds or other benefits

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our home office is part of the Parent Group’s home office complex in Northbrook, Illinois. As of December 31, 2019, the home office complex consists of several buildings totaling 1.9 million square feet of office space on a 186-acre site. In addition, the Parent Group operates various administrative, data processing, claims handling and other support facilities around the world.

All of the facilities from which we operate are owned or leased by our direct parent, AIC. Expenses associated with facilities owned or leased by AIC are allocated to us. We believe that these facilities are suitable and adequate for our current operations.

The locations where Allstate exclusive agencies and exclusive financial specialists operate in the U.S. are normally leased by the agencies and financial specialists.

Item 3. Legal Proceedings

Information required for Item 3 is incorporated by reference to the discussion under the heading “Regulation and compliance” in Note 11 of the 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

No established public trading market exists for Allstate Life’s common stock. All of its outstanding common stock is owned by Allstate Life’s parent, AIC. All of the outstanding common stock of AIC is owned by Allstate Insurance Holdings, LLC, which is wholly owned by The Allstate Corporation.

Item 6. Selected Financial Data

5-YEAR SUMMARY OF SELECTED FINANCIAL DATA

($ in millions)	2019	2018	2017	2016	2015
Consolidated Operating Results					
Premiums	$ 677	$ 704	$ 690	$ 592	$ 600
Contract charges	682	695	703	717	738
Other revenue	42	38	40	45	44
Net investment income	1,411	1,585	1,777	1,659	1,819
Realized capital gains and losses	341	(175)	49	(77)	265
Total revenues	3,153	2,847	3,259	2,936	3,466
Net income	530	365	996	319	561
Consolidated Financial Position					
Investments	$ 33,607	$ 32,683	$ 34,438	$ 35,067	$ 34,962
Total assets	41,129	40,142	42,605	43,239	43,678
Reserve for life-contingent contract benefits and contractholder funds	27,983	28,709	30,217	30,792	31,936
Notes due to related parties	214	140	140	465	275
Shareholder’s equity	7,809	6,692	6,855	6,409	5,933

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

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OVERVIEW

The following discussion highlights significant factors influencing the consolidated financial position and results of operations of Allstate Life Insurance Company (referred to in this document as "we," "our," "us," the "Company" or "ALIC"). It should be read in conjunction with the consolidated financial statements and related notes found under Item 8. contained herein. We operate as a single segment entity based on the manner in which we use financial information to evaluate business performance and to determine the allocation of resources.

The most important factors we monitor to evaluate the financial condition and performance of our company include:

- For operations: benefit and investment spread, asset-liability matching, expenses, net income, and premiums and contract charges.
- For investments: exposure to market risk, asset allocation, credit quality/experience, total return, net investment income, cash flows, realized capital gains and losses, unrealized capital gains and losses, stability of long-term returns, and asset and liability duration.
- For financial condition: liquidity, financial strength ratings, capital position, and return on equity.

This section of this Form 10-K generally discusses 2019 and 2018 results and year-to-year comparisons between 2019 and 2018. Discussions of 2017 results and year-to-year comparisons between 2018 and 2017 that are not included in this Form 10-K can be found in Management's Discussion and Analysis ("MD&A") in Part II, Item 7 of our annual report on Form 10-K for 2018, filed February 22, 2019.

2019 HIGHLIGHTS

- Net income was $530 million in 2019 compared to $365 million in 2018.
- Premiums and contract charges totaled $1.36 billion in 2019, a decrease of 2.9% from $1.40 billion in 2018.
- Investments totaled $33.61 billion as of December 31, 2019, an increase of $924 million from $32.68 billion as of December 31, 2018. Net investment income decreased 11.0% to $1.41 billion in 2019 from $1.59 billion in 2018.
- Net realized capital gains totaled $341 million in 2019 compared to net realized capital losses of $175 million in 2018.
- Contractholder funds totaled $16.71 billion as of December 31, 2019, a decrease of $759 million from $17.47 billion as of December 31, 2018. Reserve for life-contingent contract benefits totaled $11.27 billion as of December 31, 2019 compared to $11.24 billion as of December 31, 2018.

OPERATIONS

Summary analysis Summarized financial data for the years ended December 31 is presented in the following table.

($ in millions)	2019	2018	2017
Revenues			
Premiums	$ 677	$ 704	$ 690
Contract charges	682	695	703
Other revenue	42	38	40
Net investment income	1,411	1,585	1,777
Realized capital gains and losses	341	(175)	49
Total revenues	3,153	2,847	3,259
Costs and expenses			
Contract benefits	(1,481)	(1,446)	(1,430)
Interest credited to contractholder funds	(585)	(601)	(639)
Amortization of DAC	(180)	(146)	(152)
Operating costs and expenses	(249)	(271)	(321)
Restructuring and related charges	(1)	(2)	(2)
Interest expense	(5)	(5)	(4)
Total costs and expenses	(2,501)	(2,471)	(2,548)
Gain on disposition of operations	6	6	7
Income tax (expense) benefit	(128)	(17)	278
Net income	$ 530	$ 365	$ 996

Net income increased 45.2% or $165 million in 2019 compared to 2018. 2018 results include a net tax benefit of $53 million related to the Tax Cut and Jobs Act of 2017 ("Tax Legislation"). Excluding the impact of the Tax Legislation in 2018, net income

increased $218 million in 2019 compared to 2018, primarily due to net realized capital gains in 2019 compared to net realized capital losses in 2018, partially offset by lower net investment income.

Analysis of revenues Total revenues increased 10.7% or $306 million in 2019 compared to 2018, primarily due to net realized capital gains in 2019 compared to net realized capital losses in 2018, partially offset by lower net investment income and lower premiums.

Premiums represent revenues generated from traditional life insurance, accident and health insurance products, and immediate annuities with life contingencies that have significant mortality or morbidity risk.

Contract charges are revenues generated from interest-sensitive and variable life insurance and fixed annuities for which deposits are classified as contractholder funds or separate account liabilities. Contract charges are assessed against the contractholder account values for maintenance, administration, cost of insurance and surrender prior to contractually specified dates.

The following table summarizes premiums and contract charges by product for the years ended December 31.

($ in millions)	2019	2018	2017
Underwritten products			
Traditional life insurance premiums	$ 557	$ 582	$ 579
Accident and health insurance premiums	120	122	111
Interest-sensitive life insurance contract charges	669	680	689
Subtotal	1,346	1,384	1,379
Annuities			
Fixed annuity contract charges	13	15	14
Premiums and contract charges [1]	$ 1,359	$ 1,399	$ 1,393

[1] Contract charges related to the cost of insurance totaled $501 million, $495 million and $493 million in 2019, 2018, and 2017, respectively.

Premiums and contract charges decreased 2.9% or $40 million in 2019 compared to 2018, primarily due to lower premiums on traditional life insurance and lower contract charges on interest-sensitive life insurance.

Other revenue increased 10.5% or $4 million in 2019 compared to 2018, primarily due to higher gross dealer concessions earned on Allstate agencies' sales of non-proprietary fixed annuities.

Analysis of costs and expenses Total costs and expenses increased 1.2% or $30 million in 2019 compared to 2018, primarily due to higher contract benefits and higher amortization of DAC related to our annual review of assumptions, partially offset by lower operating costs and expenses and lower interest credited to contractholder funds.

Contract benefits increased 2.4% or $35 million in 2019 compared to 2018, primarily due to higher claim experience on interest-sensitive life insurance and worse immediate annuity mortality experience, partially offset by a favorable change associated with the annual review of assumptions.

Our annual review of assumptions in 2019 resulted in a $5 million decrease in reserves primarily for secondary guarantees on interest-sensitive life insurance due to utilizing more refined policy level information and assumptions. In 2018, the review resulted in a $3 million increase in reserves, primarily for guaranteed withdrawal benefits on equity-indexed annuities due to higher projected guaranteed benefits and secondary guarantees on interest-sensitive life insurance due to higher than anticipated policyholder persistency.

As of December 31, 2019, our premium deficiency and profits followed by losses evaluations concluded that no adjustments were required to be recognized. For further detail on these evaluations, see Reserve for life-contingent contract benefits estimation in the Application of Critical Accounting Estimates section.

We analyze our mortality and morbidity results using the difference between premiums and contract charges earned for the cost of insurance and contract benefits excluding the portion related to the implied interest on immediate annuities with life contingencies ("benefit spread"). This implied interest totaled $479 million and $492 million in 2019 and 2018, respectively.

The benefit spread by product group for the years ended December 31 is disclosed in the following table.

($ in millions)	2019	2018	2017
Life insurance	$ 218	$ 254	$ 282
Accident and health insurance	53	59	56
Annuities	(95)	(68)	(84)
Total benefit spread	$ 176	$ 245	$ 254

Benefit spread decreased 28.2% or $69 million in 2019 compared to 2018, primarily due to worse immediate annuity mortality experience, lower premiums on traditional life insurance and higher claim experience on interest-sensitive life insurance, partially offset by favorable mortality experience on traditional life insurance.

Interest credited to contractholder funds decreased 2.7% or $16 million in 2019 compared to 2018, primarily due to lower average contractholder funds, partially offset by valuation changes on derivatives embedded in equity-indexed life and annuity contracts that are not hedged. Valuation changes on derivatives embedded in equity-indexed life and annuity contracts that are not hedged increased interest credited to contractholder funds by $18 million in 2019 compared to a decrease of $3 million in 2018.

In order to analyze the impact of net investment income and interest credited to contractholders on net income, we monitor the difference between net investment income and the sum of interest credited to contractholder funds and the implied interest on immediate annuities with life contingencies, which is included as a component of contract benefits on the Consolidated Statements of Operations and Comprehensive Income ("investment spread").

The investment spread is shown in the following table.

($ in millions)	**2019**	**2018**	**2017**
Investment spread before valuation changes on embedded derivatives not hedged	$ 365	$ 489	$ 638
Valuation changes on derivatives embedded in equity-indexed life and annuity contracts that are not hedged	(18)	3	(1)
Total investment spread	$ 347	$ 492	$ 637

Investment spread before valuation changes on embedded derivatives not hedged decreased 25.4% or $124 million in 2019 compared to 2018, primarily due to lower investment income, mainly from limited partnership interests, partially offset by lower interest credited to contractholder funds.

To further analyze investment spreads, the following table summarizes the weighted average investment yield on assets supporting product liabilities and capital, interest crediting rates and investment spreads. Investment spreads may vary significantly between periods due to the variability in investment income, particularly for immediate fixed annuities where the investment portfolio includes performance-based investments.

	Weighted average investment yield			**Weighted average interest crediting rate**			**Weighted average investment spreads**		
	2019	**2018**	**2017**	**2019**	**2018**	**2017**	**2019**	**2018**	**2017**
Interest-sensitive life insurance	4.9%	5.1%	5.3%	3.7%	3.7%	3.7%	1.2 %	1.4%	1.6%
Deferred fixed annuities	4.3	4.1	4.3	2.7	2.8	2.8	1.6	1.3	1.5
Immediate fixed annuities with and without life contingencies	5.0	6.4	8.0	5.9	6.0	6.0	(0.9)	0.4	2.0
Investments supporting capital, traditional life and other products	3.7	3.6	3.6	n/a	n/a	n/a	n/a	n/a	n/a

The following table summarizes the weighted average guaranteed crediting rates and weighted average current crediting rates as of December 31, 2019 for certain fixed annuities and interest-sensitive life contracts where management has the ability to change the crediting rate, subject to contractual minimums. Other products, including equity-indexed, variable and immediate annuities, and equity-indexed and variable life totaling $4.99 billion of contractholder funds, have been excluded from the analysis because management does not have the ability to change the crediting rate or the minimum crediting rate is not considered meaningful in this context.

($ in millions)	**Weighted average guaranteed crediting rates**	**Weighted average current crediting rates**	**Contractholder funds**
Annuities with annual crediting rate resets	3.15%	3.16%	$ 4,190
Annuities with multi-year rate guarantees [(1)]:			
Resettable in next 12 months	1.73	2.89	116
Resettable after 12 months	2.22	2.63	518
Interest-sensitive life insurance	3.88	3.89	6,900

[(1)] These contracts include interest rate guarantee periods, the majority of which are 5 years.

Amortization of DAC The components of amortization of DAC for the years ended December 31 are summarized in the following table.

($ in millions)	**2019**	**2018**	**2017**
Amortization of DAC before amortization relating to realized capital gains and losses, valuation changes on embedded derivatives that are not hedged and changes in assumptions	$ 130	$ 134	$ 151
Amortization relating to realized capital gains and losses [1] and valuation changes on embedded derivatives that are not hedged	6	10	15
Amortization acceleration (deceleration) for changes in assumptions ("DAC unlocking")	44	2	(14)
Total amortization of DAC	$ 180	$ 146	$ 152

[1] The impact of realized capital gains and losses on amortization of DAC is dependent upon the relationship between the assets that give rise to the gain or loss and the product liability supported by the assets. Fluctuations result from changes in the impact of realized capital gains and losses on actual and expected gross profits.

Amortization of DAC increased 23.3% or $34 million in 2019 compared to 2018, primarily due to higher amortization acceleration for changes in assumptions, partially offset by lower gross profits on interest-sensitive life insurance.

Our annual comprehensive review of assumptions underlying estimated future gross profits for our interest-sensitive life, fixed annuities and other investment contracts covers assumptions for mortality, persistency, expenses, investment returns, including capital gains and losses, interest crediting rates to policyholders, and the effect of any hedges. An assessment is made of future projections to ensure the reported DAC balances reflect current expectations.

In 2019, the review resulted in an acceleration of DAC amortization (decrease to income) of $44 million related to interest-sensitive life insurance. The acceleration primarily related to the investment margin component of estimated gross profits and was due to lower projected future interest rates and investment returns compared to our previous expectations. The acceleration related to benefit margin was due to decreased projected interest rates that result in lower projected policyholder account values which increases benefits on guaranteed products and more refined policy level information and assumptions.

In 2018, the review resulted in an acceleration of DAC amortization (decrease to income) of $2 million related to interest-sensitive life insurance. The acceleration primarily related to the investment margin component of estimated gross profits and was due to lower projected investment returns. This was partially offset by DAC amortization deceleration (increase to income) for changes in the benefit margin due to a decrease in projected mortality.

For additional detail related to the DAC annual review, see the Application of Critical Accounting Estimates section of this document.

The changes in DAC for the years ended December 31 are detailed in the following table.

($ in millions)	Traditional life and accident and health		Interest-sensitive life insurance		Fixed annuities		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
Beginning balance	$ 507	$ 516	$ 698	$ 606	$ 27	$ 34	$ 1,232	$ 1,156
Acquisition costs deferred	25	46	30	32	—	—	55	78
Amortization of DAC before amortization relating to realized capital gains and losses, valuation changes on embedded derivatives not hedged and changes in assumptions [1]	(64)	(55)	(59)	(72)	(7)	(7)	(130)	(134)
Amortization relating to realized capital gains and losses and valuation changes on embedded derivatives not hedged [1]	—	—	(6)	(10)	—	—	(6)	(10)
Amortization (acceleration) deceleration for changes in assumptions (“DAC unlocking”) [1]	—	—	(44)	(2)	—	—	(44)	(2)
Effect of unrealized capital gains and losses [2]	—	—	(160)	144	—	—	(160)	144
Ending balance	$ 468	$ 507	$ 459	$ 698	$ 20	$ 27	$ 947	$ 1,232

[1] Included as a component of amortization of DAC on the Consolidated Statements of Operations and Comprehensive Income.

[2] Represents the change in the DAC adjustment for unrealized capital gains and losses. The DAC adjustment represents the amount by which the amortization of DAC would increase or decrease if the unrealized gains and losses in the respective product portfolios were realized.

Operating costs and expenses decreased 8.1% or $22 million in 2019 compared to 2018, primarily due to lower acquisition and maintenance expenses resulting from the decline in new and inforce business, partially offset by higher commissions on non-proprietary product sales.

Analysis of reserves and contractholder funds

The following table summarizes our product liabilities as of December 31.

($ in millions)	2019	2018	2017
Traditional life insurance	$ 2,552	$ 2,517	$ 2,458
Accident and health insurance	195	203	238
Immediate fixed annuities with life contingencies			
Sub-standard structured settlements and group pension terminations [1]	5,085	4,990	5,304
Standard structured settlements and SPIA [2]	3,362	3,420	3,540
Other	78	109	85
Reserve for life-contingent contract benefits	$ 11,272	$ 11,239	$ 11,625
Interest-sensitive life insurance	$ 7,442	$ 7,369	$ 7,387
Deferred fixed annuities	6,468	7,123	8,093
Immediate fixed annuities without life contingencies	2,343	2,522	2,697
Other	458	456	415
Contractholder funds	$ 16,711	$ 17,470	$ 18,592

[1] Comprises structured settlement annuities for annuitants with severe injuries or other health impairments which increased their expected mortality rate at the time the annuity was issued (“sub-standard structured settlements”) and group annuity contracts issued to sponsors of terminated pension plans (“ABO”). Sub-standard structured settlements comprise 6% of our immediate annuity policies in force and 54% of the immediate annuity reserve for life-contingent contract benefits.

[2] Comprises structured settlement annuities for annuitants with standard life expectancy (“standard structured settlements”) and single premium immediate annuities (“SPIA”) with life contingencies.

Contractholder funds represent interest-bearing liabilities arising from the sale of products such as interest-sensitive life insurance and fixed annuities. The balance of contractholder funds is equal to the cumulative deposits received and interest credited to the contractholder less cumulative contract benefits, surrenders, withdrawals and contract charges for mortality or administrative expenses.

The following table shows the changes in contractholder funds for the years ended December 31.

($ in millions)	2019	2018	2017
Contractholder funds, beginning balance	$ 17,470	$ 18,592	$ 19,470
Deposits			
Interest-sensitive life insurance	819	848	881
Fixed annuities	15	15	28
Total deposits	834	863	909
Interest credited	581	597	635
Benefits, withdrawals and other adjustments			
Benefits	(769)	(810)	(871)
Surrenders and partial withdrawals	(844)	(1,095)	(960)
Contract charges	(637)	(645)	(655)
Net transfers from separate accounts	11	7	4
Other adjustments [1]	65	(39)	60
Total benefits, withdrawals and other adjustments	(2,174)	(2,582)	(2,422)
Contractholder funds, ending balance	$ 16,711	$ 17,470	$ 18,592

[1] The table above illustrates the changes in contractholder funds, which are presented gross of reinsurance recoverables on the Consolidated Statements of Financial Position. The table above is intended to supplement our discussion and analysis of revenues, which are presented net of reinsurance on the Consolidated Statements of Operations and Comprehensive Income. As a result, the net change in contractholder funds associated with products reinsured is reflected as a component of the other adjustments line.

Contractholder funds decreased 4.3% in 2019, primarily due to the continued runoff of our deferred fixed annuity business. We discontinued the sale of proprietary annuities but still accept additional deposits on existing contracts.

Surrenders and partial withdrawals on deferred fixed annuities and interest-sensitive life insurance products decreased 22.9% or $251 million in 2019 compared to 2018. 2018 had elevated surrenders on fixed annuities resulting from an increased number of contracts reaching the 30-45 day period during which there is no surrender charge. The surrender and partial withdrawal rate on deferred fixed annuities and interest-sensitive life insurance products, based on the beginning of year contractholder funds, was 6.1% in 2019 compared to 7.4% in 2018.

Reinsurance Ceded

In the normal course of business, we seek to limit aggregate and single exposure to losses on large risks by purchasing reinsurance. In addition, we have used reinsurance to effect the disposition of certain blocks of business. We retain primary liability as a direct insurer for all risks ceded to reinsurers. As of December 31, 2019, 19% of our face amount of life insurance in force was reinsured. Additionally, we ceded substantially all of the risk associated with our variable annuity business to Prudential Insurance Company of America.

Our reinsurance recoverables, summarized by reinsurer as of December 31, are shown in the following table.

($ in millions)	S&P financial strength rating [1]	Reinsurance recoverable on paid and unpaid benefits	
		2019	2018
Prudential Insurance Company of America	AA-	$ 1,288	$ 1,364
Allstate Assurance Company [2]	N/A	408	420
RGA Reinsurance Company	AA-	197	208
Swiss Re Life and Health America, Inc.	AA-	155	155
Munich American Reassurance	AA-	80	87
Transamerica Life Group	AA-	78	80
Scottish Re (U.S.), Inc. [3]	N/A	70	66
John Hancock Life & Health Insurance Company	AA-	50	53
Triton Insurance Company [4]	N/A	43	45
American Health & Life Insurance Company [4]	N/A	32	34
Lincoln National Life Insurance	AA-	27	25
Security Life of Denver	A+	23	24
SCOR Global Life	AA-	14	14
American United Life Insurance Company	AA-	11	13
Other [5]		14	17
Total		$ 2,490	$ 2,605

(1) N/A reflects no S&P Global Ratings ("S&P") rating available.

(2) Affiliate company. A.M. Best rating is A+.

(3) In December 2018, the Delaware Insurance Commissioner placed Scottish Re (U.S.), Inc. under regulatory supervision and in March 2019, the reinsurer was placed in rehabilitation. We have been permitted to exercise certain setoff rights while the parties address any potential disputes. See Note 9 of the consolidated financial statements for more details.

(4) A.M. Best rating is B++.

(5) As of December 31, 2019 and 2018, the other category includes $8 million and $9 million, respectively, of recoverables due from reinsurers rated A- or better by S&P.

We continuously monitor the creditworthiness of reinsurers in order to determine our risk of recoverability on an individual and aggregate basis, and a provision for uncollectible reinsurance is recorded if needed. No amounts have been deemed unrecoverable in the three-years ended December 31, 2019, except for an allowance related to Scottish Re (U.S.), Inc. that was established in 2019.

INVESTMENTS

Overview and strategy The return on our investment portfolio is an important component of our ability to offer good value to customers and earn an acceptable return on capital. We identify a strategic asset allocation which considers both the nature of the liabilities and the risk and return characteristics of the various asset classes in which we invest. This allocation is informed by our long-term and market expectations, as well as other considerations such as risk appetite, portfolio diversification, duration, desired liquidity and capital. Within appropriate ranges relative to strategic allocations, tactical allocations are made in consideration of prevailing and potential future market conditions. We manage risks that involve uncertainty related to interest rates, credit spreads, equity returns and currency exchange rates.

Our portfolio is comprised of assets chosen to generate returns to support corresponding liabilities within an asset-liability framework that targets an appropriate return on capital. For shorter-term annuity liability cash flows and life insurance liabilities, we invest primarily in fixed income securities and commercial mortgage loans with maturity profiles aligned with liability cash flow requirements. For longer-term immediate annuity liability cash flows, we invest primarily in performance-based investments, such as limited partnerships, and public equity securities.

We utilize two primary strategies to manage risks and returns and to position our portfolio to take advantage of market opportunities while attempting to mitigate adverse effects. As strategies and market conditions evolve, the asset allocation may change or assets may be moved between strategies.

Market-based strategy includes investments primarily in public fixed income and equity securities. It seeks to deliver predictable earnings aligned to business needs and take advantage of short-term opportunities primarily through public and private fixed income investments and public equity securities.

Performance-based strategy seeks to deliver attractive risk-adjusted returns and supplement market risk with idiosyncratic risk. Returns are impacted by a variety of factors including general macroeconomic and public market conditions as public benchmarks are often used in the valuation of underlying investments. Variability in earnings will also result from the performance of the underlying assets or business and the timing of sales of those investments. Earnings from the sales of investments may be recorded as net investment income or realized capital gains and losses. The portfolio, which primarily includes private equity and real estate with a majority being limited partnerships, is diversified across a number of characteristics, including managers or partners, vintage years, strategies, geographies (including international) and industry sectors or property types. These investments are generally illiquid in nature, often require specialized expertise, typically involve a third-party manager, and often enhance returns and income through transformation at the company or property level. A portion of these investments seek returns in markets or asset classes that are dislocated or special situations, primarily in private markets.

Impact of Low Interest Rate Environment

In January 2020, the Federal Open Market Committee ("FOMC") maintained the target range for federal funds rate at 1-1/2 percent to 1-3/4 percent and maintained their inflation target of 2 percent. The FOMC noted that the current stance of monetary policy is appropriate to support sustained expansion of economic activity, strong labor market conditions and inflation returning to the target of 2 percent. The path of the federal funds rate will depend on economic conditions and their impact on the economic outlook. Interest-bearing investments are comprised of fixed income securities, mortgage loans, short-term investments and other investments, including bank and agent loans.

Contractual maturities and yields of fixed income securities and mortgage loans for the next three years are presented in the following table:

	Fixed income securities		Mortgage loans	
($ in millions)	**Carrying value**	**Investment yield**	**Carrying value**	**Investment yield**
2020	$ 1,374	4.3%	$ 52	4.7%
2021	2,224	4.2	371	4.9
2022	1,990	4.2	336	4.3

Investing activity will continue to decrease our portfolio yield as long as market yields remain below the current portfolio yield. In the annuity business, the portfolio yield has been less impacted by reinvestment in the current low interest rate environment than other portfolios because much of the investment cash flows have been used to fund the managed reduction in spread-based liabilities. The decline in market-based portfolio yield and annuity invested assets are expected to result in lower net investment income in future periods.

Investments outlook

We plan to focus on the following priorities:

- Enhance investment portfolio returns through use of a dynamic capital allocation framework and focus on tax efficiency.
- Leverage our broad capabilities to shift the portfolio mix to earn higher risk-adjusted returns on capital.
- Invest for the specific needs and characteristics of our business, including our liability profile.

Invested assets and market-based income are expected to decline with reductions in contractholder funds and income related to performance-based investments will result in variability of our earnings.

Portfolio composition The composition of the investment portfolio is presented in the following table.

($ in millions)	December 31, 2019	Percent to total
Fixed income securities [1]	$ 21,725	64.6%
Mortgage loans	3,988	11.9
Equity securities [2]	1,469	4.4
Limited partnership interests	3,250	9.7
Short-term investments [3]	1,191	3.5
Policy loans	557	1.7
Other	1,427	4.2
Total	$ 33,607	100.0%

[1] Fixed income securities are carried at fair value. Amortized cost basis for these securities was $20.22 billion.

[2] Equity securities are carried at fair value. The fair value of equity securities held as of December 31, 2019 was $346 million in excess of cost. These net gains were primarily concentrated in the consumer goods, technology and financial services sectors.

[3] Short-term investments are carried at fair value.

Investments totaled $33.61 billion as of December 31, 2019, increasing from $32.68 billion as of December 31, 2018, primarily due to higher fixed income and equity valuations and positive operating cash flows, partially offset by net reductions in contractholder funds and dividends paid to Allstate Insurance Company ("AIC").

Beginning January 1, 2018, equity securities are reported at fair value with changes in fair value recognized in realized capital gains and losses. Limited partnerships previously reported using the cost method are reported at fair value with changes in fair value recognized in net investment income. As a result, 2017 net investment income and net realized capital gains and losses are not comparable to other periods presented.

Portfolio composition by investment strategy The following table presents the investment portfolio by strategy as of December 31, 2019.

($ in millions)	Market-based	Performance-based	Total
Fixed income securities	$ 21,712	$ 13	$ 21,725
Mortgage loans	3,988	—	3,988
Equity securities	1,385	84	1,469
Limited partnership interests	129	3,121	3,250
Short-term investments	1,191	—	1,191
Policy loans	557	—	557
Other	1,126	301	1,427
Total	$ 30,088	$ 3,519	$ 33,607
Percent to total	89.5%	10.5%	100.0%
Unrealized net capital gains (losses)			
Fixed income securities	$ 1,508	$ —	$ 1,508
Limited partnership interests	—	(2)	(2)
Total	$ 1,508	$ (2)	$ 1,506

During 2019, strategic actions focused on optimizing portfolio yield, return and risk in the low interest rate environment. We maintained the maturity profile of fixed income securities in our portfolio. Invested assets and market-based income declined with reductions in contractholder funds. Performance-based investments and equity securities will continue to be allocated primarily to the longer-term immediate annuity liabilities to reduce the risk that investment returns are below levels required to meet their funding needs while shorter-term annuity liabilities will be invested in market-based investments.

Fixed income securities by type are listed in the following table.

($ in millions)	Fair value as of December 31, 2019	Fair value as of December 31, 2018
U.S. government and agencies	$ 882	$ 773
Municipal	1,755	2,195
Corporate	18,441	17,587
Foreign government	149	179
Asset-backed securities (“ABS”)	317	429
Mortgage-backed securities (“MBS”)	181	237
Total fixed income securities	$ 21,725	$ 21,400

Fixed income securities are rated by third-party credit rating agencies and/or are internally rated. As of December 31, 2019, 87.0% of the fixed income securities portfolio was rated investment grade, which is defined as a security having a rating of Aaa, Aa, A or Baa from Moody’s, a rating of AAA, AA, A or BBB from S&P, a comparable rating from another nationally recognized rating agency, or a comparable internal rating if an externally provided rating is not available. Credit ratings below these designations are considered lower credit quality or below investment grade, which includes high yield bonds. Market prices for certain securities may have credit spreads which imply higher or lower credit quality than the current third-party rating. Our initial investment decisions and ongoing monitoring procedures for fixed income securities are based on a thorough due diligence process which includes, but is not limited to, an assessment of the credit quality, sector, structure and liquidity risks of each issue.

The following table summarizes the fair value and unrealized net capital gains (losses) for fixed income securities by credit quality as of December 31, 2019.

($ in millions)	Investment grade		Below investment grade		Total		
	Fair value	Unrealized gain (loss)	Fair value	Unrealized gain (loss)	Fair value	Unrealized gain (loss)	Percent rated investment grade
U.S. government and agencies	$ 882	$ 34	$ —	$ —	$ 882	$ 34	100.0%
Municipal	1,722	279	33	(7)	1,755	272	98.1
Corporate							
Public	11,531	781	1,271	53	12,802	834	90.1
Privately placed	4,284	259	1,355	47	5,639	306	76.0
Total corporate	15,815	1,040	2,626	100	18,441	1,140	85.8
Foreign government	142	7	7	—	149	7	95.3
ABS	299	—	18	1	317	1	94.3
MBS	31	2	150	52	181	54	17.1
Total fixed income securities	$ 18,891	$ 1,362	$ 2,834	$ 146	$ 21,725	$ 1,508	87.0%

Municipal bonds include general obligations of state and local issuers and revenue bonds (including pre-refunded bonds, which are bonds for which an irrevocable trust has been established to fund the remaining payments of principal and interest).

Our practice for acquiring and monitoring municipal bonds is predominantly based on the underlying credit quality of the primary obligor. We currently rely on the primary obligor to pay all contractual cash flows and are not relying on bond insurers for payments. As a result of downgrades in the insurers’ credit ratings, the ratings of the insured municipal bonds generally reflect the underlying ratings of the primary obligor.

Corporate bonds include publicly traded and privately placed securities. Privately placed securities primarily consist of corporate issued senior debt securities that are directly negotiated with the borrower or are in unregistered form.

Our portfolio of privately placed securities is diversified by issuer, industry sector and country. The portfolio is made up of 418 issuers. Privately placed corporate obligations may contain structural security features such as financial covenants and call protections that provide investors greater protection against credit deterioration, reinvestment risk or fluctuations in interest rates than those typically found in publicly registered debt securities. Additionally, investments in these securities are made after due diligence of the issuer, typically including discussions with senior management and on-site visits to company facilities. Ongoing monitoring includes direct periodic dialog with senior management of the issuer and continuous monitoring of operating performance and financial position. Every issue not rated by an independent rating agency is internally rated with a formal rating affirmation at least once a year.

Our corporate bonds portfolio includes $2.63 billion of below investment grade bonds, $1.36 billion of which are privately placed. These securities are diversified by issuer and industry sector. The below investment grade corporate bonds portfolio is made up of 277 issuers. We employ fundamental analyses of issuers and sectors along with macro and asset class views to identify investment opportunities. This results in a portfolio with broad exposure to the high yield market with an emphasis on idiosyncratic positions reflective of our views of market conditions and opportunities.

Foreign government securities include 90.6% backed by the U.S. government, 4.7% in Canadian governmental and provincial securities, and 4.7% that are highly diversified in other foreign governments.

ABS and MBS are structured securities that are primarily collateralized by consumer or corporate borrowings and residential and commercial real estate loans. The cash flows from the underlying collateral paid to the securitization trust are generally applied in a pre-determined order and are designed so that each security issued by the trust, typically referred to as a “class”, qualifies for a specific original rating.

For example, the “senior” portion or “top” of the capital structure, or rating class, which would originally qualify for a rating of Aaa typically has priority in receiving principal repayments on the underlying collateral and retains this priority until the class is paid in full. In a sequential structure, underlying collateral principal repayments are directed to the most senior rated Aaa class in the structure until paid in full, after which principal repayments are directed to the next most senior Aaa class in the structure until it is paid in full. Senior Aaa classes generally share any losses from the underlying collateral on a pro-rata basis after losses are absorbed by classes with lower original ratings.

The payment priority and class subordination included in these securities serves as credit enhancement for holders of the senior or top portions of the structures. These securities continue to retain the payment priority features that existed at the origination of the securitization trust. Other forms of credit enhancement may include structural features embedded in the securitization trust, such as overcollateralization, excess spread and bond insurance. The underlying collateral may contain fixed interest rates, variable interest rates (such as adjustable rate mortgages), or both fixed and variable rate features.

ABS includes collateralized debt obligations, consumer and other ABS. Credit risk is managed by monitoring the performance of the underlying collateral. Many of the securities in the ABS portfolio have credit enhancement with features such as overcollateralization, subordinated structures, reserve funds, guarantees and/or insurance.

MBS includes residential mortgage-backed securities (“RMBS”) and commercial mortgage-backed securities (“CMBS”). RMBS is subject to interest rate risk, but unlike other fixed income securities, is additionally subject to prepayment risk from the underlying residential mortgage loans. RMBS consists of a U.S. Agency portfolio having collateral issued or guaranteed by U.S. government agencies and a non-agency portfolio consisting of securities collateralized by Prime, Alt-A and Subprime loans. CMBS investments are primarily traditional conduit transactions collateralized by commercial mortgage loans, broadly diversified across property types and geographical area.

Mortgage loans mainly comprise loans secured by first mortgages on developed commercial real estate. Key considerations used to manage our exposure include property type and geographic diversification. For further detail on our mortgage loan portfolio, see Note 5 of the consolidated financial statements.

Equity securities primarily include common stocks, exchange traded and mutual funds, non-redeemable preferred stocks and real estate investment trust equity investments. Certain exchange traded and mutual funds have fixed income securities as their underlying investments.

Limited partnership interests include $2.75 billion of private equity funds interests, $369 million of real estate funds interests and $129 million of other funds interests as of December 31, 2019. We have commitments to invest additional amounts in limited partnership interests totaling $1.06 billion as of December 31, 2019.

Short-term investments primarily comprise money market funds, commercial paper, U.S. Treasury bills and other short-term investments, including securities lending collateral of $528 million.

Policy loans are carried at unpaid principal balances.

Other investments primarily comprise $666 million of agent loans (loans issued to exclusive Allstate agents), $344 million of bank loans, $292 million of real estate and $124 million of derivatives as of December 31, 2019. For further detail on our use of derivatives, see Note 7 of the consolidated financial statements.

The following table presents unrealized net capital gains (losses) as of December 31.

($ in millions)	2019	2018
U.S. government and agencies	$ 34	$ 33
Municipal	272	198
Corporate	1,140	53
Foreign government	7	9
ABS	1	—
MBS	54	50
Fixed income securities	1,508	343
Equity method of accounting (“EMA”) limited partnerships	(2)	—
Unrealized net capital gains and losses, pre-tax	$ 1,506	$ 343

Fixed income portfolio monitoring is a comprehensive process to identify and evaluate each security that may be other-than-temporarily impaired. The process includes a quarterly review of all securities to identify instances where the fair value of a security compared to its amortized cost is below established thresholds. The process also includes the monitoring of other impairment indicators such as ratings, ratings downgrades and payment defaults. The securities identified, in addition to other securities for which we may have a concern, are evaluated for potential other-than-temporary impairment using all reasonably available information relevant to the collectability or recovery of the security. Inherent in our evaluation of other-than-temporary impairment for these fixed income securities are assumptions and estimates about the financial condition and future earnings potential of the issue or issuer.

Some of the factors that may be considered in evaluating whether a decline in fair value is other than temporary are:

1) Financial condition, near-term and long-term prospects of the issue or issuer, including relevant industry specific market conditions and trends, geographic location and implications of rating agency actions and offering prices

2) Specific reasons that a security is in an unrealized loss position, including overall market conditions which could affect liquidity

3) Length of time and extent to which the fair value has been less than amortized cost or cost. All investments in an unrealized loss position as of December 31, 2019 were included in our portfolio monitoring process for determining whether declines in value were other than temporary.

The following table presents gross unrealized gains (losses) on fixed income securities as of December 31.

($ in millions)	2019	2018
Gross unrealized gains	$ 1,549	$ 732
Gross unrealized losses	(41)	(389)
Unrealized net capital gains and losses	$ 1,508	$ 343

Fixed income valuations increased primarily due to a decrease in risk-free interest rates and tighter credit spreads.

Gross unrealized gains (losses) on fixed income securities by type as of December 31, 2019 are provided in the following table.

($ in millions)	Amortized cost	Gross unrealized		Fair value
		Gains	Losses	
Corporate	$ 17,301	$ 1,170	$ (30)	$ 18,441
U.S. government and agencies	848	34	—	882
Municipal	1,483	279	(7)	1,755
Foreign government	142	7	—	149
ABS	316	4	(3)	317
MBS	127	55	(1)	181
Total fixed income securities	$ 20,217	$ 1,549	$ (41)	$ 21,725

The consumer goods, utilities and capital goods sectors comprise 28%, 18% and 13%, respectively, of the carrying value of our corporate fixed income securities portfolio as of December 31, 2019. The banking, energy and utilities sectors comprise 43%, 20% and 13%, respectively, of the gross unrealized losses of our corporate fixed income securities portfolio as of December 31, 2019. In general, the gross unrealized losses are related to an increase in market yields, which may include increased risk-free interest rates and/or wider credit spreads since the time of initial purchase. Similarly, gross unrealized gains reflect a decrease in market yields since the time of initial purchase.

As of December 31, 2019, we have not made the decision to sell and it is not more likely than not we will be required to sell fixed income securities with unrealized losses before recovery of the amortized cost basis.

Net investment income The following table presents net investment income for the years ended December 31.

($ in millions)	2019	2018	2017
Fixed income securities	$ 963	$ 991	$ 1,058
Mortgage loans	190	188	182
Equity securities	29	39	48
Limited partnership interests	175	327	457
Short-term investments	31	21	9
Policy loans	34	31	31
Other	93	91	79
Investment income, before expense	1,515	1,688	1,864
Investment expense [1][2]	(104)	(103)	(87)
Net investment income	$ 1,411	$ 1,585	$ 1,777
Market-based	$ 1,318	$ 1,339	$ 1,386
Performance-based	197	349	478
Investment income, before expense	$ 1,515	$ 1,688	$ 1,864

(1) Investment expense includes $27 million, $23 million and $16 million of investee level expenses in 2019, 2018 and 2017, respectively. Investee level expenses include depreciation and asset level operating expenses on directly held real estate.

(2) Investment expense includes $13 million, $10 million and $4 million related to the portion of reinvestment income on securities lending collateral paid to the counterparties in 2019, 2018 and 2017, respectively.

Net investment income decreased 11.0% or $174 million in 2019 compared to 2018, primarily due to lower performance-based investment results, primarily from limited partnerships, and lower average investment balances.

Performance-based investments primarily include private equity and real estate. The following table presents investment income for performance-based investments for the years ended December 31.

($ in millions)	2019	2018	2017
Limited partnerships			
Private equity	$ 124	$ 276	$ 375
Real estate	51	51	82
Performance-based - limited partnerships	175	327	457
Non-limited partnerships			
Private equity	(1)	1	6
Real estate	23	21	15
Performance-based - non-limited partnerships	22	22	21
Total			
Private equity	123	277	381
Real estate	74	72	97
Total performance-based	$ 197	$ 349	$ 478
Investee level expenses [1]	$ (27)	$ (23)	$ (16)

(1) Investee level expenses include depreciation and asset level operating expenses reported in investment expense.

Performance-based investment income decreased 43.6% or $152 million in 2019 compared to 2018, primarily due to lower asset appreciation related to private equity investments and lower valuations on two private equity investments totaling $37 million in the fourth quarter of 2019.

Performance-based investment results and income can vary significantly between periods and are influenced by economic conditions, equity market performance, comparable public company earnings multiples, capitalization rates, operating performance of the underlying investments and the timing of asset sales.

Realized capital gains and losses The following table presents the components of realized capital gains (losses) and the related tax effect for the years ended December 31.

($ in millions)	2019	2018	2017
Impairment write-downs:			
Fixed income securities	$ (5)	$ (8)	$ (17)
Mortgage loans	—	—	(1)
Equity securities	—	—	(12)
Limited partnership interests	(2)	—	(9)
Other investments	(14)	(1)	(2)
Total impairment write-downs	(21)	(9)	(41)
Change in intent write-downs	—	—	(4)
Net OTTI losses recognized in earnings	(21)	(9)	(45)
Sales	54	(27)	110
Valuation of equity investments - appreciation (decline):			
Equity securities	276	(124)	—
Limited partnerships [(1)]	21	(22)	—
Total valuation of equity investments	297	(146)	—
Valuation and settlements of derivative instruments	11	7	(16)
Realized capital gains (losses), pre-tax	341	(175)	49
Income tax (expense) benefit	(72)	37	(19)
Realized capital gains (losses), after-tax	$ 269	$ (138)	$ 30
Market-based	$ 300	$ (202)	$ 66
Performance-based	41	27	(17)
Realized capital gains (losses), pre-tax	$ 341	$ (175)	49

(1) Relates to limited partnerships where the underlying assets are predominately public equity securities.

Net realized capital gains in 2019 related primarily to increased valuation of equity investments and gains on sales of fixed income securities. Net realized capital losses in 2018 related primarily to decreased valuation of equity investments and sales of fixed income securities.

Impairment write-downs in 2019 and 2018 related to investment-specific circumstances.

Sales in 2019 related primarily to fixed income securities in connection with ongoing portfolio management as well as limited partnerships. Sales in 2018 related primarily to fixed income securities in connection with ongoing portfolio management.

Valuation and settlements of derivative instruments in 2019 primarily comprised gains on equity options and total return swaps used for asset replication due to increases in equity indices and gains on foreign currency contracts due to the strengthening of the U.S. dollar. The net realized capital gains on derivative instruments in 2018 primarily comprised gains on foreign currency contracts due to the strengthening of the U.S. dollar, partially offset by losses on equity options and total return swaps used for asset replication due to decreases in equity indices.

The table below presents realized capital gains (losses) for performance-based investments for the years ended December 31.

($ in millions)	2019	2018	2017
Impairment write-downs	$ (2)	$ —	$ (9)
Sales	24	(1)	5
Valuation of equity investments	16	16	—
Valuation and settlements of derivative instruments	3	12	(13)
Total performance-based	$ 41	$ 27	$ (17)

Net realized capital gains for performance-based investments in 2019 primarily related to a gain on the sale of a limited partnership and increased valuation of equity investments. 2018 primarily related to increased valuation of equity investments and gains on valuation and settlements of derivative instruments.

MARKET RISK

Market risk is the risk that we will incur losses due to adverse changes in interest rates, credit spreads, equity prices, commodity prices or currency exchange rates. Adverse changes to these rates and prices may occur due to changes in fiscal policy, the economic climate, the liquidity of a market or market segment, insolvency or financial distress of key market makers or participants or changes in market perceptions of credit worthiness and/or risk tolerance. Our primary market risk exposures are to changes in interest rates, credit spreads and equity prices. We also have direct and indirect exposure to commodity price changes through our diversified investments in infrastructure and energy primarily held in limited partnership interests.

The active management of market risk is integral to our results of operations. We may use the following approaches to manage exposure to market risk within defined tolerance ranges: 1) rebalancing existing asset or liability portfolios, 2) changing the type of investments purchased in the future and 3) using derivative instruments to modify the market risk characteristics of existing assets and liabilities or assets expected to be purchased.

Overview In formulating and implementing guidelines for investing funds, we seek to earn attractive risk adjusted returns that enhance our ability to offer competitive rates and prices to customers while contributing to stable profits and long-term capital growth. Accordingly, our investment decisions and objectives are informed by the underlying risks and product profiles.

Investment policies define the overall framework for managing market and other investment risks, including accountability and controls over risk management activities. These investment activities follow policies that have been approved by our board of directors and which specify the investment limits and strategies that are appropriate given the liquidity, surplus, product profile and regulatory requirements. Executive oversight of investment activities is conducted primarily through our board of directors and investment committee. Asset-liability management (“ALM”) policies further define the overall framework for managing market and investment risks and are approved by our board of directors. ALM focuses on strategies to enhance yields, mitigate market risks and optimize capital to improve profitability and returns while incorporating future expected cash requirements to repay liabilities. These ALM policies specify limits, ranges and/or targets for investments that best meet business objectives in light of the unique demands and characteristics of the product liabilities and are intended to result in a prudent, methodical and effective adjudication of market risk and return.

We use widely-accepted quantitative and qualitative approaches to measure, monitor and manage market risk. We evaluate our market risk exposure using multiple measures including but not limited to duration, value-at-risk, scenario analysis and sensitivity analysis. Duration measures the price sensitivity of assets and liabilities to changes in interest rates. For example, if interest rates increase 100 basis points, the fair value of an asset with a duration of 5 is expected to decrease in value by 5%. Value-at-risk is a statistical estimate of the probability that the change in fair value of a portfolio will exceed a certain amount over a given time horizon. Scenario analysis estimates the potential changes in the fair value of a portfolio that could occur under hypothetical market conditions defined by changes to multiple market risk factors: interest rates, credit spreads, equity prices or currency exchange rates. Sensitivity analysis estimates the potential changes in the fair value of a portfolio that could occur under different hypothetical shocks to a market risk factor. The selection of measures used in our sensitivity analysis should not be construed as our prediction of future market events, but only as an illustration of the potential effect of such an event. In general, we establish investment portfolio asset allocation and market risk limits based upon a combination of these measures. The asset allocation limits place restrictions on the total funds that may be invested within an asset class. Comprehensive day-to-day management of market risk within defined tolerance ranges occurs as portfolio managers buy and sell within their respective markets based upon the acceptable boundaries established by investment policies. Although we apply a similar overall philosophy to market risk, the underlying business frameworks and the accounting and regulatory environments may differ between our products and therefore affect investment decisions and risk parameters.

Interest rate risk is the risk that we will incur a loss due to adverse changes in interest rates relative to the characteristics of our interest-bearing assets and liabilities. Interest rate risk includes risks related to changes in U.S. Treasury yields and other key risk-free reference yields. This risk arises from many of our primary activities, as we invest substantial funds in interest-sensitive assets and issue interest-sensitive liabilities. Changes in interest rates can have favorable and unfavorable effects on our results. For example, increases in rates can improve investment income, but decrease the fair value of our fixed income securities portfolio and increase policyholder surrenders requiring us to liquidate assets. Decreases in rates could increase the fair value of our fixed income securities portfolio while decreasing investment income due to reinvesting at lower market yields and accelerating pay-downs and prepayments of certain investments.

We manage the interest rate risk in our assets relative to the interest rate risk in our liabilities and our assessment of overall economic and capital risk. One of the measures used to quantify this exposure is duration. The difference in the duration of our assets relative to our liabilities is our duration gap. To calculate the duration gap between assets and liabilities, we project asset and liability cash flows and calculate their net present value using a risk-free market interest rate adjusted for credit quality, sector attributes, liquidity and other specific risks. Duration is calculated by revaluing these cash flows at alternative interest rates and determining the percentage change in aggregate fair value. The cash flows used in this calculation include the expected maturity and repricing characteristics of our derivative financial instruments, all other financial instruments, and certain other items including

annuity liabilities and other interest-sensitive liabilities. The projections include assumptions (based upon historical market experience and our experience) that reflect the effect of changing interest rates on the prepayment, lapse, leverage and/or option features of instruments, where applicable. The preceding assumptions relate primarily to callable municipal and corporate bonds, fixed rate single and flexible premium deferred annuities, mortgage-backed securities and municipal housing bonds.

As of December 31, 2019, the difference between our asset and liability duration was a (9.39) gap compared to a (6.18) gap as of December 31, 2018. A negative duration gap indicates that the fair value of our liabilities is more sensitive to interest rate movements than the fair value of our assets, while a positive duration gap indicates that the fair value of our assets is more sensitive to interest rate movements than the fair value of our liabilities. We may have a positive or negative duration gap, as the duration of our assets and liabilities vary based on the characteristics of the products in force and investing activity.

Shorter-term annuity liability cash flows are invested in market-based investments to generate cash flows that will fund future claims, benefits and expenses, and that will earn stable returns across a wide variety of interest rate and economic scenarios. To reduce the risk that investment returns are below levels required to meet the funding needs of longer-term liabilities, we are executing our performance-based strategy that supplements market risk with idiosyncratic risk. We are using these investments, in addition to public equity securities, to support our long-term annuity liability cash flows. Performance-based investments and public equity securities are generally not interest-bearing; accordingly, using them to support interest-bearing liabilities contributes toward a negative duration gap.

Based upon the information and assumptions used in the duration calculation, and market interest rates as of December 31, 2019, we estimate that a 100 basis point immediate, parallel increase in interest rates ("rate shock") would increase the net fair value of the assets and liabilities by $1.65 billion, compared to an increase of $1.11 billion as of December 31, 2018, reflecting year to year changes in duration and the amount of assets and liabilities. The estimate excludes traditional and interest-sensitive life insurance and accident and health insurance products that are not considered financial instruments. The assets supporting these products totaled $9.90 billion and $8.89 billion as of December 31, 2019 and 2018, respectively. Based on assumptions described above, these assets would decrease in value by $555 million as of December 31, 2019, compared to a decrease of $504 million as of December 31, 2018.

To the extent that conditions differ from the assumptions we used in these calculations, duration and rate shock measures could be significantly impacted. Additionally, our calculations assume the current relationship between short-term and long-term interest rates (the term structure of interest rates) will remain constant over time. As a result, these calculations may not fully capture the effect of non-parallel changes in the term structure of interest rates and/or large changes in interest rates.

Credit spread risk is the risk that we will incur a loss due to adverse changes in credit spreads ("spreads"). Credit spread is the additional yield on fixed income securities and loans above the risk-free rate (typically referenced as the yield on U.S. Treasury securities) that market participants require to compensate them for assuming credit, liquidity and/or prepayment risks. The magnitude of the spread will depend on the likelihood that a particular issuer will default ("credit risk"). This risk arises from many of our primary activities, as we invest substantial funds in spread-sensitive fixed income assets.

We manage the spread risk in our assets. One of the measures used to quantify this exposure is spread duration. Spread duration measures the price sensitivity of the assets to changes in spreads. For example, if spreads increase 100 basis points, the fair value of an asset exhibiting a spread duration of 5 is expected to decrease in value by 5%.

Spread duration is calculated similarly to interest rate duration. As of December 31, 2019, the spread duration was 4.75, compared to 4.66 as of December 31, 2018. Based upon the information and assumptions we use in this spread duration calculation, and market spreads as of December 31, 2019, we estimate that a 100 basis point immediate, parallel increase in spreads across all asset classes, industry sectors and credit ratings would decrease the net fair value of the assets by $1.24 billion compared to $1.18 billion as of December 31, 2018. Reflected in the spread duration calculation are the effects of tactical positions that may include the use of credit default swaps to manage spread risk.

Equity price risk is the risk that we will incur losses due to adverse changes in the general levels of the markets. As of December 31, 2019, we held $1.27 billion in equity securities, excluding those with fixed income securities as their underlying investments, and limited partnership interests where the underlying assets are predominately public equity securities, compared to $1.33 billion as of December 31, 2018. As of December 31, 2019, these investments had an equity market portfolio beta of 1.04, compared to a beta of 1.02 as of December 31, 2018. Beta represents a widely used methodology to describe, quantitatively, an investment's market risk characteristics relative to an index such as the Standard & Poor's 500 Composite Price Index ("S&P 500"). Based upon the information and assumptions we used to calculate beta as of December 31, 2019, we estimate that an immediate increase or decrease in the S&P 500 of 10% would increase or decrease the net fair value of these investments by $132 million, compared to $136 million as of December 31, 2018.

As of December 31, 2019, we held $3.12 billion in limited partnership interests excluding those limited partnership interests where the underlying assets are predominately public equity securities compared to $3.17 billion as of December 31, 2018. These investments are primarily comprised of private equity and real estate funds. These investments are idiosyncratic in nature and a

greater portion of the return is derived from asset operating performance. They are not actively traded, and valuation changes typically reflect the performance of the underlying asset. Based upon the information and assumptions used as of December 31, 2019, we estimate that a 10% immediate increase or decrease in private market valuations would increase or decrease the net fair value of these limited partnership interests by $312 million, compared to $317 million as of December 31, 2018.

For limited partnership interests, quarterly changes in fair values may not be highly correlated to equity indices in the short term and changes in value of these investments are generally recognized on a three-month delay due to the availability of the related investee financial statements. The illustrations noted above may not reflect our actual experience if the future composition of the portfolio (hence its beta) and correlation relationships differ from the historical relationships.

As of December 31, 2019 and 2018, we had separate account assets, related to variable annuity and variable life contracts with account values totaling $3.01 billion and $2.78 billion, respectively. Equity risk exists for contract charges based on separate account balances and guarantees for death and/or income benefits provided by our variable products. In 2006, we disposed of substantially all of the variable annuity business through reinsurance agreements with The Prudential Insurance Company of America, a subsidiary of Prudential Financial Inc. and therefore mitigated this aspect of our risk. Equity risk for our variable life business relates to contract charges and policyholder benefits. Total variable life contract charges, including reinsurance assumed, for 2019 and 2018 were $41 million and $42 million, respectively. Separate account liabilities related to variable life contracts were $71 million and $63 million as of December 31, 2019 and 2018, respectively.

As of December 31, 2019 and 2018, we had $1.80 billion and $1.75 billion, respectively, in equity-indexed life and annuity liabilities that provide customers with interest crediting rates based on the performance of the S&P 500. We hedge the majority of the risk associated with these liabilities using equity-indexed options and futures and eurodollar futures, maintaining risk within specified value-at-risk limits.

Foreign currency exchange rate risk is the risk that we will incur economic losses due to adverse changes in foreign currency exchange rates. This risk primarily arises from our foreign equity investments, including common stocks and limited partnership interests. We use foreign currency derivative contracts to partially offset this risk.

As of December 31, 2019, we had $636 million in foreign currency denominated equity investments, including the impact of foreign currency derivative contracts, and $8 million in unhedged non-U.S. dollar fixed income securities. As of December 31, 2018, we had $666 million in foreign currency denominated equity investments and $4 million in unhedged non-U.S. dollar fixed income securities.

Based upon the information and assumptions used, including the impact of foreign currency derivative contracts, as of December 31, 2019, we estimate that a 10% immediate unfavorable change in each of the foreign currency exchange rates to which we are exposed would decrease the value of our foreign currency denominated instruments by $64 million, compared with an estimated $67 million decrease as of December 31, 2018.

The modeling technique we use to report our currency exposure does not take into account correlation among foreign currency exchange rates. Even though we believe it is very unlikely that all of the foreign currency exchange rates that we are exposed to would simultaneously decrease by 10%, we nonetheless stress test our portfolio under this and other hypothetical extreme adverse market scenarios. Our actual experience may differ from these results because of assumptions we have used or because significant liquidity and market events could occur that we did not foresee.

CAPITAL RESOURCES AND LIQUIDITY

Capital resources consist of shareholder's equity and notes due to related parties, representing funds deployed or available to be deployed to support business operations. The following table summarizes our capital resources as of December 31.

($ in millions)	2019	2018	2017
Common stock, retained income and additional capital paid-in	$ 6,894	$ 6,439	$ 6,010
Accumulated other comprehensive income	915	253	845
Total shareholder's equity	7,809	6,692	6,855
Notes due to related parties	214	140	140
Total capital resources	$ 8,023	$ 6,832	$ 6,995

Shareholder's equity increased in 2019, primarily due to increased unrealized net capital gains on investments and net income, partially offset by dividends paid to AIC. Shareholder's equity decreased in 2018, primarily due to decreased unrealized net capital gains on investments and dividends paid to AIC, partially offset by net income.

Notes due to related parties increased in 2019 due to sales of agent loan collateralized notes to unconsolidated affiliates. See Note 4 of the consolidated financial statements for further detail.

Financial ratings and strength The following table summarizes our insurance financial strength ratings as of December 31, 2019.

Rating agency	Rating
A.M. Best Company, Inc.	A+
S&P Global Ratings	A+
Moody's Investors Service, Inc.	A2

Our ratings are influenced by many factors including our operating and financial performance, asset quality, liquidity, asset/liability management, overall portfolio mix, financial leverage (i.e., debt), exposure to risks, the current level of operating leverage, AIC's ratings and our strategic integration with AIC.

In May 2019, A.M. Best affirmed our insurance financial strength rating of A+ and the outlook for the rating is stable. In July 2019, Moody's downgraded our insurance financial strength rating to A2 from A1 reflecting Moody's shift to a more standard single rating level positive adjustment for subsidiary company ratings and the outlook for the rating is stable. In December 2019, S&P Global affirmed our insurance financial strength rating of A+ and the outlook for the rating is stable.

ALIC and its life insurance subsidiaries prepare their statutory-basis financial statements in conformity with accounting practices prescribed or permitted by the insurance department of the applicable state of domicile. Statutory surplus is a measure that is often used as a basis for determining dividend paying capacity, operating leverage and premium growth capacity, and it is also reviewed by rating agencies in determining their ratings. As of December 31, 2019, ALIC's statutory surplus was $3.81 billion compared to $3.47 billion as of December 31, 2018.

The National Association of Insurance Commissioners ("NAIC") has developed financial relationships or tests known as the Insurance Regulatory Information System to assist state insurance regulators in monitoring the financial condition of insurance companies and identifying companies that require special attention or actions by state insurance regulators. The NAIC analyzes financial data provided by insurance companies using prescribed ratios, each with defined "usual ranges". Additional regulatory scrutiny may occur if a company's ratios fall outside the usual ranges for four or more of the ratios. None of the insurance companies had more than three ratios outside of the usual ranges.

Liquidity sources and uses Our potential sources of funds principally include the following.

Potential sources of funds	Potential uses of funds
Receipt of insurance premiums	Payment of contract benefits, surrenders and withdrawals
Contractholder fund deposits	Reinsurance cessions and payments
Reinsurance recoveries	Operating costs and expenses
Receipts of principal, interest and dividends on investments	Purchase of investments
Sales of investments	Repayment of securities lending and line of credit agreements
Funds from securities lending and line of credit agreements	Payment or repayment of intercompany loans
Intercompany loans	Dividends and return of capital to parent
Capital contributions from parent	Tax payments/settlements
Tax refunds/settlements	Debt service expenses and repayment
Funds from issuance of surplus notes or other notes	Payments for acquisitions

We actively manage our financial position and liquidity levels in light of changing market, economic, and business conditions. Liquidity is managed at both the entity and enterprise level across the Company and is assessed on both base and stressed level liquidity needs. We believe we have sufficient liquidity to meet these needs. Additionally, we have existing intercompany agreements in place that facilitate liquidity management across the Company to enhance flexibility.

The Company is party to an Amended and Restated Intercompany Liquidity Agreement ("Liquidity Agreement") with certain of its affiliates, which include, but are not limited to, AIC, Allstate Assurance Company ("AAC") and the Corporation. The Liquidity Agreement allows for short-term advances of funds to be made between parties for liquidity and other general corporate purposes. The Liquidity Agreement does not establish a commitment to advance funds on the part of any party. The Company and AIC each serve as a lender and borrower, AAC and certain other affiliates serve only as borrowers, and the Corporation serves only as a lender. The Company also has a capital support agreement with AIC. Under the capital support agreement, AIC is committed to providing capital to the Company to maintain an adequate capital level. The maximum amount of potential funding under each of these agreements is $1.00 billion.

In addition to the Liquidity Agreement, the Company also has an intercompany loan agreement with the Corporation. The amount of intercompany loans available to the Company is at the discretion of the Corporation. The maximum amount of loans the Corporation will have outstanding to all its eligible subsidiaries at any given point in time is limited to $1.00 billion. The Corporation may use commercial paper borrowings, bank lines of credit and securities lending to fund intercompany borrowings. There were no borrowings by the Company under these agreements during 2019.

The Company, AIC and the Corporation have access to a $1.00 billion unsecured revolving credit facility that is available for short-term liquidity requirements. The maturity date of this facility is April 2021. The facility is fully subscribed among 11 lenders with the largest commitment being $115 million. The commitments of the lenders are several and no lender is responsible for any other lender's commitment if such lender fails to make a loan under the facility. This facility contains an increase provision that would allow up to an additional $500 million of borrowing. This facility has a financial covenant requiring that the Corporation not exceed a 37.5% debt to capitalization ratio as defined in the agreement. This ratio was 15.9% as of December 31, 2019. Although the right to borrow under the facility is not subject to a minimum rating requirement, the costs of maintaining the facility and borrowing under it are based on the ratings of the Corporation's senior unsecured, unguaranteed long-term debt. There were no borrowings under the credit facility during 2019.

Allstate parent company capital capacity The Corporation has at the parent holding company level deployable assets totaling $2.30 billion as of December 31, 2019, comprising cash and investments that are generally saleable within one quarter. This provides funds for the parent company's fixed charges and other corporate purposes. In addition, the Corporation has access to $1.00 billion of funds from either commercial paper issuance or an unsecured revolving credit facility.

In 2019, 2018 and 2017, we paid dividends of $75 million, $250 million and $600 million to AIC, respectively. We did not receive any capital contributions in 2019, 2018 or 2017.

The Company has access to additional borrowings to support liquidity through the Corporation as follows. The amount available to the Company is at the discretion of the Corporation.

- A commercial paper facility with a borrowing limit of $1.00 billion to cover short-term cash needs. As of December 31, 2019, there were no balances outstanding and therefore the remaining borrowing capacity was $1.00 billion.
- A universal shelf registration statement that was filed by the Corporation with the Securities and Exchange Commission that expires in 2021. The Corporation can use this shelf registration to issue an unspecified amount of debt securities, common stock (including 581 million shares of treasury stock as of December 31, 2019), preferred stock, depositary shares, warrants, stock purchase contracts, stock purchase units and securities of trust subsidiaries. The specific terms of any securities the Corporation issues under this registration statement will be provided in the applicable prospectus supplements.

Liquidity exposure Contractholder funds were $16.71 billion as of December 31, 2019. The following table summarizes contractholder funds by their contractual withdrawal provisions.

($ in millions)	**December 31, 2019**	**Percent to total**
Not subject to discretionary withdrawal	$ 2,667	16.0%
Subject to discretionary withdrawal with adjustments:		
Specified surrender charges [1]	4,403	26.3
Market value adjustments [2]	808	4.8
Subject to discretionary withdrawal without adjustments [3]	8,833	52.9
Total contractholder funds [4]	$ 16,711	100.0%

[1] Includes $1.42 billion of liabilities with a contractual surrender charge of less than 5% of the account balance.
[2] $369 million of the contracts with market value adjusted surrenders have a 30-45 day period at the end of their initial and subsequent interest rate guarantee periods (which are typically 1, 5, 7 or 10 years) during which there is no surrender charge or market value adjustment. $168 million of these contracts have their 30-45 day window period in 2020.
[3] 89% of these contracts have a minimum interest crediting rate guarantee of 3% or higher.
[4] Includes $698 million of contractholder funds on variable annuities reinsured to The Prudential Insurance Company of America, a subsidiary of Prudential Financial Inc., in 2006.

Retail life and annuity products may be surrendered by customers for a variety of reasons. Reasons unique to individual customers include a current or unexpected need for cash or a change in life insurance coverage needs. Other key factors that may impact the likelihood of customer surrender include the level of the contract surrender charge, the length of time the contract has been in force, distribution channel, market interest rates, equity market conditions and potential tax implications. In addition, the propensity for retail life insurance policies to lapse is lower than it is for fixed annuities because of the need for the insured to be re-underwritten upon policy replacement. The surrender and partial withdrawal rate on deferred fixed annuities and interest-sensitive life insurance products, based on the beginning of year contractholder funds, was 6.1% in 2019 and 7.4% in 2018. We strive to promptly pay customers who request cash surrenders; however, statutory regulations generally provide up to six months in most states to fulfill surrender requests.

Our asset-liability management practices enable us to manage the differences between the cash flows generated by our investment portfolio and the expected cash flow requirements of our life insurance and annuity product obligations.

Certain remote events and circumstances could constrain our, AIC's or the Corporation's liquidity. Those events and circumstances include, for example, a catastrophe resulting in extraordinary losses, a downgrade in the Corporation's senior long-

term debt ratings to non-investment grade status, a downgrade in AIC's financial strength ratings, or a downgrade in our financial strength ratings. The rating agencies also consider the interdependence of our individually rated entities; therefore, a rating change in one entity could potentially affect the ratings of other related entities.

Cash flows As reflected in our Consolidated Statements of Cash Flows, lower cash provided by operating activities in 2019 compared to 2018 was primarily due to lower net investment income and higher tax payments.

Lower cash provided by investing activities in 2019 compared to 2018 was the result of decreased sales of fixed income securities and an increase in short-term investments, partially offset by decreased purchases of fixed income and equity securities.

Lower cash used in financing activities in 2019 compared to 2018 was primarily due to decreased payments for contractholder surrenders and withdrawals on fixed annuities and lower dividends paid to AIC in 2019.

Contractual obligations and commitments Our contractual obligations as of December 31, 2019 and the payments due by period are shown in the following table.

($ in millions)	Total	Less than 1 year	1 to 3 years	Over 3 years to 5 years	Over 5 years
Liabilities for collateral [(1)]	$ 530	$ 530	$ —	$ —	$ —
Contractholder funds [(2)]	31,237	1,898	3,591	3,256	22,492
Reserve for life-contingent contract benefits [(2)]	33,710	1,016	1,934	1,852	28,908
Notes due to related parties [(3)]	268	7	14	56	191
Payable to affiliates, net	35	35	—	—	—
Other liabilities and accrued expenses [(4)(5)]	(570)	(454)	(101)	(9)	(6)
Net unrecognized tax benefits [(6)]	14	2	12	—	—
Total contractual cash obligations	$ 65,224	$ 3,034	$ 5,450	$ 5,155	$ 51,585

(1) Liabilities for collateral are typically fully secured with cash or short-term investments. We manage our short-term liquidity position to ensure the availability of a sufficient amount of liquid assets to extinguish short-term liabilities as they come due in the normal course of business, including utilizing potential sources of liquidity as disclosed previously.

(2) Contractholder funds represent interest-bearing liabilities arising from the sale of products such as interest-sensitive life and fixed annuities, including immediate annuities without life contingencies. The reserve for life-contingent contract benefits relates primarily to traditional life insurance, immediate annuities with life contingencies and voluntary accident and health insurance. These amounts reflect the present value of estimated cash payments to be made to contractholders and policyholders. Certain of these contracts, such as immediate annuities without life contingencies, involve payment obligations where the amount and timing of the payment are essentially fixed and determinable. These amounts relate to (i) policies or contracts where we are currently making payments and will continue to do so and (ii) contracts where the timing of a portion or all of the payments has been determined by the contract. Other contracts, such as interest-sensitive life, fixed deferred annuities, traditional life insurance and voluntary accident and health insurance, involve payment obligations where a portion or all of the amount and timing of future payments is uncertain. For these contracts, we are not currently making payments and will not make payments until (i) the occurrence of an insurable event such as death or illness or (ii) the occurrence of a payment triggering event such as the surrender or partial withdrawal on a policy or deposit contract, which is outside of our control. For immediate annuities with life contingencies, the amount of future payments is uncertain since payments will continue as long as the annuitant lives. We have estimated the timing of payments related to these contracts based on historical experience and our expectation of future payment patterns. Uncertainties relating to these liabilities include mortality, morbidity, expenses, customer lapse and withdrawal activity, estimated additional deposits for interest-sensitive life contracts, and renewal premium for life policies, which may significantly impact both the timing and amount of future payments. Such cash outflows reflect adjustments for the estimated timing of mortality, retirement, and other appropriate factors, but are undiscounted with respect to interest. As a result, the sum of the cash outflows shown for all years in the table exceeds the corresponding liabilities of $16.71 billion for contractholder funds and $11.27 billion for reserve for life-contingent contract benefits as included in the Consolidated Statements of Financial Position as of December 31, 2019. The liability amount in the Consolidated Statements of Financial Position reflects the discounting for interest as well as adjustments for the timing of other factors as described above. Future premium collections are not included in the amounts presented in the table above.

(3) Amount differs from the balance presented on the Consolidated Statements of Financial Position as of December 31, 2019, because the notes due to related parties amount above includes interest.

(4) Other liabilities primarily include accrued expenses, claim payments and other checks outstanding.

(5) Balance sheet liabilities not included in the table above include gross deferred tax liabilities of $901 million and unearned and advance premiums of $11 million. These items were excluded as they do not meet the definition of a contractual liability as we are not contractually obligated to pay these amounts to third parties. Rather, they represent an accounting mechanism that allows us to present our financial statements on an accrual basis. In addition, other liabilities of $67 million were not included in the table above because they did not represent a contractual obligation or the amount and timing of their eventual payment was sufficiently uncertain.

(6) Net unrecognized tax benefits represent our potential future obligation to the taxing authority for a tax position that was not recognized in the consolidated financial statements. We believe it is reasonably possible that a decrease of up to $2 million in unrecognized tax benefits may occur within the next twelve months due to IRS settlements. The resolution of this obligation may be for an amount different than what we have accrued.

Our contractual commitments as of December 31, 2019 and the periods in which the commitments expire are shown in the following table.

($ in millions)	Total	Less than 1 year	1 to 3 years	Over 3 years to 5 years	Over 5 years
Other commitments - conditional	$ 110	$ 82	$ 18	$ 4	$ 6
Other commitments - unconditional	1,087	143	122	172	650
Total commitments	$ 1,197	$ 225	$ 140	$ 176	$ 656

Contractual commitments represent investment commitments such as private placements, limited partnership interests and other loans. Limited partnership interests are typically funded over the commitment period which is shorter than the contractual expiration date of the partnership and as a result, the actual timing of the funding may vary.

We have agreements in place for services we conduct, generally at cost, between subsidiaries relating to insurance, reinsurance, loans and capitalization. All material intercompany transactions have been appropriately eliminated in consolidation. Intercompany transactions among insurance subsidiaries and affiliates have been approved by the appropriate departments of insurance as required.

For a more detailed discussion of our off-balance sheet arrangements, see Note 7 of the consolidated financial statements.

APPLICATION OF CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (“GAAP”) requires management to adopt accounting policies and make estimates and assumptions that affect amounts reported in the consolidated financial statements. The most critical estimates, presented in the order they appear in the Consolidated Statements of Financial Position, include those used in determining:

- Fair value of financial assets
- Impairment of fixed income securities
- Deferred policy acquisition costs amortization
- Reserve for life-contingent contract benefits estimation

In making these determinations, management makes subjective and complex judgments that frequently require estimates about matters that are inherently uncertain. Many of these policies, estimates and related judgments are common in the insurance and financial services industries; others are specific to our business and operations. It is reasonably likely that changes in these estimates could occur from period to period and result in a material impact on our consolidated financial statements.

A summary of each of these critical accounting estimates follows. For a more detailed discussion of the effect of these estimates on our consolidated financial statements, and the judgments and assumptions related to these estimates, see the referenced sections of this document. For a more detailed summary of our significant accounting policies, see the notes to the consolidated financial statements.

Fair value of financial assets Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. We are responsible for the determination of fair value of financial assets and the supporting assumptions and methodologies. We use independent third-party valuation service providers, broker quotes and internal pricing methods to determine fair values. We obtain or calculate only one single quote or price for each financial instrument.

Valuation service providers typically obtain data about market transactions and other key valuation model inputs from multiple sources and, through the use of proprietary models, produce valuation information in the form of a single fair value for individual fixed income and other securities for which a fair value has been requested under the terms of our agreements. The inputs used by the valuation service providers include, but are not limited to, market prices from recently completed transactions and transactions of comparable securities, interest rate yield curves, credit spreads, liquidity spreads, currency rates, and other information, as applicable. Credit and liquidity spreads are typically implied from completed transactions and transactions of comparable securities. Valuation service providers also use proprietary discounted cash flow models that are widely accepted in the financial services industry and similar to those used by other market participants to value the same financial instruments. The valuation models take into account, among other things, market observable information as of the measurement date, as described above, as well as the specific attributes of the security being valued including its term, interest rate, credit rating, industry sector, and where applicable, collateral quality and other issue or issuer specific information. Executing valuation models effectively requires seasoned professional judgment and experience. For certain equity securities, valuation service providers provide market quotations for completed transactions on the measurement date. In cases where market transactions or other market observable data is limited, the extent to which judgment is applied varies inversely with the availability of market observable information.

For certain of our financial assets measured at fair value, where our valuation service providers cannot provide fair value determinations, we obtain a single non-binding price quote from a broker familiar with the security who, similar to our valuation service providers, may consider transactions or activity in similar securities among other information. The brokers providing price quotes are generally from the brokerage divisions of financial institutions with market making, underwriting and distribution expertise regarding the security subject to valuation.

The fair value of certain financial assets, including privately placed corporate fixed income securities and free-standing derivatives, for which our valuation service providers or brokers do not provide fair value determinations, is developed using valuation methods and models widely accepted in the financial services industry. Our internal pricing methods are primarily based on models using discounted cash flow methodologies that develop a single best estimate of fair value. Our models generally incorporate inputs that we believe are representative of inputs other market participants would use to determine fair value of the same instruments, including yield curves, quoted market prices of comparable securities or instruments, published credit spreads, and other applicable market data as well as instrument-specific characteristics that include, but are not limited to, coupon rates, expected cash flows, sector of the issuer, and call provisions. Because judgment is required in developing the fair values of these financial assets, they may differ from the amount actually received to sell an asset in an orderly transaction between market participants at the measurement date. Moreover, the use of different valuation assumptions may have a material effect on the financial assets' fair values.

For most of our financial assets measured at fair value, all significant inputs are based on or corroborated by market observable data and significant management judgment does not affect the periodic determination of fair value. The determination of fair value using discounted cash flow models involves management judgment when significant model inputs are not based on or corroborated by market observable data. However, where market observable data is available, it takes precedence, and as a result, no range of reasonably likely inputs exists from which the basis of a sensitivity analysis could be constructed.

We gain assurance that our financial assets are appropriately valued through the execution of various processes and controls designed to ensure the overall reasonableness and consistent application of valuation methodologies, including inputs and assumptions, and compliance with accounting standards. For fair values received from third parties or internally estimated, our processes and controls are designed to ensure that the valuation methodologies are appropriate and consistently applied, the inputs and assumptions are reasonable and consistent with the objective of determining fair value, and the fair values are accurately recorded. For example, on a continuing basis, we assess the reasonableness of individual fair values that have stale security prices or that exceed certain thresholds as compared to previous fair values received from valuation service providers or brokers or derived from internal models. We perform procedures to understand and assess the methodologies, processes and controls of valuation service providers. In addition, we may validate the reasonableness of fair values by comparing information obtained from valuation service providers or brokers to other third-party valuation sources for selected securities. We perform ongoing price validation procedures such as back-testing of actual sales, which corroborate the various inputs used in internal models to market observable data. When fair value determinations are expected to be more variable, we validate them through reviews by members of management who have relevant expertise and who are independent of those charged with executing investment transactions.

We also perform an analysis to determine whether there has been a significant decrease in the volume and level of activity for the asset when compared to normal market activity, and if so, whether transactions may not be orderly. Among the indicators we consider in determining whether a significant decrease in the volume and level of market activity for a specific asset has occurred include the level of new issuances in the primary market, trading volume in the secondary market, level of credit spreads over historical levels, bid-ask spread, and price consensuses among market participants and sources. If evidence indicates that prices are based on transactions that are not orderly, we place little, if any, weight on the transaction price and will estimate fair value using an internal model. As of December 31, 2019 and 2018, we did not adjust fair values provided by our valuation service providers or brokers or substitute them with an internal model for such securities.

The following table identifies fixed income and equity securities and short-term investments as of December 31, 2019 by source of fair value determination.

($ in millions)	**Fair value**	**Percent to total**
Fair value based on internal sources	$ 2,180	8.9%
Fair value based on external sources [1]	22,205	91.1
Total	$ 24,385	100.0%

[1] Includes $55 million that are valued using broker quotes and $81 million that are valued using quoted prices or quoted net asset values from deal sponsors.

For additional detail on fair value measurements, see Note 6 of the consolidated financial statements.

Impairment of fixed income securities For fixed income securities classified as available-for-sale, the difference between fair value and amortized cost, net of certain other items and deferred income taxes (as disclosed in Note 5 of the consolidated financial statements), is reported as a component of AOCI on the Consolidated Statements of Financial Position and is not reflected in the operating results of any period until reclassified to net income upon the consummation of a transaction with an unrelated third party or when a write-down is recorded due to an other-than-temporary decline in fair value. We have a comprehensive portfolio monitoring process to identify and evaluate each fixed income security whose carrying value may be other-than-temporarily impaired.

For each fixed income security in an unrealized loss position, we assess whether management with the appropriate authority has made the decision to sell or whether it is more likely than not we will be required to sell the security before recovery of the amortized cost basis for reasons such as liquidity, contractual or regulatory purposes. If a security meets either of these criteria, the security's decline in fair value is considered other than temporary and is recorded in earnings.

If we have not made the decision to sell the fixed income security and it is not more likely than not we will be required to sell the fixed income security before recovery of its amortized cost basis, we evaluate whether we expect to receive cash flows sufficient to recover the entire amortized cost basis of the security. We use our best estimate of future cash flows expected to be collected from the fixed income security, discounted at the security's original or current effective rate, as appropriate, to calculate a recovery value and determine whether a credit loss exists. The determination of cash flow estimates is inherently subjective and methodologies may vary depending on facts and circumstances specific to the security. All reasonably available information relevant to the collectability of the security, including past events, current conditions, and reasonable and supportable assumptions and forecasts, is considered when developing the estimate of cash flows expected to be collected. That information generally includes, but is not limited to, the remaining payment terms of the security, prepayment speeds, foreign exchange rates, the financial condition and future earnings potential of the issue or issuer, expected defaults, expected recoveries, the value of underlying collateral, vintage, geographic concentration, available reserves or escrows, current subordination levels, third party guarantees and other credit enhancements. Other information, such as industry analyst reports and forecasts, sector credit ratings, financial condition of the bond insurer for insured fixed income securities, and other market data relevant to the realizability of contractual cash flows, may also be considered. The estimated fair value of collateral will be used to estimate recovery value if we determine that the security is dependent on the liquidation of collateral for ultimate settlement. If the estimated recovery value is less than the amortized cost of the security, a credit loss exists and an other-than-temporary impairment for the difference between the estimated recovery value and amortized cost is recorded in earnings. The portion of the unrealized loss related to factors other than credit remains classified in AOCI. If we determine that the fixed income security does not have sufficient cash flow or other information to estimate a recovery value for the security, we may conclude that the entire decline in fair value is deemed to be credit related and the loss is recorded in earnings.

Once assumptions and estimates are made, any number of changes in facts and circumstances could cause us to subsequently determine that a fixed income security is other-than-temporarily impaired, including: 1) general economic conditions that are worse than previously forecast or that have a greater adverse effect on a particular issuer or industry sector than originally estimated; 2) changes in the facts and circumstances related to a particular issue or issuer's ability to meet all of its contractual obligations; and 3) changes in facts and circumstances that result in management's decision to sell or result in our assessment that it is more likely than not we will be required to sell before recovery of the amortized cost basis. Changes in assumptions, facts and circumstances could result in additional charges to earnings in future periods to the extent that losses are realized. The charge to earnings, while potentially significant to net income, would not have a significant effect on shareholder's equity, since our fixed income securities are designated as available-for-sale and carried at fair value and as a result, any related unrealized loss, net of deferred income taxes and related DAC, deferred sales inducement costs and reserves for life-contingent contract benefits, would already be reflected as a component of AOCI in shareholder's equity.

The determination of the amount of other-than-temporary impairment is an inherently subjective process based on periodic evaluations of the factors described above. Such evaluations and assessments are revised as conditions change and new information becomes available. We update our evaluations regularly and reflect changes in other-than-temporary impairments in our results of operations as such evaluations are revised. The use of different methodologies and assumptions in the determination of the amount of other-than-temporary impairments may have a material effect on the amounts recognized and presented within the consolidated financial statements.

For additional detail on investment impairments, see Note 5 of the consolidated financial statements.

Deferred policy acquisition costs amortization We incur significant costs in connection with acquiring insurance policies and investment contracts. In accordance with GAAP, costs that are related directly to the successful acquisition of new or renewal insurance policies and investment contracts are deferred and recorded as an asset on the Consolidated Statements of Financial Position.

DAC related to traditional life and voluntary accident and health insurance is amortized over the premium paying period of the related policies in proportion to the estimated revenues on such business. Significant assumptions relating to estimated

premiums, investment returns, as well as mortality, persistency and expenses to administer the business are established at the time the policy is issued and are generally not revised during the life of the policy. The assumptions for determining the timing and amount of DAC amortization are consistent with the assumptions used to calculate the reserve for life-contingent contract benefits. Any deviations from projected business in force resulting from actual policy terminations differing from expected levels and any estimated premium deficiencies may result in a change to the rate of amortization in the period such events occur. Generally, the amortization periods for these policies approximate the estimated lives of the policies. The recovery of DAC is dependent upon the future profitability of the business.

We periodically review the adequacy of reserves and recoverability of DAC using actual experience and current assumptions. We evaluate our traditional life insurance products, immediate annuities with life contingencies, and voluntary accident and health insurance products individually. In the event actual experience and current assumptions are adverse compared to the original assumptions and a premium deficiency is determined to exist, any remaining unamortized DAC balance must be expensed to the extent not recoverable and a premium deficiency reserve may be required if the remaining DAC balance is insufficient to absorb the deficiency. In 2019 and 2018, our reviews concluded that no premium deficiency adjustments were necessary. For additional detail on reserve adequacy, see the Reserve for life-contingent contract benefits estimation section.

DAC related to interest-sensitive life insurance is amortized in proportion to the incidence of the total present value of gross profits, which includes both actual historical gross profits (“AGP”) and estimated future gross profits (“EGP”) expected to be earned over the estimated lives of the contracts. The amortization is net of interest on the prior period DAC balance using rates established at the inception of the contracts. Actual amortization periods generally range from 15-30 years; however, incorporating estimates of the rate of customer surrenders, partial withdrawals and deaths generally results in the majority of the DAC being amortized during the surrender charge period, which is typically 10-20 years for interest-sensitive life. The rate of DAC amortization is reestimated and adjusted by a cumulative charge or credit to income when there is a difference between the incidence of actual versus expected gross profits in a reporting period or when there is a change in total EGP.

AGP and EGP primarily consist of the following components: contract charges for the cost of insurance less mortality costs and other benefits (benefit margin); investment income and realized capital gains and losses less interest credited (investment margin); and surrender and other contract charges less maintenance expenses (expense margin). The principal assumptions for determining the amount of EGP are mortality, persistency, expenses, investment returns, including capital gains and losses on assets supporting contract liabilities, interest crediting rates to contractholders, and the effects of any hedges. These assumptions are reasonably likely to have the greatest impact on the amount of DAC amortization. Changes in these assumptions can be offsetting and we are unable to reasonably predict their future movements or offsetting impacts over time.

Each reporting period, DAC amortization is recognized in proportion to AGP for that period adjusted for interest on the prior period DAC balance. This amortization process includes an assessment of AGP compared to EGP, the actual amount of business remaining in force and realized capital gains and losses on investments supporting the product liability. The impact of realized capital gains and losses on amortization of DAC depends upon which product liability is supported by the assets that give rise to the gain or loss. If the AGP is greater than EGP in the period, but the total EGP is unchanged, the amount of DAC amortization will generally increase, resulting in a current period decrease to earnings. The opposite result generally occurs when the AGP is less than the EGP in the period, but the total EGP is unchanged. However, when DAC amortization or a component of gross profits for a quarterly period is potentially negative (which would result in an increase of the DAC balance) as a result of negative AGP, the specific facts and circumstances surrounding the potential negative amortization are considered to determine whether it is appropriate for recognition in the consolidated financial statements. Negative amortization is only recorded when the increased DAC balance is determined to be recoverable based on facts and circumstances. For products whose supporting investments are exposed to capital losses in excess of our expectations which may cause periodic AGP to become temporarily negative, EGP and AGP utilized in DAC amortization may be modified to exclude the excess capital losses.

Annually, we review and update the assumptions underlying the projections of EGP, including mortality, persistency, expenses, investment returns, comprising investment income and realized capital gains and losses, interest crediting rates and the effect of any hedges, using our experience and industry experience. At each reporting period, we assess whether any revisions to assumptions used to determine DAC amortization are required. These reviews and updates may result in amortization acceleration or deceleration, which are referred to as “DAC unlocking”. If the update of assumptions causes total EGP to increase, the rate of DAC amortization will generally decrease, resulting in a current period increase to earnings. A decrease to earnings generally occurs when the assumption update causes the total EGP to decrease.

The following table provides the effect on DAC amortization of changes in assumptions relating to the gross profit components of investment margin, benefit margin and expense margin during the years ended December 31.

($ in millions)	2019	2018
Investment margin	$ 18	$ 9
Benefit margin	26	(7)
Expense margin	—	—
Net acceleration (deceleration)	$ 44	$ 2

In 2019, DAC amortization acceleration for changes in the investment margin component of EGP was due to lower projected future interest rates and investment returns compared to our previous expectations. The acceleration related to benefit margin was due to decreased projected interest rates that result in lower projected policyholder account values which increases benefits on guaranteed products and more refined policy level information and assumptions.

In 2018, DAC amortization acceleration for changes in the investment margin component of EGP related to interest-sensitive life insurance and was due to lower projected investment returns. The deceleration related to benefit margin primarily related to interest-sensitive life insurance and was due to a decrease in projected mortality.

The following table displays the sensitivity of reasonably likely changes in assumptions included in the gross profit components of investment margin or benefit margin to amortization of the DAC balance as of December 31, 2019.

($ in millions)	Increase/(reduction)
Increase in future investment margins of 25 basis points	$ 48
Decrease in future investment margins of 25 basis points	$ (54)
Decrease in future life mortality by 1%	$ 13
Increase in future life mortality by 1%	$ (13)

Any potential changes in assumptions discussed above are measured without consideration of correlation among assumptions. Therefore, it would be inappropriate to add them together in an attempt to estimate overall variability in amortization.

For additional detail related to DAC, see the Operations section of this document.

Reserve for life-contingent contract benefits estimation Due to the long-term nature of traditional life insurance, life-contingent immediate annuities and voluntary accident and health insurance products, benefits are payable over many years; accordingly, the reserves are calculated as the present value of future expected benefits to be paid, reduced by the present value of future expected net premiums. Long-term actuarial assumptions of future investment yields, mortality, morbidity, policy terminations and expenses are used when establishing the reserve for life-contingent contract benefits payable under these insurance policies. These assumptions, which for traditional life insurance are applied using the net level premium method, include provisions for adverse deviation and generally vary by characteristics such as type of coverage, year of issue and policy duration. Future investment yield assumptions are determined based upon prevailing investment yields as well as estimated reinvestment yields. Mortality, morbidity and policy termination assumptions are based on our experience and industry experience. Expense assumptions include the estimated effects of inflation and expenses to be incurred beyond the premium-paying period. These assumptions are established at the time the policy is issued, are consistent with assumptions for determining DAC amortization for these policies, and are generally not changed during the policy coverage period. However, if actual experience emerges in a manner that is significantly adverse relative to the original assumptions, adjustments to DAC or reserves may be required resulting in a charge to earnings which could have a material effect on our operating results and financial condition.

We periodically review the adequacy of reserves and recoverability of DAC using actual experience and current assumptions. In the event actual experience and current assumptions are adverse compared to the original assumptions and a premium deficiency is determined to exist, any remaining unamortized DAC balance must be expensed to the extent not recoverable and the establishment of a premium deficiency reserve may be required.

We evaluate our traditional life insurance products, immediate annuities with life contingencies, and voluntary accident and health insurance individually. In 2019 and 2018, our reviews concluded that no premium deficiency adjustments were necessary. As of December 31, 2019, traditional life insurance and voluntary accident and health insurance both have a substantial sufficiency.

As of December 31, 2019, there is marginal sufficiency in the evaluation of immediate annuities with life contingencies which has been adversely impacted primarily by sub-standard structured settlement mortality expectations, where annuitants are living longer than originally anticipated, and the impact of interest rates, which are lower than originally anticipated and are expected to remain low for an extended period. The sufficiency represents approximately 3% of applicable reserves for annuity products as of December 31, 2019. Additional reserves may be required in future periods if mortality and interest rates continue to develop in a manner that results in a premium deficiency.

The following table displays the sensitivity of permanent changes in the future investment yield assumption included in the annuity premium deficiency evaluation to the sufficiency balance as of December 31, 2019.

($ in millions)	Increase/(reduction) in sufficiency	Change in sufficiency as a percentage of applicable reserves
Increase in future investment yields of 25 basis points	$200	3%
Decrease in future investment yields of 25 basis points	$(211)	(3)%

We also review these policies for circumstances where projected profits would be recognized in early years followed by projected losses in later years. In 2019 and 2018, our reviews concluded that there were no projected losses following projected profits in each long-term projection.

We will continue to monitor the experience of our traditional life insurance and immediate annuities. We periodically complete comprehensive mortality studies for our structured settlement annuities with life contingencies to determine whether annuitants are living for a longer period than originally estimated. We anticipate that investment and reinvestment yields, mortality, and policy terminations are the factors that would be most likely to require premium deficiency adjustments to reserves or related DAC. Mortality rates and investment and reinvestment yields are the factors that would be most likely to require a profits followed by losses liability accrual.

For further detail on the reserve for life-contingent contract benefits, see Note 8 of the consolidated financial statements.

REGULATION AND LEGAL PROCEEDINGS

We are subject to extensive regulation and we are involved in various legal and regulatory actions, all of which have an effect on specific aspects of our business. For a detailed discussion of the legal and regulatory actions in which we are involved, see Note 11 of the consolidated financial statements.

PENDING ACCOUNTING STANDARDS

There are pending accounting standards that we have not implemented because the implementation date has not yet occurred. For a discussion of these pending standards, see Note 2 of the consolidated financial statements.

The effect of implementing certain accounting standards on our financial results and financial condition is often based in part on market conditions at the time of implementation of the standard and other factors we are unable to determine prior to implementation. For this reason, we are sometimes unable to estimate the effect of certain pending accounting standards until the relevant authoritative body finalizes these standards or until we implement them.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Information required for Item 7A is incorporated by reference to the material under the caption “Market Risk” in Part II, Item 7 of this report.

Item 8. Financial Statements and Supplementary Data

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ALLSTATE LIFE INSURANCE COMPANY AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME

($ in millions)	Year Ended December 31,		
	2019	2018	2017
Revenues			
Premiums (net of reinsurance ceded of $139, $138 and $149)	$ 677	$ 704	$ 690
Contract charges (net of reinsurance ceded of $180, $188 and $191)	682	695	703
Other revenue	42	38	40
Net investment income	1,411	1,585	1,777
Realized capital gains and losses:			
Total other-than-temporary impairment (“OTTI”) losses	(24)	(7)	(46)
OTTI losses reclassified to (from) other comprehensive income	3	(2)	1
Net OTTI losses recognized in earnings	(21)	(9)	(45)
Sales and valuation changes on equity investments and derivatives	362	(166)	94
Total realized capital gains and losses	341	(175)	49
Total revenues	3,153	2,847	3,259
Costs and expenses			
Contract benefits (net of reinsurance ceded of $187, $249 and $208)	1,481	1,446	1,430
Interest credited to contractholder funds (net of reinsurance ceded of $40, $44 and $46)	585	601	639
Amortization of deferred policy acquisition costs	180	146	152
Operating costs and expenses	249	271	321
Restructuring and related charges	1	2	2
Interest expense	5	5	4
Total costs and expenses	2,501	2,471	2,548
Gain on disposition of operations	6	6	7
Income from operations before income tax expense	658	382	718
Income tax expense (benefit)	128	17	(278)
Net income	530	365	996
Other comprehensive income (loss), after-tax			
Change in unrealized net capital gains and losses	679	(354)	5
Change in unrealized foreign currency translation adjustments	(17)	—	11
Other comprehensive income (loss), after-tax	662	(354)	16
Comprehensive income	$ 1,192	$ 11	$ 1,012

See notes to consolidated financial statements.

ALLSTATE LIFE INSURANCE COMPANY AND SUBSIDIARES
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

($ in millions, except par value data)	December 31,	
	2019	2018
Assets		
Investments		
Fixed income securities, at fair value (amortized cost $20,217 and $21,057)	$ 21,725	$ 21,400
Mortgage loans	3,988	3,995
Equity securities, at fair value (cost $1,123 and $1,197)	1,469	1,325
Limited partnership interests	3,250	3,292
Short-term, at fair value (amortized cost $1,191 and $810)	1,191	810
Policy loans	557	561
Other	1,427	1,300
Total investments	33,607	32,683
Cash	43	52
Deferred policy acquisition costs	947	1,232
Reinsurance recoverable from non-affiliates	2,082	2,185
Reinsurance recoverable from affiliates	408	420
Accrued investment income	239	253
Other assets	794	534
Separate Accounts	3,009	2,783
Total assets	$ 41,129	$ 40,142
Liabilities		
Contractholder funds	$ 16,711	$ 17,470
Reserve for life-contingent contract benefits	11,272	11,239
Unearned premiums	4	4
Payable to affiliates, net	35	50
Other liabilities and accrued expenses	1,181	1,101
Deferred income taxes	894	663
Notes due to related parties	214	140
Separate Accounts	3,009	2,783
Total liabilities	33,320	33,450
Commitments and Contingent Liabilities (Notes 7 and 11)		
Shareholder's Equity		
Redeemable preferred stock - series A, $100 par value, 1,500,000 shares authorized, none issued	—	—
Redeemable preferred stock - series B, $100 par value, 1,500,000 shares authorized, none issued	—	—
Common stock, $227 par value, 23,800 shares authorized and outstanding	5	5
Additional capital paid-in	2,024	2,024
Retained income	4,865	4,410
Accumulated other comprehensive income:		
Unrealized net capital gains and losses:		
Unrealized net capital gains and losses on fixed income securities with OTTI	41	45
Other unrealized net capital gains and losses	1,149	225
Unrealized adjustment to DAC, DSI and insurance reserves	(268)	(27)
Total unrealized net capital gains and losses	922	243
Unrealized foreign currency translation adjustments	(7)	10
Total accumulated other comprehensive income ("AOCI")	915	253
Total shareholder's equity	7,809	6,692
Total liabilities and shareholder's equity	$ 41,129	$ 40,142

See notes to consolidated financial statements.

ALLSTATE LIFE INSURANCE COMPANY AND SUBSIDIARES
CONSOLIDATED STATEMENTS OF SHAREHOLDER'S EQUITY

($ in millions)	Year Ended December 31,		
	2019	2018	2017
Common stock	$ 5	$ 5	$ 5
Additional capital paid-in			
Balance, beginning of year	2,024	2,024	1,990
Gain on reinsurance with an affiliate	—	—	34
Balance, end of year	2,024	2,024	2,024
Retained income			
Balance, beginning of year	4,410	3,981	3,736
Net income	530	365	996
Dividends	(75)	(250)	(600)
Cumulative effect of change in accounting principle	—	314	—
Reclassification of tax effects due to change in accounting principle	—	—	(151)
Balance, end of year	4,865	4,410	3,981
Accumulated other comprehensive income			
Balance, beginning of year	253	845	678
Change in unrealized net capital gains and losses	679	(354)	5
Change in unrealized foreign currency translation adjustments	(17)	—	11
Cumulative effect of change in accounting principle	—	(238)	—
Reclassification of tax effects due to change in accounting principle	—	—	151
Balance, end of year	915	253	845
Total shareholder's equity	$ 7,809	$ 6,692	$ 6,855

See notes to consolidated financial statements.

ALLSTATE LIFE INSURANCE COMPANY AND SUBSIDIARES
CONSOLIDATED STATEMENTS OF CASH FLOWS

($ in millions)	Year Ended December 31,		
	2019	2018	2017
Cash flows from operating activities			
Net income	$ 530	$ 365	$ 996
Adjustments to reconcile net income to net cash provided by operating activities:			
Amortization and other non-cash items	(60)	(58)	(64)
Realized capital gains and losses	(341)	175	(49)
Gain on disposition of operations	(6)	(6)	(7)
Interest credited to contractholder funds	585	601	639
Changes in:			
Policy benefits and other insurance reserves	(610)	(612)	(529)
Deferred policy acquisition costs	125	67	31
Reinsurance recoverables, net	66	51	56
Income taxes	8	(64)	(308)
Other operating assets and liabilities	69	136	(159)
Net cash provided by operating activities	366	655	606
Cash flows from investing activities			
Proceeds from sales			
Fixed income securities	3,800	4,858	3,916
Equity securities	984	1,257	1,536
Limited partnership interests	354	367	539
Other investments	61	39	45
Investment collections			
Fixed income securities	1,355	1,448	1,733
Mortgage loans	537	434	566
Other investments	76	168	208
Investment purchases			
Fixed income securities	(4,406)	(5,444)	(4,698)
Equity securities	(844)	(1,086)	(1,385)
Limited partnership interests	(398)	(551)	(631)
Mortgage loans	(532)	(552)	(503)
Other investments	(103)	(270)	(238)
Change in short-term investments, net	(343)	(3)	(12)
Change in policy loans and other investments, net	(63)	(69)	(37)
Net cash provided by investing activities	478	596	1,039
Cash flows from financing activities			
Contractholder fund deposits	747	771	808
Contractholder fund withdrawals	(1,599)	(1,893)	(1,823)
Proceeds from issuance of notes to related parties	215	—	—
Repayment of notes to related parties	(141)	—	—
Dividends paid	(75)	(250)	(600)
Other	—	28	(23)
Net cash used in financing activities	(853)	(1,344)	(1,638)
Net (decrease) increase in cash	(9)	(93)	7
Cash at beginning of year	52	145	138
Cash at end of year	$ 43	$ 52	$ 145

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. General

Basis of presentation

The accompanying consolidated financial statements include the accounts of Allstate Life Insurance Company ("ALIC") and its wholly owned subsidiaries (collectively referred to as the "Company"). ALIC is wholly owned by Allstate Insurance Company ("AIC"), which is wholly owned by Allstate Insurance Holdings, LLC, a wholly owned subsidiary of The Allstate Corporation (the "Corporation"). These consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"). All significant intercompany accounts and transactions have been eliminated.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

The Company operates as a single segment entity based on the manner in which the Company uses financial information to evaluate business performance and to determine the allocation of resources.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 ("Tax Legislation") became effective, permanently reducing the U.S. corporate income tax rate from 35% to 21% beginning January 1, 2018. As a result, the corporate tax rate is not comparable between periods.

Nature of operations

The Company offers traditional, interest-sensitive and variable life insurance in New York and term conversion interest-sensitive life insurance countrywide. The Company previously sold traditional life insurance countrywide through June 2019 and variable life insurance nationwide through September 2017. The Company distributes its products through Allstate exclusive agencies and exclusive financial specialists. The Company also offers voluntary accident and health insurance through workplace enrolling independent agents and benefits brokers in New York. The Company previously offered and continues to have in force fixed annuities such as deferred and immediate annuities. The Company also previously offered variable annuities and substantially all of this business is reinsured.

The following table summarizes premiums and contract charges by product.

($ in millions)	2019	2018	2017
Premiums			
Traditional life insurance	$ 557	$ 582	$ 579
Accident and health insurance	120	122	111
Total premiums	677	704	690
Contract charges			
Interest-sensitive life insurance	669	680	689
Fixed annuities	13	15	14
Total contract charges	682	695	703
Total premiums and contract charges	$ 1,359	$ 1,399	$ 1,393

The Company, through several subsidiaries, operates in the U.S. (all 50 states and the District of Columbia). For 2019, the top geographic locations for direct statutory premiums and annuity considerations were New York, California, Texas, Florida and Illinois. No other jurisdiction accounted for more than 5% of direct statutory premiums and annuity considerations.

2. Summary of Significant Accounting Policies

Investments

Fixed income securities include bonds, asset-backed securities ("ABS") and mortgage-backed securities ("MBS"). MBS includes residential and commercial mortgage-backed securities that were previously disclosed separately. Fixed income securities, which may be sold prior to their contractual maturity, are designated as available-for-sale and are carried at fair value. The difference between amortized cost and fair value, net of deferred income taxes and related deferred policy acquisition costs ("DAC"), deferred sales inducement costs ("DSI") and reserves for life-contingent contract benefits, is reflected as a component of AOCI. Cash received from calls and make-whole payments is reflected as a component of proceeds from sales and cash received from maturities and pay-downs is reflected as a component of investment collections within the Consolidated Statements of Cash Flows.

Mortgage loans are carried at unpaid principal balances, net of unamortized premium or discount and valuation allowances. Valuation allowances are established for impaired loans when it is probable that contractual principal and interest will not be collected.

Equity securities primarily include common stocks, exchange traded and mutual funds, non-redeemable preferred stocks and real estate investment trust equity investments. Certain exchange traded and mutual funds have fixed income securities as their underlying investments. Equity securities are carried at fair value. Equity securities without readily determinable or estimable fair values are measured using the measurement alternative, which is cost less impairment, if any, and adjustments resulting from observable price changes in orderly transactions for the identical or similar investment of the same issuer. Due to the adoption of a new accounting standard for the recognition and measurement of financial assets and financial liabilities, the periodic change in fair value of equity securities is recognized within realized capital gains and losses on the Consolidated Statements of Operations and Comprehensive Income effective January 1, 2018. As a result, 2017 net investment income and net realized capital gains and losses are not comparable to other periods presented.

Investments in limited partnership interests are primarily accounted for in accordance with the equity method of accounting ("EMA") and include interests in private equity funds, real estate funds and other funds. Investments in limited partnership interests purchased prior to January 1, 2018 where the Company's interest is so minor that it exercises virtually no influence over operating and financial policies are accounted for at fair value primarily utilizing the net asset value ("NAV") as a practical expedient to determine fair value.

Short-term investments, including money market funds, commercial paper, U.S. Treasury bills and other short-term investments, are carried at fair value. Policy loans are carried at unpaid principal balances. Other investments primarily consist of bank loans, agent loans, real estate and derivatives. Bank loans are primarily senior secured corporate loans and are carried at amortized cost. Real estate is carried at cost less accumulated depreciation. Agent loans are loans issued to exclusive Allstate agents and are carried at unpaid principal balances, net of valuation allowances. Derivatives are carried at fair value.

Investment income primarily consists of interest, dividends, income from limited partnership interests, rental income from real estate, and income from certain derivative transactions. Interest is recognized on an accrual basis using the effective yield method and dividends are recorded at the ex-dividend date. Interest income for ABS and MBS is determined considering estimated pay-downs, including prepayments, obtained from third party data sources and internal estimates. Actual prepayment experience is periodically reviewed and effective yields are recalculated when differences arise between the prepayments originally anticipated and the actual prepayments received and currently anticipated. For ABS and MBS of high credit quality with fixed interest rates, the effective yield is recalculated on a retrospective basis. For all others, the effective yield is recalculated on a prospective basis. Accrual of income is suspended for other-than-temporarily impaired fixed income securities when the timing and amount of cash flows expected to be received is not reasonably estimable. Accrual of income is suspended for mortgage loans, bank loans and agent loans that are in default or when full and timely collection of principal and interest payments is not probable. Cash receipts on investments on nonaccrual status are generally recorded as a reduction of carrying value. Income from limited partnership interests carried at fair value is recognized based upon the changes in fair value of the investee's equity primarily determined using NAV. Income from EMA limited partnership interests is recognized based on the Company's share of the partnerships' earnings. Income from EMA limited partnership interests is generally recognized on a three month delay due to the availability of the related financial statements from investees.

Realized capital gains and losses include gains and losses on investment sales, write-downs in value due to other-than-temporary declines in fair value, adjustments to valuation allowances on mortgage loans and agent loans, valuation changes of equity investments, including equity securities and certain limited partnerships where the underlying assets are predominately public equity securities, and periodic changes in fair value and settlements of certain derivatives including hedge ineffectiveness. Realized capital gains and losses on investment sales are determined on a specific identification basis.

Derivative and embedded derivative financial instruments

Derivative financial instruments include interest rate swaps, credit default swaps, futures (interest rate and equity), options (including swaptions), interest rate caps, warrants, foreign currency swaps, foreign currency forwards, total return swaps and certain investment risk transfer reinsurance agreements. Derivatives required to be separated from the host instrument and accounted for as derivative financial instruments ("subject to bifurcation") are embedded in equity-indexed life and annuity contracts and reinsured variable annuity contracts.

All derivatives are accounted for on a fair value basis and reported as other investments, other assets, other liabilities and accrued expenses or contractholder funds. Embedded derivative instruments subject to bifurcation are also accounted for on a fair value basis and are reported together with the host contract. The change in fair value of derivatives embedded in life and annuity product contracts and subject to bifurcation is reported in contract benefits or interest credited to contractholder funds. Cash flows from embedded derivatives subject to bifurcation and derivatives receiving hedge accounting are reported consistently with the host contracts and hedged risks, respectively, within the Consolidated Statements of Cash Flows. Cash flows from other derivatives are reported in cash flows from investing activities within the Consolidated Statements of Cash Flows.

When derivatives meet specific criteria, they may be designated as accounting hedges and accounted for as fair value, cash flow, foreign currency fair value or foreign currency cash flow hedges. The hedged item may be either all or a specific portion of a recognized asset, liability or an unrecognized firm commitment attributable to a particular risk for fair value hedges. At the inception of the hedge, the Company formally documents the hedging relationship and risk management objective and strategy. The documentation identifies the hedging instrument, the hedged item, the nature of the risk being hedged and the methodology used to assess the effectiveness of the hedging instrument in offsetting the exposure to changes in the hedged item's fair value attributable to the hedged risk. For a cash flow hedge, this documentation includes the exposure to changes in the variability in cash flows attributable to the hedged risk. The Company does not exclude any component of the change in fair value of the hedging instrument from the effectiveness assessment. At each reporting date, the Company confirms that the hedging instrument continues to be highly effective in offsetting the hedged risk.

Fair value hedges The change in fair value of hedging instruments used in fair value hedges of investment assets or a portion thereof is reported in net investment income, together with the change in fair value of the hedged items. The change in fair value of hedging instruments used in fair value hedges of contractholder funds liabilities or a portion thereof is reported in interest credited to contractholder funds, together with the change in fair value of the hedged items. Accrued periodic settlements on swaps are reported together with the changes in fair value of the related swaps in net investment income or interest credited to contractholder funds. The amortized cost for fixed income securities, the carrying value for mortgage loans or the carrying value of a designated hedged liability is adjusted for the change in fair value of the hedged risk.

Cash flow hedges For hedging instruments used in cash flow hedges, the changes in fair value of the derivatives are reported in AOCI. Amounts are reclassified to net investment income or realized capital gains and losses as the hedged or forecasted transaction affects income. Accrued periodic settlements on derivatives used in cash flow hedges are reported in net investment income. The amount reported in AOCI for a hedged transaction is the cumulative gain or loss on the derivative instrument from inception of the hedge less gains or losses previously reclassified from AOCI into income. If the Company expects at any time that the loss reported in AOCI would lead to a net loss on the combination of the hedging instrument and the hedged transaction which may not be recoverable, a loss is recognized immediately in realized capital gains and losses. If an impairment loss is recognized on an asset or an additional obligation is incurred on a liability involved in a hedge transaction, any offsetting gain in AOCI is reclassified and reported together with the impairment loss or recognition of the obligation.

Termination of hedge accounting If, subsequent to entering into a hedge transaction, the derivative becomes ineffective (including if the hedged item is sold or otherwise extinguished, the occurrence of a hedged forecasted transaction is no longer probable or the hedged asset becomes other-than-temporarily impaired), the Company may terminate the derivative position. The Company may also terminate derivative instruments or redesignate them as non-hedge as a result of other events or circumstances. If the derivative instrument is not terminated when a fair value hedge is no longer effective, the future gains and losses recognized on the derivative are reported in realized capital gains and losses. When a fair value hedge is no longer effective, is redesignated as non-hedge or when the derivative has been terminated, the fair value gain or loss on the hedged asset, liability or portion thereof previously recognized in income while the hedge was in place and used to adjust the amortized cost of hedged fixed income securities, carrying value of hedged mortgage loans or carrying value of a hedged liability, is amortized over the remaining life of the hedged asset, liability or portion thereof, and reflected in net investment income or interest credited to contractholder funds beginning in the period that hedge accounting is no longer applied. If the hedged item in a fair value hedge is an asset that has become other-than-temporarily impaired, the adjustment made to the amortized cost for fixed income securities or the carrying value for mortgage loans is subject to the accounting policies applied to other-than-temporarily impaired assets.

When a derivative instrument used in a cash flow hedge of an existing asset or liability is no longer effective or is terminated, the gain or loss recognized on the derivative is reclassified from AOCI to income as the hedged risk impacts income. If the derivative instrument is not terminated when a cash flow hedge is no longer effective, future gains and losses recognized on the derivative are reported in realized capital gains and losses. When a derivative instrument used in a cash flow hedge of a forecasted transaction is terminated because it is probable the forecasted transaction will not occur, the gain or loss recognized on the derivative is immediately reclassified from AOCI to realized capital gains and losses in the period that hedge accounting is no longer applied.

Non-hedge derivative financial instruments For derivatives for which hedge accounting is not applied, the income statement effects, including fair value gains and losses and accrued periodic settlements, are reported either in realized capital gains and losses or in a single line item together with the results of the associated asset or liability for which risks are being managed.

Securities loaned

The Company's business activities include securities lending transactions, which are used primarily to generate net investment income. The proceeds received in conjunction with securities lending transactions can be reinvested in short-term investments or fixed income securities. These transactions are short-term in nature, usually 30 days or less.

The Company receives cash collateral for securities loaned in an amount generally equal to 102% and 105% of the fair value of domestic and foreign securities, respectively, and records the related obligations to return the collateral in other liabilities and accrued expenses. The carrying value of these obligations approximates fair value because of their relatively short-term nature.

The Company monitors the market value of securities loaned on a daily basis and obtains additional collateral as necessary under the terms of the agreements to mitigate counterparty credit risk. The Company maintains the right and ability to repossess the securities loaned on short notice.

Recognition of premium revenues and contract charges, and related benefits and interest credited

Traditional life insurance products consist principally of products with fixed and guaranteed premiums and benefits, primarily term and whole life insurance products. Voluntary accident and health insurance products are expected to remain in force for an extended period and therefore are primarily classified as long-duration contracts. Premiums from these products are recognized as revenue when due from policyholders. Benefits are reflected in contract benefits and recognized over the life of the policy in relation to premiums.

Immediate annuities with life contingencies, including certain structured settlement annuities, provide benefits over a period that extends beyond the period during which premiums are collected. Premiums from these products are recognized as revenue when received at the inception of the contract. Benefits are recognized in relation to premiums with the establishment of a reserve. The change in reserve over time is recorded in contract benefits and primarily relates to accumulation at the discount rate and annuitant mortality. Profits from these policies come primarily from investment income, which is recognized over the life of the contract.

Interest-sensitive life contracts, such as universal life and single premium life, are insurance contracts whose terms are not fixed and guaranteed. The terms that may be changed include premiums paid by the contractholder, interest credited to the contractholder account balance and contract charges assessed against the contractholder account balance. Premiums from these contracts are reported as contractholder fund deposits. Contract charges consist of fees assessed against the contractholder account balance for the cost of insurance (mortality risk), contract administration and surrender of the contract prior to contractually specified dates. These contract charges are recognized as revenue when assessed against the contractholder account balance. Contract benefits include life-contingent benefit payments in excess of the contractholder account balance.

Contracts that do not subject the Company to significant risk arising from mortality or morbidity are referred to as investment contracts. Fixed annuities, including market value adjusted annuities, equity-indexed annuities and immediate annuities without life contingencies, are considered investment contracts. Consideration received for such contracts is reported as contractholder fund deposits. Contract charges for investment contracts consist of fees assessed against the contractholder account balance for maintenance, administration and surrender of the contract prior to contractually specified dates, and are recognized when assessed against the contractholder account balance.

Interest credited to contractholder funds represents interest accrued or paid on interest-sensitive life and investment contracts. Crediting rates for certain fixed annuities and interest-sensitive life contracts are adjusted periodically by the Company to reflect current market conditions subject to contractually guaranteed minimum rates. Crediting rates for indexed life and annuities are generally based on a specified interest rate index or an equity index, such as the Standard & Poor’s 500 Index (“S&P 500”). Interest credited also includes amortization of DSI expenses. DSI is amortized into interest credited using the same method used to amortize DAC.

Contract charges for variable life and variable annuity products consist of fees assessed against the contractholder account balances for contract maintenance, administration, mortality, expense and surrender of the contract prior to contractually specified dates. Contract benefits incurred for variable annuity products include guaranteed minimum death, income, withdrawal and accumulation benefits. Substantially all of the Company’s variable annuity business is ceded through reinsurance agreements and the contract charges and contract benefits related thereto are reported net of reinsurance ceded.

Other revenue

Other revenue represents gross dealer concessions received in connection with sales of non-proprietary products by Allstate exclusive agencies and exclusive financial specialists. Other revenue is recognized when performance obligations are fulfilled.

Deferred policy acquisition and sales inducement costs

Costs that are related directly to the successful acquisition of new or renewal life insurance policies and investment contracts are deferred and recorded as DAC. These costs are principally agency’s and brokers’ remuneration and certain underwriting expenses. DSI costs, which are deferred and recorded as other assets, relate to sales inducements offered on sales to new customers, principally on fixed annuity and interest-sensitive life contracts. These sales inducements are primarily in the form of additional credits to the customer’s account balance or enhancements to interest credited for a specified period which are in excess of the rates currently being credited to similar contracts without sales inducements. All other acquisition costs are expensed as incurred and included in operating costs and expenses. Amortization of DAC is included in amortization of deferred policy acquisition costs and is described in more detail below. DSI is amortized into income using the same methodology and assumptions as DAC and is included in interest credited to contractholder funds.

For traditional life and voluntary accident and health insurance, DAC is amortized over the premium paying period of the related policies in proportion to the estimated revenues on such business. Assumptions used in the amortization of DAC and reserve calculations are established at the time the policy is issued and are generally not revised during the life of the policy. Any deviations from projected business in force resulting from actual policy terminations differing from expected levels and any estimated premium deficiencies may result in a change to the rate of amortization in the period such events occur. Generally, the amortization periods for these policies approximates the estimated lives of the policies. The Company periodically reviews the recoverability of DAC using actual experience and current assumptions. Prior to fourth quarter 2017, the Company evaluated traditional life insurance products and immediate annuities with life contingencies on an aggregate basis. Beginning in fourth quarter 2017, traditional life insurance products, immediate annuities with life contingencies, and voluntary accident and health insurance products are reviewed individually. If actual experience and current assumptions are adverse compared to the original assumptions and a premium deficiency is determined to exist, any remaining unamortized DAC balance would be expensed to the extent not recoverable and the establishment of a premium deficiency reserve may be required for any remaining deficiency.

For interest-sensitive life insurance and fixed annuities, DAC and DSI are amortized in proportion to the incidence of the total present value of gross profits, which includes both actual historical gross profits (“AGP”) and estimated future gross profits (“EGP”) expected to be earned over the estimated lives of the contracts. The amortization is net of interest on the prior period DAC balance using rates established at the inception of the contracts. Actual amortization periods generally range from 15-30 years; however, incorporating estimates of the rate of customer surrenders, partial withdrawals and deaths generally results in the majority of the DAC being amortized during the surrender charge period, which is typically 10-20 years for interest-sensitive life and 5-10 years for fixed annuities. The rate of DAC and DSI amortization is reestimated and adjusted by a cumulative charge or credit to income when there is a difference between the incidence of actual versus expected gross profits in a reporting period or when there is a change in total EGP. When DAC or DSI amortization or a component of gross profits for a quarterly period is potentially negative (which would result in an increase of the DAC or DSI balance) as a result of negative AGP, the specific facts and circumstances surrounding the potential negative amortization are considered to determine whether it is appropriate for recognition in the consolidated financial statements. Negative amortization is only recorded when the increased DAC or DSI balance is determined to be recoverable based on facts and circumstances. Recapitalization of DAC and DSI is limited to the originally deferred costs plus interest.

AGP and EGP primarily consist of the following components: contract charges for the cost of insurance less mortality costs and other benefits; investment income and realized capital gains and losses less interest credited; and surrender and other contract charges less maintenance expenses. The principal assumptions for determining the amount of EGP are mortality, persistency, expenses, investment returns, including capital gains and losses on assets supporting contract liabilities, interest crediting rates to contractholders, and the effects of any hedges. For products whose supporting investments are exposed to capital losses in excess of the Company’s expectations which may cause periodic AGP to become temporarily negative, EGP and AGP utilized in DAC and DSI amortization may be modified to exclude the excess capital losses.

The Company performs quarterly reviews of DAC and DSI recoverability for interest-sensitive life and fixed annuity contracts using current assumptions. If a change in the amount of EGP is significant, it could result in the unamortized DAC or DSI not being recoverable, resulting in a charge which is included as a component of amortization of deferred policy acquisition costs or interest credited to contractholder funds, respectively.

The DAC and DSI balances presented include adjustments to reflect the amount by which the amortization of DAC and DSI would increase or decrease if the unrealized capital gains or losses in the respective product investment portfolios were actually realized. The adjustments are recorded net of tax in AOCI. DAC, DSI and deferred income taxes determined on unrealized capital gains and losses and reported in AOCI recognize the impact on shareholder’s equity consistently with the amounts that would be recognized in the income statement on realized capital gains and losses.

Customers of the Company may exchange one insurance policy or investment contract for another offered by the Company, or make modifications to an existing investment or life contract issued by the Company. These transactions are identified as internal replacements for accounting purposes. Internal replacement transactions determined to result in replacement contracts that are substantially unchanged from the replaced contracts are accounted for as continuations of the replaced contracts. Unamortized DAC and DSI related to the replaced contracts continue to be deferred and amortized in connection with the replacement contracts. For interest-sensitive life and investment contracts, the EGP of the replacement contracts are treated as a revision to the EGP of the replaced contracts in the determination of amortization of DAC and DSI. For traditional life insurance policies, any changes to unamortized DAC that result from replacement contracts are treated as prospective revisions. Any costs associated with the issuance of replacement contracts are characterized as maintenance costs and expensed as incurred. Internal replacement transactions determined to result in a substantial change to the replaced contracts are accounted for as an extinguishment of the replaced contracts, and any unamortized DAC and DSI related to the replaced contracts are eliminated with a corresponding charge to amortization of deferred policy acquisition costs or interest credited to contractholder funds, respectively.

The costs assigned to the right to receive future cash flows from certain business purchased from other insurers are also classified as DAC in the Consolidated Statements of Financial Position. The costs capitalized represent the present value of future

profits expected to be earned over the lives of the contracts acquired. These costs are amortized as profits emerge over the lives of the acquired business and are periodically evaluated for recoverability. The present value of future profits was $3 million as of both December 31, 2019 and 2018. Amortization expense of the present value of future profits was $357 thousand, $249 thousand and $232 thousand in 2019, 2018 and 2017, respectively.

Reinsurance

In the normal course of business, the Company seeks to limit aggregate and single exposure to losses on large risks by purchasing reinsurance. The Company has also used reinsurance to effect the disposition of certain blocks of business. The amounts reported as reinsurance recoverables include amounts billed to reinsurers on losses paid as well as estimates of amounts expected to be recovered from reinsurers on insurance liabilities and contractholder funds that have not yet been paid. Reinsurance recoverables on unpaid losses are estimated based upon assumptions consistent with those used in establishing the liabilities related to the underlying reinsured contracts. Insurance liabilities are reported gross of reinsurance recoverables. Reinsurance premiums are generally reflected in income in a manner consistent with the recognition of premiums on the reinsured contracts. Reinsurance does not extinguish the Company's primary liability under the policies written. Therefore, the Company regularly evaluates the financial condition of its reinsurers and establishes allowances for uncollectible reinsurance as appropriate.

Income taxes

Income taxes are accounted for using the asset and liability method under which deferred tax assets and liabilities are recognized for temporary differences between the financial reporting and tax bases of assets and liabilities at the enacted tax rates. The principal assets and liabilities giving rise to such differences are insurance reserves, investments (including unrealized capital gains and losses) and DAC. A deferred tax asset valuation allowance is established when it is more likely than not such assets will not be realized. The Company recognizes interest expense related to income tax matters in income tax expense and penalties in operating costs and expenses.

Reserve for life-contingent contract benefits

The reserve for life-contingent contract benefits payable under insurance policies, including traditional life insurance, life-contingent immediate annuities and voluntary accident and health insurance products, is computed on the basis of long-term actuarial assumptions of future investment yields, mortality, morbidity, policy terminations and expenses. These assumptions, which for traditional life insurance are applied using the net level premium method, include provisions for adverse deviation and generally vary by characteristics such as type of coverage, year of issue and policy duration. The assumptions are established at the time the policy is issued and are generally not changed during the life of the policy. The Company periodically reviews the adequacy of reserves using actual experience and current assumptions. If actual experience and current assumptions are adverse compared to the original assumptions and a premium deficiency is determined to exist, any remaining unamortized DAC balance would be expensed to the extent not recoverable and the establishment of a premium deficiency reserve may be required for any remaining deficiency. In 2019 and 2018, the Company's reviews concluded that no premium deficiency adjustments were necessary. Prior to fourth quarter 2017, the Company evaluated traditional life insurance products and immediate annuities with life contingencies on an aggregate basis. Beginning in fourth quarter 2017, traditional life insurance products, immediate annuities with life contingencies, and voluntary accident and health insurance are reviewed individually. The Company also reviews these policies for circumstances where projected profits would be recognized in early years followed by projected losses in later years. If this circumstance exists, the Company will accrue a liability, during the period of profits, to offset the losses at such time as the future losses are expected to commence using a method updated prospectively over time. To the extent that unrealized gains on fixed income securities would result in a premium deficiency if those gains were realized, the related increase in reserves for certain immediate annuities with life contingencies is recorded net of tax as a reduction of unrealized net capital gains included in AOCI.

Contractholder funds

Contractholder funds represent interest-bearing liabilities arising from the sale of products such as interest-sensitive life insurance and fixed annuities. Contractholder funds primarily comprise cumulative deposits received and interest credited to the contractholder less cumulative contract benefits, surrenders, withdrawals and contract charges for mortality or administrative expenses. Contractholder funds also include reserves for secondary guarantees on interest-sensitive life insurance and certain fixed annuity contracts and reserves for certain guarantees on reinsured variable annuity contracts.

Separate accounts

Separate accounts assets are carried at fair value. The assets of the separate accounts are legally segregated and available only to settle separate accounts contract obligations. Separate accounts liabilities represent the contractholders' claims to the related assets and are carried at an amount equal to the separate accounts assets. Investment income and realized capital gains and losses of the separate accounts accrue directly to the contractholders and therefore are not included in the Company's Consolidated Statements of Operations and Comprehensive Income. Deposits to and surrenders and withdrawals from the separate accounts are reflected in separate accounts liabilities and are not included in consolidated cash flows.

Absent any contract provision wherein the Company provides a guarantee, variable annuity and variable life insurance contractholders bear the investment risk that the separate accounts' funds may not meet their stated investment objectives. Substantially all of the Company's variable annuity business was reinsured beginning in 2006.

Off-balance sheet financial instruments

Commitments to invest, commitments to purchase private placement securities, commitments to extend loans, financial guarantees and credit guarantees have off-balance sheet risk because their contractual amounts are not recorded in the Company's Consolidated Statements of Financial Position (see Note 7 and Note 11).

Consolidation of variable interest entities ("VIEs")

The Company consolidates VIEs when it is the primary beneficiary. A primary beneficiary is the variable interest holder in a VIE with both the power to direct the activities of the VIE that most significantly impact the economic performance of the VIE and the obligation to absorb losses, or the right to receive benefits, that could potentially be significant to the VIE.

Adopted accounting standard

Accounting for Hedging Activities

Effective January 1, 2019, the Company adopted new Financial Accounting Standards Board ("FASB") guidance intended to better align hedge accounting with an organization's risk management activities. The new guidance expands hedge accounting to nonfinancial and financial risk components and revises the measurement methodologies. Separate presentation of hedge ineffectiveness is eliminated with the intention to provide greater transparency to the full impact of hedging by requiring presentation of the results of the hedged item and hedging instrument in a single financial statement line item. In addition, the amendments were designed to reduce complexity by simplifying hedge effectiveness testing. The adoption had no impact on the Company's results of operations or financial position.

Pending accounting standards

Measurement of Credit Losses on Financial Instruments

In June 2016, the FASB issued guidance which revises the credit loss recognition criteria for certain financial assets measured at amortized cost, including reinsurance recoverables. The new guidance replaces the existing incurred loss recognition model with an expected loss recognition model. The objective of the expected credit loss model is for a reporting entity to recognize its estimate of expected credit losses for affected financial assets in a valuation allowance that when deducted from the amortized cost basis of the related financial assets results in a net carrying value at the amount expected to be collected. The reporting entity must consider all relevant information available when estimating expected credit losses, including details about past events, current conditions, and reasonable and supportable forecasts over the life of an asset. Financial assets may be evaluated individually or on a pooled basis when they share similar risk characteristics. The measurement of credit losses for available-for-sale debt securities measured at fair value is not affected except that credit losses recognized are limited to the amount by which fair value is below amortized cost and the carrying value adjustment is recognized through a valuation allowance which may change over time but once recorded cannot subsequently be reduced to an amount below zero. The guidance is effective for reporting periods beginning after December 15, 2019, and for most affected instruments must be adopted using a modified retrospective approach, with a cumulative effect adjustment recorded to beginning retained income.

The Company's implementation activities, which are being finalized, include review and validation of models, methodologies, data inputs and assumptions to be used to estimate expected credit losses. The implementation impacts relate primarily to the Company's commercial mortgage loans, bank loans and reinsurance recoverables and are dependent on economic conditions and judgments at the date of adoption. Based on the economic conditions at the date of adoption and the balances at the reporting date, the Company estimates the application of the current expected credit loss requirements will result in total valuation allowances for credit losses of approximately $85 million as of the date of adoption. After consideration of existing valuation allowances maintained prior to adoption of the new guidance, the Company expects to recognize a cumulative-effect decrease in retained income of approximately $55 million, after-tax, to adjust existing valuation allowances to the basis in the new requirements.

Accounting for Long-Duration Insurance Contracts

In August 2018, the FASB issued guidance revising the accounting for certain long-duration insurance contracts. The new guidance introduces material changes to the measurement of the Company's reserves for traditional life, life-contingent immediate annuities and certain voluntary accident and health insurance products.

Under the new guidance, measurement assumptions, including those for mortality, morbidity and policy terminations, will be required to be reviewed and updated at least annually. The effect of updating measurement assumptions other than the discount rate are required to be measured on a retrospective basis and reported in net income. In addition, reserves under the new guidance are required to be discounted using an upper medium grade fixed income instrument yield required to be updated through other

comprehensive income at each reporting date. Current GAAP requires reserves to utilize assumptions set at policy issuance unless updated current assumptions indicate that recorded reserves are deficient.

The new guidance also requires DAC and other capitalized balances currently amortized in proportion to premiums or gross profits to be amortized on a constant level basis over the expected term for all long-duration insurance contracts. DAC will not be subject to loss recognition testing but will be reduced when actual lapse experience exceeds expected experience. The new guidance will no longer require adjustments to DAC and DSI related to unrealized gains and losses on investment securities supporting the related business.

All market risk benefit product features will be measured at fair value with changes in fair value recorded in net income with the exception of changes in the fair value attributable to changes in the reporting entity's own credit risk, which are required to be recognized in OCI. Substantially all of the Company's market risk benefits are reinsured and therefore these impacts are not expected to be material to the Company.

The new guidance will be included in the comparable financial statements issued in reporting periods beginning after December 15, 2021, thereby requiring restatement of prior periods presented. Early adoption is permitted. The new guidance will be applied to affected contracts and DAC on the basis of existing carrying amounts at the earliest period presented or retrospectively using actual historical experience as of contract inception. The new guidance for market risk benefits is required to be adopted retrospectively.

The Company is evaluating the anticipated impacts of applying the new guidance to both retained income and AOCI. The requirements of the new guidance represent a material change from existing GAAP, however, the underlying economics of the business and related cash flows are unchanged. The Company is evaluating the specific impacts of adopting the new guidance and anticipates the financial statement impact of adopting the new guidance to be material, largely attributed to the impact of transitioning to a discount rate based on an upper-medium grade fixed income investment yield and updates to mortality assumptions. The Company expects the most significant impacts will occur in the run-off annuity business. The revised accounting for DAC will be applied prospectively using the new model and any DAC effects existing in AOCI as a result of applying existing GAAP at the date of adoption will be reversed.

Simplifications to the Accounting for Income Taxes

In December 2019, the FASB issued amendments to simplify the accounting for income taxes. The amendments eliminate certain exceptions in the existing guidance including those related to intraperiod tax allocation and deferred tax liability recognition when changes in control of equity method and foreign subsidiary investments occur. The amendments require recognition of the effect of an enacted change in tax laws or rates in the interim period that includes the enactment date, provide an option to not allocate taxes to a legal entity that is not subject to tax as well as other minor changes. The amendments are effective for interim and annual reporting periods beginning after December 15, 2020. The new guidance specifies which amendments should be applied prospectively, retrospective to all periods presented or on a modified retrospective basis through a cumulative-effect adjustment to retained income as of the beginning of the year of adoption. The impact of adoption is not expected to be material to the Company's results of operations or financial position.

3. Supplemental Cash Flow Information

Non-cash investing activities include $67 million, $43 million and $51 million related to mergers and exchanges completed with equity securities, fixed income securities and limited partnerships, and modifications of certain mortgage loans and other investments in 2019, 2018 and 2017, respectively.

In 2017, the Company redeemed $325 million of surplus notes due to Kennett Capital, Inc. ("Kennett"), an unconsolidated affiliate of ALIC. In connection with the redemption, the related $325 million of notes due from Kennett (recorded as other investments) were extinguished.

Liabilities for collateral received in conjunction with the Company's securities lending program were $522 million, $517 million and $539 million as of December 31, 2019, 2018 and 2017, respectively, and are reported in other liabilities and accrued expenses. Obligations to return cash collateral for over-the-counter ("OTC") and cleared derivatives were $8 million, $8 million and $3 million as of December 31, 2019, 2018 and 2017, respectively, and are reported in other liabilities and accrued expenses or other investments.

The accompanying cash flows are included in cash flows from operating activities in the Consolidated Statements of Cash Flows along with the activities resulting from management of the proceeds, which for the years ended December 31 are as follows:

($ in millions)	2019	2018	2017
Net change in proceeds managed			
Net change in fixed income securities	$ 28	$ 94	$ 149
Net change in short-term investments	(33)	(77)	(142)
Operating cash flow (used) provided	(5)	17	7
Net change in cash	—	—	1
Net change in proceeds managed	$ (5)	$ 17	$ 8
Net change in liabilities			
Liabilities for collateral, beginning of year	$ (525)	$ (542)	$ (550)
Liabilities for collateral, end of year	(530)	(525)	(542)
Operating cash flow provided (used)	$ 5	$ (17)	$ (8)

4. Related Party Transactions

Business operations

The Company uses services performed by AIC and other affiliates, and business facilities owned or leased and operated by AIC in conducting its business activities. In addition, the Company shares the services of employees with AIC. The Company reimburses its affiliates for the operating expenses incurred on behalf of the Company. The Company is charged for the cost of these operating expenses based on the level of services provided. Operating expenses, including compensation, retirement and other benefit programs (see Note 15), allocated to the Company were $211 million, $235 million and $243 million in 2019, 2018 and 2017, respectively.

Agent loan sale and securitization

On December 22, 2016, ALIC's subsidiary Allstate Finance Company, LLC ("AFC") sold agent loans with a fair value of $419 million to affiliate Allstate Finance Company Agency Loans LLC ("AFCAL") and AFCAL used the loans as collateral in the issuance of notes. On December 16, 2019, investors in the notes approved redemption of the original notes and AFCAL issued replacement notes at new terms. Concurrent with redemption, AFC sold agent loans with a fair value of $222 million to AFCAL and AFCAL used the loans as collateral in the issuance of additional notes. Investors in the notes are as follows:

($ in millions)	December 31, 2019 (2)	December 31, 2018 (3)
Class A Notes (1)		
Allstate New Jersey Insurance Company	$ 83	$ 77
American Heritage Life Insurance Company	59	37
Allstate Assurance Company	33	19
First Colonial Insurance Company	9	7
Allstate Fire & Casualty Insurance Company	7	—
Allstate Property and Casualty Insurance Company	6	—
Allstate Indemnity Company	4	—
Esurance Insurance Company	4	—
North Light Specialty Insurance Company	3	—
Allstate Vehicle and Property Insurance Company	2	—
Allstate New Jersey Property and Casualty Insurance Company	2	—
Esurance Property and Casualty Insurance Company	2	—
Subtotal - Class A	214	140
Class B Deferrable Notes		
Allstate Life Insurance Company	214	140
Class C Deferrable Notes		
Allstate Life Insurance Company	168	110
Subordinated Notes		
Allstate Life Insurance Company	45	29
Total	$ 641	$ 419

(1) As of December 31, 2019, $74 million of these notes have an annual interest rate of 3.16% and $140 million have an annual interest rate of 3.36%. As of December 31, 2018, all notes had an annual interest rate of 3.25%.
(2) Notes due March 10, 2037.
(3) Notes due March 10, 2034.

AFCAL is a VIE established as a bankruptcy-remote entity whose assets are isolated from those of ALIC and are not available to ALIC's creditors. ALIC is the primary beneficiary since ALIC has control over the significant activities of AFCAL, the obligation to absorb significant losses and the rights to residual returns. Therefore, AFCAL is included in ALIC's consolidated financial statements. Transactions between ALIC, AFC and AFCAL are eliminated in consolidation. The Company's Consolidated Statements of Financial Position included $612 million of agent loans, $1 million of cash and $214 million of notes due to related parties as of December 31, 2019 and $407 million of agent loans, $2 million of cash and $140 million of notes due to related parties as of December 31, 2018 associated with AFCAL.

The Company incurred interest expense related to these notes of $5 million in each year 2019, 2018 and 2017.

Reinsurance

The Company has coinsurance reinsurance agreements with its unconsolidated affiliate American Heritage Life Insurance Company ("AHL") whereby the Company assumes certain interest-sensitive life insurance, fixed annuity contracts and accident and health insurance policies. The amounts assumed are disclosed in Note 9.

Effective January 1, 2017, ALIC entered into a coinsurance reinsurance agreement with AAC to assume certain term life insurance policies. In connection with the agreement, the Company recorded cash of $20 million, DAC of $45 million, other assets of $11 million, reserve for life-contingent contract benefits of $24 million and deferred tax liabilities of $18 million. The $34 million gain on the transaction was recorded as an increase to additional capital paid-in since the transaction was between entities under common control.

ALIC enters into certain intercompany reinsurance transactions with its wholly owned subsidiaries. ALIC enters into these transactions in order to maintain underwriting control and spread risk among various legal entities. These reinsurance agreements have been approved by the appropriate regulatory authorities. All significant intercompany transactions have been eliminated in consolidation.

Broker-Dealer agreement

The Company receives distribution services from Allstate Financial Services, LLC, an affiliated broker-dealer company, for certain annuity and variable life insurance contracts sold by Allstate exclusive agencies and exclusive financial specialists. For these services, the Company incurred commission and other distribution expenses of $3 million, $3 million and $9 million of 2019, 2018 and 2017, respectively.

Structured settlement annuities

The Company previously issued structured settlement annuities, a type of immediate annuity, to fund structured settlements in matters involving AIC. In most cases, these annuities were issued under a "qualified assignment" whereby Allstate Assignment Company and prior to July 1, 2001 Allstate Settlement Corporation ("ASC"), both wholly owned subsidiaries of ALIC, purchased annuities from ALIC and assumed AIC's obligation to make future payments.

AIC issued surety bonds to guarantee the payment of structured settlement benefits assumed by ASC (from both AIC and non-related parties) and funded by certain annuity contracts issued by the Company through June 30, 2001. ASC entered into a General Indemnity Agreement pursuant to which it indemnified AIC for any liabilities associated with the surety bonds and gave AIC certain collateral security rights with respect to the annuities and certain other rights in the event of any defaults covered by the surety bonds. ALIC guaranteed the payment of structured settlement benefits on all contracts issued on or after July 1, 2001. Reserves recorded by the Company for annuities that are guaranteed by the surety bonds of AIC were $4.57 billion and $4.59 billion as of December 31, 2019 and 2018, respectively.

Income taxes

The Company is a party to a federal income tax allocation agreement with the Corporation (see Note 12).

Surplus notes

On December 2, 2016, the Company purchased for cash a $40 million 3.07% surplus note due December 2, 2036 that was issued by AAC. No payment of principal or interest is permitted on the surplus note without the written approval from the proper regulatory authority. The regulatory authority could prohibit the payment of interest and principal on the surplus notes if certain statutory capital requirements are not met. The surplus note is classified as fixed income securities on the Consolidated Statements of Financial Position. The Company recorded investment income on this surplus note of $1 million in each year 2019, 2018 and 2017.

Liquidity and intercompany loan agreements

The Company is party to an Amended and Restated Intercompany Liquidity Agreement ("Liquidity Agreement") with certain of its affiliates, which include, but are not limited to, AIC, AAC and the Corporation. The Liquidity Agreement allows for short-term advances of funds to be made between parties for liquidity and other general corporate purposes. The Liquidity Agreement does not establish a commitment to advance funds on the part of any party. The Company and AIC each serve as a lender and borrower, AAC and certain other affiliates serve only as borrowers, and the Corporation serves only as a lender. The maximum amount of advances each party may make or receive is limited to $1 billion. Netting or offsetting of advances made and received is not permitted. Advances between the parties are required to have specified due dates less than or equal to 364 days from the date of the advance and be payable upon demand by written request from the lender at least 10 business days prior to the demand date. The borrower may make prepayments of the outstanding principal balance of an advance without penalty. Advances will bear interest equal to or greater than the rate applicable to 30-day commercial paper issued by the Corporation on the date the advance is made with an adjustment on the first day of each month thereafter. The Company had no amounts outstanding under the Liquidity Agreement as of December 31, 2019 or 2018.

In addition to the Liquidity Agreement, the Company has an intercompany loan agreement with the Corporation. The amount of intercompany loans available to the Company is at the discretion of the Corporation. The maximum amount of loans the Corporation will have outstanding to all its eligible subsidiaries at any given point in time is limited to $1 billion. The Corporation may use commercial paper borrowings, bank lines of credit and securities lending to fund intercompany borrowings. The Company had no amounts outstanding under the intercompany loan agreement as of December 31, 2019 or 2018.

Road Bay Investments, LLC (“RBI”), a consolidated subsidiary of ALIC, has a Revolving Loan Credit Agreement (“Credit Agreement”) with AHL, according to which AHL agreed to extend revolving credit loans to RBI. As security for its obligations under the Credit Agreement, RBI entered into a Pledge and Security Agreement with AHL, according to which RBI agreed to grant a pledge of and security interest in RBI’s right, title, and interest in certain assets of RBI. The Company had no amounts outstanding under the Credit Agreement as of December 31, 2019 or 2018.

Capital support agreement

The Company has a capital support agreement with AIC. Under the terms of this agreement, AIC agrees to provide capital to maintain the amount of statutory capital and surplus necessary to maintain a company action level risk-based capital (“RBC”) ratio of at least 150%. AIC’s obligation to provide capital to the Company under the agreement is limited to an aggregate amount of $1 billion. In exchange for providing this capital, the Company will pay AIC an annual commitment fee of 1% of the amount of the Capital and Surplus maximum that remains available on January 1 of such year. The Company or AIC have the right to terminate this agreement when: 1) the Company qualifies for a financial strength rating from S&P, Moody’s or A.M. Best, without giving weight to the existence of this agreement, that is the same or better than its rating with such support; 2) the Company’s RBC ratio is at least 300%; or 3) AIC no longer directly or indirectly owns at least 50% of the voting stock of the Company. During 2019 and 2018, no capital had been provided by AIC under this agreement.

External financing agreement

In January 2017, ALIC Reinsurance Company (“ALIC Re”), a wholly owned subsidiary of the Company, entered into a master transaction agreement with Bueller Financing LLC (“Bueller”), an external financing provider. In accordance with the agreement, Bueller issued a variable funding puttable note (“credit-linked note”) that is held in a trust. The credit-linked note can be put back to Bueller for cash in the event certain ALIC Re statutory reserves and capital are depleted. The balance of the credit-linked note will vary based on the statutory reserve balance with a maximum value of $1.75 billion. The impacts of the agreement are eliminated in consolidation and have no impact on the Consolidated Statements of Financial Position.

Dividends

The Company paid dividends of $75 million, $250 million and $600 million to AIC in the form of cash in 2019, 2018, and 2017, respectively.

5. Investments

Fair values

The amortized cost, gross unrealized gains and losses and fair value for fixed income securities are as follows:

($ in millions)	Amortized cost	Gross unrealized Gains	Gross unrealized Losses	Fair value
December 31, 2019				
U.S. government and agencies	$ 848	$ 34	$ —	$ 882
Municipal	1,483	279	(7)	1,755
Corporate	17,301	1,170	(30)	18,441
Foreign government	142	7	—	149
ABS	316	4	(3)	317
MBS	127	55	(1)	181
Total fixed income securities	$ 20,217	$ 1,549	$ (41)	$ 21,725
December 31, 2018				
U.S. government and agencies	$ 740	$ 33	$ —	$ 773
Municipal	1,997	202	(4)	2,195
Corporate	17,534	434	(381)	17,587
Foreign government	170	9	—	179
ABS	429	3	(3)	429
MBS	187	51	(1)	237
Total fixed income securities	$ 21,057	$ 732	$ (389)	$ 21,400

Scheduled maturities

The scheduled maturities for fixed income securities are as follows:

($ in millions)	As of December 31, 2019 Amortized cost	As of December 31, 2019 Fair value
Due in one year or less	$ 1,360	$ 1,374
Due after one year through five years	7,690	7,994
Due after five years through ten years	7,455	7,955
Due after ten years	3,269	3,904
	19,774	21,227
ABS and MBS	443	498
Total	$ 20,217	$ 21,725

Actual maturities may differ from those scheduled as a result of calls and make-whole payments by the issuers. ABS and MBS are shown separately because of the potential for prepayment of principal prior to contractual maturity dates.

Net investment income

Net investment income for the years ended December 31 is as follows:

($ in millions)	2019	2018	2017
Fixed income securities	$ 963	$ 991	$ 1,058
Mortgage loans	190	188	182
Equity securities	29	39	48
Limited partnership interests	175	327	457
Short-term investments	31	21	9
Policy loans	34	31	31
Other	93	91	79
Investment income, before expense	1,515	1,688	1,864
Investment expense	(104)	(103)	(87)
Net investment income	$ 1,411	$ 1,585	$ 1,777

Realized capital gains and losses

Realized capital gains (losses) by asset type for the years ended December 31 are as follows:

($ in millions)	2019	2018	2017
Fixed income securities	$ 25	$ (40)	$ (6)
Mortgage loans	—	2	1
Equity securities	276	(124)	21
Limited partnership interests	43	(22)	46
Derivatives	11	10	(16)
Other	(14)	(1)	3
Realized capital gains (losses)	$ 341	$ (175)	$ 49

Realized capital gains (losses) by transaction type for the years ended December 31 are as follows:

($ in millions)	2019	2018	2017
Impairment write-downs	$ (21)	$ (9)	$ (41)
Change in intent write-downs	—	—	(4)
Net OTTI losses recognized in earnings	(21)	(9)	(45)
Sales	54	(27)	110
Valuation of equity investments [(1)]	297	(146)	—
Valuation and settlements of derivative instruments	11	7	(16)
Realized capital gains (losses)	$ 341	$ (175)	$ 49

(1) Includes valuation of equity securities and certain limited partnership interests where the underlying assets are predominately public equity securities.

Sales of fixed income securities resulted in gross gains of $65 million, $34 million and $134 million and gross losses of $35 million, $66 million and $86 million during 2019, 2018 and 2017, respectively.

The following table presents the net pre-tax appreciation (decline) recognized in net income of equity securities and limited partnership interests carried at fair value that are still held as of December 31, 2019 and 2018, respectively.

($ in millions)	For the years ended December 31, 2019	2018
Equity securities	$ 216	$ (78)
Limited partnership interests carried at fair value	57	113
Total	$ 273	$ 35

OTTI losses by asset type for the years ended December 31 are as follows:

($ in millions)	2019			2018			2017		
	Gross	Included in OCI	Net	Gross	Included in OCI	Net	Gross	Included in OCI	Net
Fixed income securities:									
Municipal	$ (2)	$ 2	$ —	$ —	$ —	$ —	$ (1)	$ —	$ (1)
Corporate	(1)	(1)	(2)	(1)	—	(1)	(7)	3	(4)
ABS	(1)	—	(1)	—	(1)	(1)	(1)	(1)	(2)
MBS	(4)	2	(2)	(5)	(1)	(6)	(9)	(1)	(10)
Total fixed income securities	(8)	3	(5)	(6)	(2)	(8)	(18)	1	(17)
Mortgage loans	—	—	—	—	—	—	(1)	—	(1)
Equity securities	—	—	—	—	—	—	(16)	—	(16)
Limited partnership interests	(2)	—	(2)	—	—	—	(9)	—	(9)
Other	(14)	—	(14)	(1)	—	(1)	(2)	—	(2)
OTTI losses	$ (24)	$ 3	$ (21)	$ (7)	$ (2)	$ (9)	$ (46)	$ 1	$ (45)

The total amount of OTTI losses included in AOCI at the time of impairment for fixed income securities, which were not included in earnings, are presented in the following table.

($ in millions)	December 31, 2019	December 31, 2018
Municipal	$ (6)	$ (4)
Corporate	—	(1)
ABS	(4)	(5)
MBS	(30)	(34)
Total [(1)]	$ (40)	$ (44)

[(1)] The amounts exclude $92 million and $101 million as of December 31, 2019 and 2018, respectively, of net unrealized gains related to changes in valuation of the fixed income securities subsequent to the impairment measurement date.

Rollforwards of the cumulative credit losses recognized in earnings for fixed income securities held as of December 31 are as follows:

($ in millions)	2019	2018	2017
Beginning balance	$ (123)	$ (138)	$ (176)
Additional credit loss for securities previously other-than-temporarily impaired	(4)	(7)	(9)
Additional credit loss for securities not previously other-than-temporarily impaired	(1)	(1)	(8)
Reduction in credit loss for securities disposed or collected	25	22	54
Change in credit loss due to accretion of increase in cash flows	—	1	1
Ending balance	$ (103)	$ (123)	$ (138)

The Company uses its best estimate of future cash flows expected to be collected from the fixed income security, discounted at the security's original or current effective rate, as appropriate, to calculate a recovery value and determine whether a credit loss exists. The determination of cash flow estimates is inherently subjective, and methodologies may vary depending on facts and circumstances specific to the security. All reasonably available information relevant to the collectability of the security, including past events, current conditions, and reasonable and supportable assumptions and forecasts, are considered when developing the estimate of cash flows expected to be collected. That information generally includes, but is not limited to, the remaining payment terms of the security, prepayment speeds, foreign exchange rates, the financial condition and future earnings potential of the issue or issuer, expected defaults, expected recoveries, the value of underlying collateral, vintage, geographic concentration of underlying collateral, available reserves or escrows, current subordination levels, third party guarantees and other credit enhancements. Other information, such as industry analyst reports and forecasts, sector credit ratings, financial condition of the bond insurer for insured fixed income securities, and other market data relevant to the realizability of contractual cash flows, may also be considered. The estimated fair value of collateral will be used to estimate recovery value if the Company determines that the security is dependent on the liquidation of collateral for ultimate settlement. If the estimated recovery value is less than the amortized cost of the security, a credit loss exists and an OTTI for the difference between the estimated recovery value and amortized cost is recorded in earnings. The portion of the unrealized loss related to factors other than credit remains classified in AOCI. If the Company determines that the fixed income security does not have sufficient cash flow or other information to estimate a recovery value for the security, the Company may conclude that the entire decline in fair value is deemed to be credit related and the loss is recorded in earnings.

Unrealized net capital gains and losses

Unrealized net capital gains and losses included in AOCI are as follows:

($ in millions)		Gross unrealized		Unrealized net gains (losses)
December 31, 2019	Fair value	Gains	Losses	
Fixed income securities	$ 21,725	$ 1,549	$ (41)	$ 1,508
Short-term investments	1,191	—	—	—
Derivative instruments	—	—	—	—
EMA limited partnerships [1]				(2)
Unrealized net capital gains and losses, pre-tax				1,506
Amounts recognized for:				
Insurance reserves [2]				(126)
DAC and DSI [3]				(213)
Amounts recognized				(339)
Deferred income taxes				(245)
Unrealized net capital gains and losses, after-tax				$ 922
December 31, 2018				
Fixed income securities	$ 21,400	$ 732	$ (389)	$ 343
Short-term investments	810	—	—	—
Derivative instruments	—	—	—	—
EMA limited partnerships				—
Unrealized net capital gains and losses, pre-tax				343
Amounts recognized for:				
Insurance reserves				—
DAC and DSI				(35)
Amounts recognized				(35)
Deferred income taxes				(65)
Unrealized net capital gains and losses, after-tax				$ 243

[1] Unrealized net capital gains and losses for limited partnership interests represent the Company's share of EMA limited partnerships' OCI. Fair value and gross unrealized gains and losses are not applicable.

[2] The insurance reserves adjustment represents the amount by which the reserve balance would increase if the net unrealized gains in the applicable product portfolios were realized and reinvested at lower interest rates, resulting in a premium deficiency. This adjustment primarily relates to structured settlement annuities with life contingencies (a type of immediate fixed annuities).

[3] The DAC and DSI adjustment balance represents the amount by which the amortization of DAC and DSI would increase or decrease if the unrealized gains or losses in the respective product portfolios were realized.

Change in unrealized net capital gains and losses

The change in unrealized net capital gains and losses for the years ended December 31 is as follows:

($ in millions)	2019	2018	2017
Fixed income securities	$ 1,165	$ (914)	$ 147
Equity securities [1]	—	—	226
Derivative instruments	—	(2)	(3)
EMA limited partnerships	(2)	(1)	3
Total	1,163	(917)	373
Amounts recognized for:			
Insurance reserves	(126)	315	(315)
DAC and DSI	(178)	154	(49)
Amounts recognized	(304)	469	(364)
Deferred income taxes	(180)	94	145
Increase (decrease) in unrealized net capital gains and losses, after-tax	$ 679	$ (354)	$ 154

[1] Upon adoption of the recognition and measurement accounting standard on January 1, 2018, $308 million of pre-tax unrealized net capital gains for equity securities were reclassified from AOCI to retained income.

Portfolio monitoring

The Company has a comprehensive portfolio monitoring process to identify and evaluate each fixed income security whose carrying value may be other-than-temporarily impaired.

For each fixed income security in an unrealized loss position, the Company assesses whether management with the appropriate authority has made the decision to sell or whether it is more likely than not the Company will be required to sell the security before recovery of the amortized cost basis for reasons such as liquidity, contractual or regulatory purposes. If a security meets either of these criteria, the security's decline in fair value is considered other than temporary and is recorded in earnings.

If the Company has not made the decision to sell the fixed income security and it is not more likely than not the Company will be required to sell the fixed income security before recovery of its amortized cost basis, the Company evaluates whether it expects to receive cash flows sufficient to recover the entire amortized cost basis of the security. The Company calculates the estimated recovery value by discounting the best estimate of future cash flows at the security's original or current effective rate, as appropriate, and compares this to the amortized cost of the security. If the Company does not expect to receive cash flows sufficient to recover the entire amortized cost basis of the fixed income security, the credit loss component of the impairment is recorded in earnings, with the remaining amount of the unrealized loss related to other factors recognized in OCI.

The Company's portfolio monitoring process includes a quarterly review of all securities to identify instances where the fair value of a security compared to its amortized cost is below established thresholds. The process also includes the monitoring of other impairment indicators such as ratings, ratings downgrades and payment defaults. The securities identified, in addition to other securities for which the Company may have a concern, are evaluated for potential OTTI using all reasonably available information relevant to the collectability or recovery of the security. Inherent in the Company's evaluation of OTTI for these securities are assumptions and estimates about the financial condition and future earnings potential of the issue or issuer. Some of the factors that may be considered in evaluating whether a decline in fair value is other than temporary are: 1) the financial condition, near-term and long-term prospects of the issue or issuer, including relevant industry specific market conditions and trends, geographic location and implications of rating agency actions and offering prices; 2) the specific reasons that a security is in an unrealized loss position, including overall market conditions which could affect liquidity; and 3) the length of time and extent to which the fair value has been less than amortized cost.

The following table summarizes the gross unrealized losses and fair value of securities by the length of time that individual securities have been in a continuous unrealized loss position.

($ in millions)	Less than 12 months			12 months or more			Total unrealized losses
	Number of issues	Fair value	Unrealized losses	Number of issues	Fair value	Unrealized losses	
December 31, 2019							
Fixed income securities							
U.S. government and agencies	6	$ 74	$ —	—	$ —	$ —	$ —
Municipal	4	22	(5)	1	14	(2)	(7)
Corporate	92	504	(8)	43	237	(22)	(30)
ABS	22	61	(1)	5	19	(2)	(3)
MBS	8	1	—	22	5	(1)	(1)
Total fixed income securities	132	$ 662	$ (14)	71	$ 275	$ (27)	$ (41)
Investment grade fixed income securities	85	$ 524	$ (3)	39	$ 152	$ (17)	$ (20)
Below investment grade fixed income securities	47	138	(11)	32	123	(10)	(21)
Total fixed income securities	132	$ 662	$ (14)	71	$ 275	$ (27)	$ (41)
December 31, 2018							
Fixed income securities							
U.S. government and agencies	2	$ 6	$ —	1	$ 1	$ —	$ —
Municipal	38	98	(1)	5	26	(3)	(4)
Corporate	1,261	6,799	(218)	370	2,633	(163)	(381)
ABS	30	167	(1)	11	31	(2)	(3)
MBS	127	18	—	49	10	(1)	(1)
Total fixed income securities	1,458	$ 7,088	$ (220)	436	$ 2,701	$ (169)	$ (389)
Investment grade fixed income securities	948	$ 5,255	$ (121)	388	$ 2,551	$ (147)	$ (268)
Below investment grade fixed income securities	510	1,833	(99)	48	150	(22)	(121)
Total fixed income securities	1,458	$ 7,088	$ (220)	436	$ 2,701	$ (169)	$ (389)

The following table summarizes gross unrealized losses by unrealized loss position and credit quality as of December 31, 2019.

($ in millions)	Investment grade	Below investment grade	Total
Fixed income securities with unrealized loss position less than 20% of amortized cost [1] [2]	$ (7)	$ (15)	$ (22)
Fixed income securities with unrealized loss position greater than or equal to 20% of amortized cost [3] [4]	(13)	(6)	(19)
Total unrealized losses	$ (20)	$ (21)	$ (41)

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(1) Below investment grade fixed income securities include $6 million that have been in an unrealized loss position for less than twelve months.

(2) Related to securities with an unrealized loss position less than 20% of amortized cost, the degree of which suggests that these securities do not pose a high risk of being other-than-temporarily impaired.

(3) No below investment grade fixed income securities have been in an unrealized loss position for a period of twelve or more consecutive months.

(4) Evaluated based on factors such as discounted cash flows and the financial condition and near-term and long-term prospects of the issue or issuer and were determined to have adequate resources to fulfill contractual obligations.

Investment grade is defined as a security having a rating of Aaa, Aa, A or Baa from Moody’s, a rating of AAA, AA, A or BBB from S&P Global Ratings (“S&P”), a comparable rating from another nationally recognized rating agency, or a comparable internal rating if an externally provided rating is not available. Market prices for certain securities may have credit spreads which imply higher or lower credit quality than the current third-party rating. Unrealized losses on investment grade securities are principally related to an increase in market yields which may include increased risk-free interest rates and/or wider credit spreads since the time of initial purchase. The unrealized losses are expected to reverse as the securities approach maturity.

ABS and MBS in an unrealized loss position were evaluated based on actual and projected collateral losses relative to the securities’ positions in the respective securitization trusts, security specific expectations of cash flows, and credit ratings. This evaluation also takes into consideration credit enhancement, measured in terms of (i) subordination from other classes of securities in the trust that are contractually obligated to absorb losses before the class of security the Company owns, and (ii) the expected impact of other structural features embedded in the securitization trust beneficial to the class of securities the Company owns, such as overcollateralization and excess spread. Municipal bonds in an unrealized loss position were evaluated based on the underlying credit quality of the primary obligor, obligation type and quality of the underlying assets.

As of December 31, 2019, the Company has not made the decision to sell and it is not more likely than not the Company will be required to sell fixed income securities with unrealized losses before recovery of the amortized cost basis.

Limited partnerships

Investments in limited partnership interests include interests in private equity funds, real estate funds and other funds. As of December 31, 2019 and 2018, the carrying value of EMA limited partnerships totaled $2.48 billion and $2.51 billion, respectively, and limited partnerships carried at fair value totaled $773 million and $787 million, respectively. Principal factors influencing carrying value appreciation or decline include operating performance, comparable public company earnings multiples, capitalization rates and the economic environment. For equity method limited partnerships, the Company recognizes an impairment loss when evidence demonstrates that the loss is other than temporary. Evidence of a loss in value that is other than temporary may include the absence of an ability to recover the carrying amount of the investment or the inability of the investee to sustain a level of earnings that would justify the carrying amount of the investment. Changes in fair value limited partnerships are recorded through net investment income and therefore are not tested for impairment.

Mortgage loans

The Company’s mortgage loans are commercial mortgage loans collateralized by a variety of commercial real estate property types located across the United States and totaled, net of valuation allowance, $3.99 billion and $4.00 billion as of December 31, 2019 and 2018, respectively. Substantially all of the commercial mortgage loans are non-recourse to the borrower.

The following table shows the principal geographic distribution of commercial real estate represented in the Company’s mortgage loan portfolio. No other state represented more than 5% of the portfolio as of December 31.

(% of mortgage loan portfolio carrying value)	2019	2018
Texas	16.8%	15.6%
California	14.1	15.2
Illinois	8.0	8.5
Florida	6.7	6.4
New Jersey	6.0	7.2

The types of properties collateralizing the mortgage loans as of December 31 are as follows:

(% of mortgage loan portfolio carrying value)	2019	2018
Apartment complex	35.6%	33.5%
Office buildings	22.4	23.9
Warehouse	16.2	15.9
Retail	14.3	15.0
Other	11.5	11.7
Total	100.0%	100.0%

The contractual maturities of the mortgage loan portfolio as of December 31, 2019 are as follows:

($ in millions)	Number of loans	Carrying value	Percent
2020	9	$ 52	1.3%
2021	35	371	9.3
2022	24	336	8.4
2023	49	684	17.2
Thereafter	147	2,545	63.8
Total	264	$ 3,988	100.0%

Mortgage loans are evaluated for impairment on a specific loan basis through a quarterly credit monitoring process and review of key credit quality indicators. Mortgage loans are considered impaired when it is probable that the Company will not collect the contractual principal and interest. Valuation allowances are established for impaired loans to reduce the carrying value to the fair value of the collateral less costs to sell or the present value of the loan's expected future repayment cash flows discounted at the loan's original effective interest rate. Impaired mortgage loans may not have a valuation allowance when the fair value of the collateral less costs to sell is higher than the carrying value. Valuation allowances are adjusted for subsequent changes in the fair value of the collateral less costs to sell or present value of the loan's expected future repayment cash flows. Mortgage loans are charged off against their corresponding valuation allowances when there is no reasonable expectation of recovery. The impairment evaluation is non-statistical in respect to the aggregate portfolio but considers facts and circumstances attributable to each loan. It is not considered probable that additional impairment losses, beyond those identified on a specific loan basis, have been incurred as of December 31, 2019.

Accrual of income is suspended for mortgage loans that are in default or when full and timely collection of principal and interest payments is not probable. Cash receipts on mortgage loans on nonaccrual status are generally recorded as a reduction of carrying value.

Debt service coverage ratio is considered a key credit quality indicator when mortgage loans are evaluated for impairment. Debt service coverage ratio represents the amount of estimated cash flows from the property available to the borrower to meet principal and interest payment obligations. Debt service coverage ratio estimates are updated annually or more frequently if conditions are warranted based on the Company's credit monitoring process.

The following table reflects the carrying value of non-impaired mortgage loans summarized by debt service coverage ratio distribution as of December 31.

($ in millions)	2019			2018		
Debt service coverage ratio distribution	Fixed rate mortgage loans	Variable rate mortgage loans	Total	Fixed rate mortgage loans	Variable rate mortgage loans	Total
Below 1.0	$ 13	$ 16	$ 29	$ 6	$ 15	$ 21
1.0 - 1.25	161	—	161	221	—	221
1.26 - 1.50	1,057	9	1,066	1,048	—	1,048
Above 1.50	2,696	28	2,724	2,659	42	2,701
Total non-impaired mortgage loans	$ 3,927	$ 53	$ 3,980	$ 3,934	$ 57	$ 3,991

Mortgage loans with a debt service coverage ratio below 1.0 that are not considered impaired primarily relate to instances where the borrower has the financial capacity to fund the revenue shortfalls from the properties for the foreseeable term, the decrease in cash flows from the properties is considered temporary, or there are other risk mitigating circumstances such as additional collateral, escrow balances or borrower guarantees.

The net carrying value of impaired mortgage loans as of December 31 is as follows:

($ in millions)	2019	2018
Impaired mortgage loans with a valuation allowance	$ 8	$ 4
Impaired mortgage loans without a valuation allowance	—	—
Total impaired mortgage loans	$ 8	$ 4
Valuation allowance on impaired mortgage loans	$ 3	$ 3

The average balance of impaired loans was $5 million, $4 million and $7 million during 2019, 2018 and 2017, respectively.

The rollforward of the valuation allowance on impaired mortgage loans for the years ended December 31 is as follows:

($ in millions)	2019	2018	2017
Beginning balance	$ 3	$ 3	$ 3
Net increase in valuation allowance	—	—	1
Charge offs	—	—	(1)
Ending balance	$ 3	$ 3	$ 3

Payments on all mortgage loans were current as of December 31, 2019, 2018 and 2017.

Municipal bonds

The Company maintains a diversified portfolio of municipal bonds which totaled $1.76 billion and $2.20 billion as of December 31, 2019 and 2018, respectively. The municipal bond portfolio includes general obligations of state and local issuers and revenue bonds (including pre-refunded bonds, which are bonds for which an irrevocable trust has been established to fund the remaining payments of principal and interest). The following table shows the principal geographic distribution of municipal bond issuers represented in the Company's portfolio as of December 31. No other state represents more than 5% of the portfolio.

(% of municipal bond portfolio carrying value)	2019	2018
Texas	17.8%	17.6%
California	15.0	15.0
Oregon	12.6	9.8
New York	7.0	5.7
New Jersey	6.7	5.0
Illinois	6.3	4.6

Short-term investments

Short-term investments, including money market funds, commercial paper, U.S. Treasury bills and other short-term investments, are carried at fair value. As of December 31, 2019 and 2018, the fair value of short-term investments totaled $1.19 billion and $810 million, respectively.

Policy loans

Policy loans are carried at unpaid principal balances. As of December 31, 2019 and 2018, the carrying value of policy loans totaled $557 million and $561 million, respectively.

Other investments

Other investments primarily consist of agent loans, bank loans, real estate and derivatives. Agent loans are loans issued to exclusive Allstate agents and are carried at unpaid principal balances, net of valuation allowances and unamortized deferred fees or costs. Bank loans are primarily senior secured corporate loans and are carried at amortized cost. Real estate is carried at cost less accumulated depreciation. Derivatives are carried at fair value. The following table summarizes other investments by asset type.

($ in millions)	December 31, 2019	December 31, 2018
Agent loans	$ 666	$ 620
Bank loans	344	422
Real estate	292	228
Derivatives and other	125	30
Total	$ 1,427	$ 1,300

Concentration of credit risk

As of December 31, 2019, the Company is not exposed to any credit concentration risk of a single issuer and its affiliates greater than 10% of the Company's shareholder's equity, other than the U.S. government and its agencies.

Securities loaned

The Company's business activities include securities lending programs with third parties, mostly large banks. As of December 31, 2019 and 2018, fixed income and equity securities with a carrying value of $506 million and $502 million, respectively, were on loan under these agreements. Interest income on collateral, net of fees, was $1 million in each of 2019, 2018 and 2017.

Other investment information

Included in fixed income securities are below investment grade assets totaling $2.83 billion and $2.57 billion as of December 31, 2019 and 2018, respectively.

As of December 31, 2019, fixed income securities and short-term investments with a carrying value of $21 million were on deposit with regulatory authorities as required by law.

As of December 31, 2019, the carrying value of fixed income securities and other investments that were non-income producing was $15 million.

6. Fair Value of Assets and Liabilities

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The hierarchy for inputs used in determining fair value maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that observable inputs be used when available. Assets and liabilities recorded on the Consolidated Statements of Financial Position at fair value are categorized in the fair value hierarchy based on the observability of inputs to the valuation techniques as follows:

Level 1: Assets and liabilities whose values are based on unadjusted quoted prices for identical assets or liabilities in an active market that the Company can access.

Level 2: Assets and liabilities whose values are based on the following:

(a) Quoted prices for similar assets or liabilities in active markets;
(b) Quoted prices for identical or similar assets or liabilities in markets that are not active; or
(c) Valuation models whose inputs are observable, directly or indirectly, for substantially the full term of the asset or liability.

Level 3: Assets and liabilities whose values are based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. Unobservable inputs reflect the Company's estimates of the assumptions that market participants would use in valuing the assets and liabilities.

The availability of observable inputs varies by instrument. In situations where fair value is based on internally developed pricing models or inputs that are unobservable in the market, the determination of fair value requires more judgment. The degree of judgment exercised by the Company in determining fair value is typically greatest for instruments categorized in Level 3. In many instances, valuation inputs used to measure fair value fall into different levels of the fair value hierarchy. The category level in the fair value hierarchy is determined based on the lowest level input that is significant to the fair value measurement in its entirety. The Company uses prices and inputs that are current as of the measurement date, including during periods of market disruption. In periods of market disruption, the ability to observe prices and inputs may be reduced for many instruments.

The Company is responsible for the determination of fair value and the supporting assumptions and methodologies. The Company gains assurance that assets and liabilities are appropriately valued through the execution of various processes and controls designed to ensure the overall reasonableness and consistent application of valuation methodologies, including inputs and assumptions, and compliance with accounting standards. For fair values received from third parties or internally estimated, the Company's processes and controls are designed to ensure that the valuation methodologies are appropriate and consistently applied, the inputs and assumptions are reasonable and consistent with the objective of determining fair value, and the fair values are accurately recorded. For example, on a continuing basis, the Company assesses the reasonableness of individual fair values that have stale security prices or that exceed certain thresholds as compared to previous fair values received from valuation service providers or brokers or derived from internal models. The Company performs procedures to understand and assess the methodologies, processes and controls of valuation service providers. In addition, the Company may validate the reasonableness of fair values by comparing information obtained from valuation service providers or brokers to other third-party valuation sources for selected securities. The Company performs ongoing price validation procedures such as back-testing of actual sales, which corroborate the various inputs used in internal models to market observable data. When fair value determinations are expected to be more variable, the Company validates them through reviews by members of management who have relevant expertise and who are independent of those charged with executing investment transactions.

The Company has two types of situations where investments are classified as Level 3 in the fair value hierarchy:

(1) Specific inputs significant to the fair value estimation models are not market observable. This primarily occurs in the Company's use of broker quotes to value certain securities where the inputs have not been corroborated to be market observable, and the use of valuation models that use significant non-market observable inputs.

(2) Quotes continue to be received from independent third-party valuation service providers and all significant inputs are market observable; however, there has been a significant decrease in the volume and level of activity for the asset when compared to normal market activity such that the degree of market observability has declined to a point where categorization as a Level 3 measurement is considered appropriate. The indicators considered in determining whether a significant decrease in the volume and level of activity for a specific asset has occurred include the level of new issuances in the primary market, trading volume in the secondary market, the level of credit spreads over historical levels, applicable bid-ask spreads, and price consensus among market participants and other pricing sources.

Certain assets are not carried at fair value on a recurring basis, including investments such as mortgage loans, bank loans, agent loans and policy loans. Accordingly, such investments are only included in the fair value hierarchy disclosure when the investment is subject to remeasurement at fair value after initial recognition and the resulting remeasurement is reflected in the consolidated financial statements.

In determining fair value, the Company principally uses the market approach which generally utilizes market transaction data for the same or similar instruments. To a lesser extent, the Company uses the income approach which involves determining fair values from discounted cash flow methodologies. For the majority of Level 2 and Level 3 valuations, a combination of the market and income approaches is used.

Summary of significant inputs and valuation techniques for Level 2 and Level 3 assets and liabilities measured at fair value on a recurring basis

Level 2 measurements

- Fixed income securities:

  U.S. government and agencies, municipal, corporate - public and foreign government: The primary inputs to the valuation include quoted prices for identical or similar assets in markets that are not active, contractual cash flows, benchmark yields and credit spreads.

  Corporate - privately placed: Privately placed are valued using a discounted cash flow model that is widely accepted in the financial services industry and uses market observable inputs and inputs derived principally from, or corroborated by, observable market data. The primary inputs to the discounted cash flow model include an interest rate yield curve, as well as published credit spreads for similar assets in markets that are not active that incorporate the credit quality and industry sector of the issuer.

  Corporate - privately placed also includes redeemable preferred stock that are valued using quoted prices for identical or similar assets in markets that are not active, contractual cash flows, benchmark yields, underlying stock prices and credit spreads.

  ABS and MBS: The primary inputs to the valuation include quoted prices for identical or similar assets in markets that are not active, contractual cash flows, benchmark yields, collateral performance and credit spreads. Certain ABS are valued based on non-binding broker quotes whose inputs have been corroborated to be market observable. ABS and residential MBS include prepayment speeds as a primary input for valuation.

- Equity securities: The primary inputs to the valuation include quoted prices or quoted net asset values for identical or similar assets in markets that are not active.

- Short-term: The primary inputs to the valuation include quoted prices for identical or similar assets in markets that are not active, contractual cash flows, benchmark yields and credit spreads.

- Other investments: Free-standing exchange listed derivatives that are not actively traded are valued based on quoted prices for identical instruments in markets that are not active.

  Over-the-counter (“OTC”) derivatives, including interest rate swaps, foreign currency swaps, total return swaps, foreign exchange forward contracts, options and certain credit default swaps, are valued using models that rely on inputs such as interest rate yield curves, implied volatilities, index price levels, currency rates, and credit spreads that are observable for substantially the full term of the contract. The valuation techniques underlying the models are widely accepted in the financial services industry and do not involve significant judgment.

Level 3 measurements

- Fixed income securities:

  Municipal: Comprise municipal bonds that are not rated by third party credit rating agencies. The primary inputs to the valuation of these municipal bonds include quoted prices for identical or similar assets in markets that exhibit less liquidity relative to those markets supporting Level 2 fair value measurements, contractual cash flows, benchmark yields and credit spreads. Also included are municipal bonds valued based on non-binding broker quotes where the inputs have not been corroborated to be market observable.

  Corporate - public and privately placed, ABS and MBS: Primarily valued based on non-binding broker quotes where the inputs have not been corroborated to be market observable. Other inputs for corporate fixed income securities include an interest rate yield curve, as well as published credit spreads for similar assets that incorporate the credit quality and industry sector of the issuer.

- Equity securities: The primary inputs to the valuation include quoted prices or quoted net asset values for identical or similar assets in markets that exhibit less liquidity relative to those markets supporting Level 2 fair value measurements.

- Other investments: Certain OTC derivatives, such as interest rate caps and certain credit default swaps, are valued using models that are widely accepted in the financial services industry. These are categorized as Level 3 as a result of the significance of non-market observable inputs such as volatility. Other primary inputs include interest rate yield curves and credit spreads.

- Contractholder funds: Derivatives embedded in certain life and annuity contracts are valued internally using models widely accepted in the financial services industry that determine a single best estimate of fair value for the embedded derivatives within a block of contractholder liabilities. The models primarily use stochastically determined cash flows based on the contractual elements of embedded derivatives, projected option cost and applicable market data, such as interest rate yield curves and equity index volatility assumptions. These are categorized as Level 3 as a result of the significance of non-market observable inputs.

Investments excluded from the fair value hierarchy

Limited partnerships carried at fair value, which do not have readily determinable fair values, use NAV provided by the investees and are excluded from the fair value hierarchy. These investments are generally not redeemable by the investees and generally cannot be sold without approval of the general partner. The Company receives distributions of income and proceeds from the liquidation of the underlying assets of the investees, which usually takes place in years 4-9 of the typical contractual life of 10-12 years. As of December 31, 2019, the Company has commitments to invest $201 million in these limited partnership interests.

The following table summarizes the Company's assets and liabilities measured at fair value as of December 31, 2019.

($ in millions)	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Counterparty and cash collateral netting	Balance as of December 31, 2019
Assets					
Fixed income securities:					
U.S. government and agencies	$ 590	$ 292	$ —		$ 882
Municipal	—	1,715	40		1,755
Corporate - public	—	12,777	25		12,802
Corporate - privately placed	—	5,517	122		5,639
Foreign government	—	149	—		149
ABS	—	301	16		317
MBS	—	176	5		181
Total fixed income securities	590	20,927	208		21,725
Equity securities	1,340	13	116		1,469
Short-term investments	493	698	—		1,191
Other investments: Free-standing derivatives	—	134	—	$ (10)	124
Separate account assets	3,009	—	—		3,009
Total recurring basis assets	$ 5,432	$ 21,772	$ 324	$ (10)	$ 27,518
% of total assets at fair value	19.7%	79.1%	1.2%	— %	100%
Investments reported at NAV					773
Total					$ 28,291
Liabilities					
Contractholder funds: Derivatives embedded in life and annuity contracts	$ —	$ —	$ (427)		$ (427)
Other liabilities: Free-standing derivatives	—	(65)	—	$ 3	(62)
Total recurring basis liabilities	$ —	$ (65)	$ (427)	$ 3	$ (489)
% of total liabilities at fair value	—%	13.3%	87.3%	(0.6)%	100%

The following table summarizes the Company's assets and liabilities measured at fair value as of December 31, 2018.

($ in millions)	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Counterparty and cash collateral netting	Balance as of December 31, 2018
Assets					
Fixed income securities:					
U.S. government and agencies	$ 493	$ 280	$ —		$ 773
Municipal	—	2,156	39		2,195
Corporate - public	—	11,891	33		11,924
Corporate - privately placed	—	5,566	97		5,663
Foreign government	—	179	—		179
ABS	—	407	22		429
MBS	—	237	—		237
Total fixed income securities	493	20,716	191		21,400
Equity securities	1,182	14	129		1,325
Short-term investments	443	367	—		810
Other investments: Free-standing derivatives	—	30	1	$ (8)	23
Separate account assets	2,783	—	—		2,783
Total recurring basis assets	$ 4,901	$ 21,127	$ 321	$ (8)	$ 26,341
% of total assets at fair value	18.6%	80.2%	1.2%	— %	100%
Investments reported at NAV					787
Total					$ 27,128
Liabilities					
Contractholder funds: Derivatives embedded in life and annuity contracts	$ —	$ —	$ (223)		$ (223)
Other liabilities: Free-standing derivatives	—	(7)	—	$ 2	(5)
Total recurring basis liabilities	$ —	$ (7)	$ (223)	$ 2	$ (228)
% of total liabilities at fair value	—%	3.1%	97.8%	(0.9)%	100%

The following table summarizes quantitative information about the significant unobservable inputs used in Level 3 fair value measurements.

($ in millions)	Fair value	Valuation technique	Unobservable input	Range	Weighted average
December 31, 2019					
Derivatives embedded in life and annuity contracts – Equity-indexed and forward starting options	$ (395)	Stochastic cash flow model	Projected option cost	1.0 - 4.2%	2.57%
December 31, 2018					
Derivatives embedded in life and annuity contracts – Equity-indexed and forward starting options	$ (184)	Stochastic cash flow model	Projected option cost	1.0 - 2.2%	1.74%

The embedded derivatives are equity-indexed and forward starting options in certain life and annuity products that provide customers with interest crediting rates based on the performance of the S&P 500. If the projected option cost increased (decreased), it would result in a higher (lower) liability fair value.

As of December 31, 2019 and 2018, Level 3 fair value measurements of fixed income securities total $208 million and $191 million, respectively, and include $38 million and $80 million, respectively, of securities valued based on non-binding broker quotes where the inputs have not been corroborated to be market observable. As the Company does not develop the Level 3 fair value unobservable inputs for these fixed income securities, they are not included in the table above. However, an increase (decrease) in credit spreads for fixed income securities valued based on non-binding broker quotes would result in a lower (higher) fair value.

The following table presents the rollforward of Level 3 assets and liabilities held at fair value during the year ended December 31, 2019.

($ in millions)	Balance as of December 31, 2018	Total gains (losses) included in: Net income	Total gains (losses) included in: OCI	Transfers into Level 3	Transfers out of Level 3	Purchases	Sales	Issues	Settlements	Balance as of December 31, 2019
Assets										
Fixed income securities:										
Municipal	$ 39	$ —	$ 4	$ —	$ —	$ —	$ (1)	$ —	$ (2)	$ 40
Corporate - public	33	—	—	5	(38)	32	(2)	—	(5)	25
Corporate - privately placed	97	(1)	1	43	(1)	4	(13)	—	(8)	122
ABS	22	1	(1)	—	(30)	36	(6)	—	(6)	16
MBS	—	—	(1)	6	—	—	—	—	—	5
Total fixed income securities	191	—	3	54	(69)	72	(22)	—	(21)	208
Equity securities	129	15	—	—	—	10	(38)	—	—	116
Free-standing derivatives, net	1	(1)	—	—	—	—	—	—	—	—
Total recurring Level 3 assets	$ 321	$ 14	$ 3	$ 54	$ (69)	$ 82	$ (60)	$ —	$ (21)	$ 324
Liabilities										
Contractholder funds: Derivatives embedded in life and annuity contracts	$ (223)	$ (52)	$ —	$ (154)	$ —	$ —	$ —	$ (10)	$ 12	$ (427)
Total recurring Level 3 liabilities	$ (223)	$ (52)	$ —	$ (154)	$ —	$ —	$ —	$ (10)	$ 12	$ (427)

The following table presents the total Level 3 gains (losses) included in net income for the year ended December 31, 2019.

($ in millions)	Net investment income	Realized capital gains and losses	Contract benefits	Interest credited to contractholder funds	Total
Components of net income	$ (2)	$ 16	$ 7	$ (59)	$ (38)

The following table presents the rollforward of Level 3 assets and liabilities held at fair value during the year ended December 31, 2018.

($ in millions)	Balance as of December 31, 2017	Total gains (losses) included in:		Transfers into Level 3	Transfers out of Level 3	Purchases	Sales	Issues	Settlements	Balance as of December 31, 2018
		Net income	OCI							
Assets										
Fixed income securities:										
Municipal	$ 57	$ —	$ (2)	$ —	$ (16)	$ 2	$ (2)	$ —	$ —	$ 39
Corporate - public	49	—	(2)	3	(3)	—	(11)	—	(3)	33
Corporate - privately placed	220	(2)	(2)	10	(101)	12	—	—	(40)	97
ABS	50	—	—	12	(18)	20	(19)	—	(23)	22
Total fixed income securities	376	(2)	(6)	25	(138)	34	(32)	—	(66)	191
Equity securities	90	16	—	—	—	30	(7)	—	—	129
Free-standing derivatives, net	1	—	—	—	—	—	—	—	—	1 (1)
Total recurring Level 3 assets	$ 467	$ 14	$ (6)	$ 25	$ (138)	$ 64	$ (39)	$ —	$ (66)	$ 321
Liabilities										
Contractholder funds: Derivatives embedded in life and annuity contracts	$ (284)	$ 57	$ —	$ —	$ —	$ —	$ —	$ (2)	$ 6	$ (223)
Total recurring Level 3 liabilities	$ (284)	$ 57	$ —	$ —	$ —	$ —	$ —	$ (2)	$ 6	$ (223)

(1) Comprises $1 million of assets.

The following table presents the total Level 3 gains (losses) included in net income for the year ended December 31, 2018.

($ in millions)	Net investment income	Realized capital gains and losses	Contract benefits	Interest credited to contractholder funds	Total
Components of net income	$ —	$ 14	$ (5)	$ 62	$ 71

The following table presents the rollforward of Level 3 assets and liabilities held at fair value during the year ended December 31, 2017.

($ in millions)	Balance as of December 31, 2016	Total gains (losses) included in: Net income	Total gains (losses) included in: OCI	Transfers into Level 3	Transfers out of Level 3	Purchases	Sales	Issues	Settlements	Balance as of December 31, 2017
Assets										
Fixed income securities:										
Municipal	$ 59	$ —	$ 2	$ —	$ —	$ —	$ (2)	$ —	$ (2)	$ 57
Corporate - public	47	1	—	3	(15)	17	—	—	(4)	49
Corporate - privately placed	264	7	(2)	11	(16)	20	(30)	—	(34)	220
ABS	69	—	6	4	(36)	34	—	—	(27)	50
Total fixed income securities	439	8	6	18	(67)	71	(32)	—	(67)	376
Equity securities	76	8	3	—	—	13	(10)	—	—	90
Free-standing derivatives, net	(2)	3	—	—	—	—	—	—	—	1 (1)
Other assets	1	(1)	—	—	—	—	—	—	—	—
Total recurring Level 3 assets	$ 514	$ 18	$ 9	$ 18	$ (67)	$ 84	$ (42)	$ —	$ (67)	$ 467
Liabilities										
Contractholder funds: Derivatives embedded in life and annuity contracts	$ (289)	$ 1	$ —	$ —	$ —	$ —	$ —	$ (2)	$ 6	$ (284)
Total recurring Level 3 liabilities	$ (289)	$ 1	$ —	$ —	$ —	$ —	$ —	$ (2)	$ 6	$ (284)

(1) Comprises $1 million of assets.

The following table presents the total Level 3 gains (losses) included in net income for the year ended December 31, 2017.

($ in millions)	Net investment income	Realized capital gains and losses	Contract benefits	Interest credited to contractholder funds	Total
Components of net income	$ 10	$ 9	$ 9	$ (9)	$ 19

Transfers between level categorizations may occur due to changes in the availability of market observable inputs, which generally are caused by changes in market conditions such as liquidity, trading volume or bid-ask spreads. Transfers between level categorizations may also occur due to changes in the valuation source, including situations where a fair value quote is not provided by the Company’s independent third-party valuation service provider resulting in the price becoming stale or replaced with a broker quote whose inputs have not been corroborated to be market observable. This situation will result in the transfer of a security into Level 3. Transfers in and out of level categorizations are reported as having occurred at the beginning of the quarter in which the transfer occurred. Therefore, for all transfers into Level 3, all realized and changes in unrealized gains and losses in the quarter of transfer are reflected in the Level 3 rollforward table.

There were no transfers between Level 1 and Level 2 during 2019, 2018 or 2017.

Transfers into Level 3 during 2019, 2018 and 2017 included situations where a quote was not provided by the Company’s independent third-party valuation service provider and as a result the price was stale or had been replaced with a broker quote where the inputs had not been corroborated to be market observable resulting in the security being classified as Level 3. Transfers into Level 3 during 2019 also included derivatives embedded in equity-indexed universal life contracts due to refinements in the valuation modeling resulting in an increase in significance of non-market observable inputs. Transfers out of Level 3 during 2019, 2018 and 2017 included situations where a broker quote was used in the prior period and a quote became available from the Company’s independent third-party valuation service provider in the current period. A quote utilizing the new pricing source was not available as of the prior period, and any gains or losses related to the change in valuation source for individual securities were not significant.

The table below provides valuation changes included in net income for Level 3 assets and liabilities held as of December 31.

($ in millions)	2019	2018	2017
Assets			
Fixed income securities:			
Municipal	$ 1	$ —	$ —
Corporate	—	—	1
Total fixed income securities	1	—	1
Equity securities	2	16	9
Free-standing derivatives, net	(1)	—	—
Other assets	—	—	(1)
Total recurring Level 3 assets	$ 2	$ 16	$ 9
Liabilities			
Contractholder funds: Derivatives embedded in life and annuity contracts	$ (52)	$ 57	$ 1
Total recurring Level 3 liabilities	$ (52)	$ 57	$ 1
Total included in net income	$ (50)	$ 73	$ 10
Components of net income			
Net investment income	$ (2)	$ —	$ 10
Realized capital gains and losses	4	16	—
Contract benefits	7	(5)	9
Interest credited to contractholder funds	(59)	62	(9)
Total included in net income	$ (50)	$ 73	$ 10

Presented below are the carrying values and fair value estimates of financial instruments not carried at fair value.

($ in millions)		December 31, 2019		December 31, 2018	
Financial assets	**Fair value level**	**Carrying value**	**Fair value**	**Carrying value**	**Fair value**
Mortgage loans	Level 3	$ 3,988	$ 4,159	$ 3,995	$ 4,028
Bank loans	Level 3	344	337	422	408
Agent loans	Level 3	666	664	620	617
Financial liabilities					
Contractholder funds on investment contracts	Level 3	$ 8,403	$ 9,123	$ 9,213	$ 9,629
Liability for collateral	Level 2	530	530	525	525
Notes due to related parties	Level 3	214	215	140	138

7. Derivative Financial Instruments and Off-balance sheet Financial Instruments

The Company uses derivatives for risk reduction and to increase investment portfolio returns through asset replication. Risk reduction activity is focused on managing the risks with certain assets and liabilities arising from the potential adverse impacts from changes in risk-free interest rates, changes in equity market valuations, increases in credit spreads and foreign currency fluctuations. Asset replication refers to the “synthetic” creation of assets through the use of derivatives. The Company replicates fixed income securities using a combination of a credit default swap, index total return swap, or a foreign currency forward contract and one or more highly rated fixed income securities, primarily investment grade host bonds, to synthetically replicate the economic characteristics of one or more cash market securities. The Company replicates equity securities using futures, index total return swaps and options to increase equity exposure.

The Company utilizes several derivative strategies to manage risk. Asset-liability management is a risk management strategy that is principally employed to balance the respective interest-rate sensitivities of the Company’s assets and liabilities. Depending upon the attributes of the assets acquired and liabilities issued, derivative instruments such as interest rate swaps, caps, swaptions and futures are utilized to change the interest rate characteristics of existing assets and liabilities to ensure the relationship is maintained within specified ranges and to reduce exposure to rising or falling interest rates. Fixed income index total return swaps are used to offset valuation losses in the portfolio during periods of declining market values. Credit default swaps are typically used to mitigate the credit risk within the Company’s fixed income portfolio. Futures and options are used for hedging the equity exposure contained in the Company’s equity indexed life and annuity product contracts that offer equity returns to contractholders. In addition, the Company uses equity index total return swaps, options and futures to offset valuation losses in the equity portfolio

during periods of declining equity market values. Foreign currency swaps and forwards are primarily used to reduce the foreign currency risk associated with holding foreign currency denominated investments.

The Company also has derivatives embedded in non-derivative host contracts that are required to be separated from the host contracts and accounted for at fair value with changes in fair value of embedded derivatives reported in net income. The Company's primary embedded derivatives are equity options in life and annuity product contracts, which provide returns linked to equity indices to contractholders.

When derivatives meet specific criteria, they may be designated as accounting hedges and accounted for as fair value, cash flow, foreign currency fair value or foreign currency cash flow hedges. The Company designates certain investment risk transfer reinsurance agreements as fair value hedges when the hedging instrument is highly effective in offsetting the risk of changes in the fair value of the hedged item. The fair value of the hedged liability is reported in contractholder funds in the Consolidated Statements of Financial Position. The impact from results of the fair value hedge is reported in interest credited to contractholder funds in the Consolidated Statements of Operations and Comprehensive Income. The Company designates certain of its foreign currency swap contracts as cash flow hedges when the hedging instrument is highly effective in offsetting the exposure of variations in cash flows for the hedged risk that could affect net income. Amounts are reclassified to net investment income or realized capital gains and losses as the hedged item affects net income.

The notional amounts specified in the contracts are used to calculate the exchange of contractual payments under the agreements and are generally not representative of the potential for gain or loss on these agreements. However, the notional amounts specified in credit default swaps where the Company has sold credit protection represent the maximum amount of potential loss, assuming no recoveries.

Fair value, which is equal to the carrying value, is the estimated amount that the Company would receive or pay to terminate the derivative contracts at the reporting date. The carrying value amounts for OTC derivatives are further adjusted for the effects, if any, of enforceable master netting agreements and are presented on a net basis, by counterparty agreement, in the Consolidated Statements of Financial Position.

For those derivatives which qualify and have been designated as fair value accounting hedges, net income includes the changes in the fair value of both the derivative instrument and the hedged risk. For cash flow hedges, gains and losses are amortized from AOCI and are reported in net income in the same period the forecasted transactions being hedged impact net income.

Non-hedge accounting is generally used for "portfolio" level hedging strategies where the terms of the individual hedged items do not meet the strict homogeneity requirements to permit the application of hedge accounting. For non-hedge derivatives, net income includes changes in fair value and accrued periodic settlements, when applicable. With the exception of non-hedge derivatives used for asset replication and non-hedge embedded derivatives, all of the Company's derivatives are evaluated for their ongoing effectiveness as either accounting hedge or non-hedge derivative financial instruments on at least a quarterly basis.

Fair value hedges The Company had one derivative designated as a fair value hedge and had no foreign currency contracts designated as fair value hedges during 2019, 2018 and 2017.

Cash flow hedges The Company had no derivatives designated as cash flow hedges during 2019 and one foreign currency contract designated as a cash flow hedge during 2018 and 2017.

The following table provides a summary of the volume and fair value positions of derivative instruments as well as their reporting location in the Consolidated Statement of Financial Position as of December 31, 2019.

($ in millions, except number of contracts)		Volume [1]				
	Balance sheet location	Notional amount	Number of contracts	Fair value, net	Gross asset	Gross liability
Asset derivatives						
Derivatives designated as fair value accounting hedging instruments						
Other	Other assets	$ 2	n/a	$ —	$ —	$ —
Derivatives not designated as accounting hedging instruments						
Interest rate contracts						
Futures	Other assets	—	476	—	—	—
Equity and index contracts						
Options	Other investments	—	2,981	124	124	—
Futures	Other assets	—	27	—	—	—
Total return index contracts						
Total return swap agreements - fixed income	Other investments	7	n/a	—	—	—
Credit default contracts						
Credit default swaps - buying protection	Other investments	1	n/a	—	—	—
Subtotal		8	3,484	124	124	—
Total asset derivatives		$ 10	3,484	$ 124	$ 124	$ —
Liability derivatives						
Derivatives not designated as accounting hedging instruments						
Interest rate contracts						
Interest rate cap agreements	Other liabilities & accrued expenses	$ 34	n/a	$ —	$ —	$ —
Futures	Other liabilities & accrued expenses	—	263	—	—	—
Equity and index contracts						
Options	Other liabilities & accrued expenses	—	2,844	(60)	—	(60)
Futures	Other liabilities & accrued expenses	—	1	—	—	—
Total return index contracts						
Total return swap agreements - fixed income	Other liabilities & accrued expenses	10	n/a	—	—	—
Total return swap agreements - equity	Other liabilities & accrued expenses	14	n/a	1	1	—
Foreign currency contracts						
Foreign currency forwards	Other liabilities & accrued expenses	242	n/a	6	9	(3)
Embedded derivative financial instruments						
Guaranteed accumulation benefits	Contractholder funds	161	n/a	(18)	—	(18)
Guaranteed withdrawal benefits	Contractholder funds	205	n/a	(14)	—	(14)
Equity-indexed and forward starting options in life and annuity product contracts	Contractholder funds	1,678	n/a	(395)	—	(395)
Credit default contracts						
Credit default swaps - buying protection	Other liabilities & accrued expenses	26	n/a	(2)	—	(2)
Credit default swaps - selling protection	Other liabilities & accrued expenses	5	n/a	—	—	—
Total liability derivatives		2,375	3,108	(482)	$ 10	$ (492)
Total derivatives		$ 2,385	6,592	$ (358)		

[1] Volume for OTC and cleared derivative contracts is represented by their notional amounts. Volume for exchange traded derivatives is represented by the number of contracts, which is the basis on which they are traded. (n/a = not applicable)

The following table provides a summary of the volume and fair value positions of derivative instruments as well as their reporting location in the Consolidated Statement of Financial Position as of December 31, 2018.

($ in millions, except number of contracts)		**Volume**				
	Balance sheet location	**Notional amount**	**Number of contracts**	**Fair value, net**	**Gross asset**	**Gross liability**
Asset derivatives						
Derivatives not designated as accounting hedging instruments						
Interest rate contracts						
Interest rate cap agreements	Other investments	$ 6	n/a	$ —	$ —	$ —
Futures	Other assets	—	330	—	—	—
Equity and index contracts						
Options	Other investments	—	3,440	21	21	—
Futures	Other assets	—	26	—	—	—
Total return index contracts						
Total return swap agreements - fixed income	Other investments	7	n/a	—	—	—
Total return swap agreements - equity index	Other investments	10	n/a	(1)	—	(1)
Foreign currency contracts						
Foreign currency forwards	Other investments	240	n/a	8	8	—
Credit default contracts						
Credit default swaps - buying protection	Other investments	27	n/a	—	1	(1)
Other contracts						
Other	Other assets	2	n/a	—	—	—
Total asset derivatives		$ 292	3,796	$ 28	$ 30	$ (2)
Liability derivatives						
Derivatives not designated as accounting hedging instruments						
Interest rate contracts						
Interest rate cap agreements	Other liabilities & accrued expenses	$ 31	n/a	$ 1	$ 1	$ —
Equity and index contracts						
Options and futures	Other liabilities & accrued expenses	—	3,266	(5)	—	(5)
Embedded derivative financial instruments						
Guaranteed accumulation benefits	Contractholder funds	169	n/a	(25)	—	(25)
Guaranteed withdrawal benefits	Contractholder funds	210	n/a	(14)	—	(14)
Equity-indexed and forward starting options in life and annuity product contracts	Contractholder funds	1,696	n/a	(184)	—	(184)
Credit default contracts						
Credit default swaps – selling protection	Other liabilities & accrued expenses	1	n/a	—	—	—
Total liability derivatives		2,107	3,266	(227)	$ 1	$ (228)
Total derivatives		$ 2,399	7,062	$ (199)		

The following table provides gross and net amounts for the Company's OTC derivatives, all of which are subject to enforceable master netting agreements.

($ in millions)		Offsets				
	Gross amount	Counter-party netting	Cash collateral (received) pledged	Net amount on balance sheet	Securities collateral (received) pledged	Net amount
December 31, 2019						
Asset derivatives	$ 10	$ (10)	$ —	$ —	$ —	$ —
Liability derivatives	(5)	10	(7)	(2)	—	(2)
December 31, 2018						
Asset derivatives	$ 10	$ (3)	$ (5)	$ 2	$ —	$ 2
Liability derivatives	(2)	3	(1)	—	—	—

The following table provides a summary of the impacts of the Company's foreign currency contracts in cash flow hedging relationships for the years ended December 31.

($ in millions)	2019	2018	2017
Gain (loss) recognized in OCI on derivatives during the period	$ —	$ 1	$ (2)
Gain recognized in OCI on derivatives during the term of the hedging relationship	—	—	2
Gain reclassified from AOCI into income (net investment income)	—	—	1
Gain reclassified from AOCI into income (realized capital gains and losses)	—	3	—

The following tables present gains and losses from valuation and settlements reported on derivatives not designated as accounting hedging instruments in the Consolidated Statements of Operations and Comprehensive Income.

($ in millions)	Realized capital gains and losses	Contract benefits	Interest credited to contractholder funds	Total gain (loss) recognized in net income on derivatives
2019				
Equity and index contracts	$ 5	$ —	$ 58	$ 63
Embedded derivative financial instruments	—	7	(57)	(50)
Foreign currency contracts	3	—	—	3
Credit default contracts	(1)	—	—	(1)
Total return swaps - fixed income	1	—	—	1
Total return swaps - equity index	3	—	—	3
Total	$ 11	$ 7	$ 1	$ 19
2018				
Interest rate contracts	$ 1	$ —	$ —	$ 1
Equity and index contracts	(4)	—	(23)	(27)
Embedded derivative financial instruments	—	(5)	66	61
Foreign currency contracts	12	—	—	12
Total return swaps - fixed income	(1)	—	—	(1)
Total return swaps - equity index	(1)	—	—	(1)
Total	$ 7	$ (5)	$ 43	$ 45
2017				
Equity and index contracts	$ (4)	$ —	$ 45	$ 41
Embedded derivative financial instruments	—	9	(5)	4
Foreign currency contracts	(14)	—	—	(14)
Credit default contracts	2	—	—	2
Total	$ (16)	$ 9	$ 40	$ 33

The Company manages its exposure to credit risk by utilizing highly rated counterparties, establishing risk control limits, executing legally enforceable master netting agreements ("MNAs") and obtaining collateral where appropriate. The Company uses MNAs for OTC derivative transactions that permit either party to net payments due for transactions and collateral is either pledged or obtained when certain predetermined exposure limits are exceeded. As of December 31, 2019, counterparties pledged $8 million in collateral to the Company, and the Company pledged $1 million in cash and securities to counterparties under MNAs

for contracts containing credit-risk contingent provisions that are in a liability position. The Company has not incurred any losses on derivative financial instruments due to counterparty nonperformance. Other derivatives, including futures and certain option contracts, are traded on organized exchanges which require margin deposits and guarantee the execution of trades, thereby mitigating any potential credit risk.

Counterparty credit exposure represents the Company's potential loss if all of the counterparties concurrently fail to perform under the contractual terms of the contracts and all collateral, if any, becomes worthless. This exposure is measured by the fair value of OTC derivative contracts with a positive fair value at the reporting date reduced by the effect, if any, of legally enforceable master netting agreements.

For certain exchange traded and cleared derivatives, margin deposits are required as well as daily cash settlements of margin accounts. As of December 31, 2019, the Company pledged $6 million in the form of margin deposits.

The following table summarizes the counterparty credit exposure as of December 31 by counterparty credit rating as it relates to the Company's OTC derivatives.

($ in millions)	2019				2018			
Rating [1]	Number of counter-parties	Notional amount [2]	Credit exposure [2]	Exposure, net of collateral [2]	Number of counter-parties	Notional amount [2]	Credit exposure [2]	Exposure, net of collateral [2]
A+	5	$ 296	$ 7	$ —	3	$ 283	$ 9	$ 1
A	—	—	—	—	1	23	—	—
Total	5	$ 296	$ 7	$ —	4	$ 306	$ 9	$ 1

[1] Allstate uses the lower of S&P's or Moody's long-term debt issuer ratings.

[2] Only OTC derivatives with a net positive fair value are included for each counterparty.

Market risk is the risk that the Company will incur losses due to adverse changes in market rates and prices. Market risk exists for all of the derivative financial instruments the Company currently holds, as these instruments may become less valuable due to adverse changes in market conditions. To limit this risk, the Company's senior management has established risk control limits. In addition, changes in fair value of the derivative financial instruments that the Company uses for risk management purposes are generally offset by the change in the fair value or cash flows of the hedged risk component of the related assets, liabilities or forecasted transactions.

Certain of the Company's derivative instruments contain credit-risk-contingent termination events, cross-default provisions and credit support annex agreements. Credit-risk-contingent termination events allow the counterparties to terminate the derivative agreement or a specific trade on certain dates if AIC's, ALIC's or Allstate Life Insurance Company of New York's ("ALNY") financial strength credit ratings by Moody's or S&P fall below a certain level. Credit-risk-contingent cross-default provisions allow the counterparties to terminate the derivative agreement if the Company defaults by pre-determined threshold amounts on certain debt instruments. Credit-risk-contingent credit support annex agreements specify the amount of collateral the Company must post to counterparties based on AIC's, ALIC's or ALNY's financial strength credit ratings by Moody's or S&P, or in the event AIC, ALIC or ALNY are no longer rated by either Moody's or S&P.

The following summarizes the fair value of derivative instruments with termination, cross-default or collateral credit-risk-contingent features that are in a liability position as of December 31, as well as the fair value of assets and collateral that are netted against the liability in accordance with provisions within legally enforceable MNAs.

($ in millions)	2019	2018
Gross liability fair value of contracts containing credit-risk-contingent features	$ 4	$ 2
Gross asset fair value of contracts containing credit-risk-contingent features and subject to MNAs	(3)	(2)
Collateral posted under MNAs for contracts containing credit-risk-contingent features	(1)	—
Maximum amount of additional exposure for contracts with credit-risk-contingent features if all features were triggered concurrently	$ —	$ —

Credit derivatives - selling protection

A credit default swap ("CDS") is a derivative instrument, representing an agreement between two parties to exchange the credit risk of a specified entity (or a group of entities), or an index based on the credit risk of a group of entities (all commonly referred to as the "reference entity" or a portfolio of "reference entities"), in return for a periodic premium. In selling protection, CDS are used to replicate fixed income securities and to complement the cash market when credit exposure to certain issuers is not available or when the derivative alternative is less expensive than the cash market alternative. CDS typically have a five-year term.

The following table shows the CDS notional amounts by credit rating and fair value of protection sold.

($ in millions)	Notional amount					
	AA	A	BBB	BB and lower	Total	Fair value
December 31, 2019						
Single name						
Corporate debt	$ —	$ —	$ —	$ 5	$ 5	$ —
Total	$ —	$ —	$ —	$ 5	$ 5	$ —
December 31, 2018						
Single name						
Corporate debt	$ —	$ —	$ —	$ 1	$ 1	$ —
Total	$ —	$ —	$ —	$ 1	$ 1	$ —

In selling protection with CDS, the Company sells credit protection on an identified single name, a basket of names in a first-to-default ("FTD") structure or credit derivative index ("CDX") that is generally investment grade, and in return receives periodic premiums through expiration or termination of the agreement. With single name CDS, this premium or credit spread generally corresponds to the difference between the yield on the reference entity's public fixed maturity cash instruments and swap rates at the time the agreement is executed. With an FTD basket, because of the additional credit risk inherent in a basket of named reference entities, the premium generally corresponds to a high proportion of the sum of the credit spreads of the names in the basket and the correlation between the names. CDX is utilized to take a position on multiple (generally 125) reference entities. Credit events are typically defined as bankruptcy, failure to pay, or restructuring, depending on the nature of the reference entities. If a credit event occurs, the Company settles with the counterparty, either through physical settlement or cash settlement. In a physical settlement, a reference asset is delivered by the buyer of protection to the Company, in exchange for cash payment at par, whereas in a cash settlement, the Company pays the difference between par and the prescribed value of the reference asset. When a credit event occurs in a single name or FTD basket (for FTD, the first credit event occurring for any one name in the basket), the contract terminates at the time of settlement. For CDX, the reference entity's name incurring the credit event is removed from the index while the contract continues until expiration. The maximum payout on a CDS is the contract notional amount. A physical settlement may afford the Company with recovery rights as the new owner of the asset.

The Company monitors risk associated with credit derivatives through individual name credit limits at both a credit derivative and a combined cash instrument/credit derivative level. The ratings of individual names for which protection has been sold are also monitored.

Off-balance sheet financial instruments

The contractual amounts of off-balance sheet financial instruments as of December 31 are as follows:

($ in millions)	2019	2018
Commitments to invest in limited partnership interests	$ 1,063	$ 1,195
Private placement commitments	16	7
Other loan commitments	118	176

In the preceding table, the contractual amounts represent the amount at risk if the contract is fully drawn upon, the counterparty defaults and the value of any underlying security becomes worthless. Unless noted otherwise, the Company does not require collateral or other security to support off-balance sheet financial instruments with credit risk.

Commitments to invest in limited partnership interests represent agreements to acquire new or additional participation in certain limited partnership investments. The Company enters into these agreements in the normal course of business. Because the investments in limited partnerships are not actively traded, it is not practical to estimate the fair value of these commitments.

Private placement commitments represent commitments to purchase private placement debt and private equity securities at a future date. The Company enters into these agreements in the normal course of business. The fair value of the debt commitments generally cannot be estimated on the date the commitment is made as the terms and conditions of the underlying private placement securities are not yet final. Because the private equity securities are not actively traded, it is not practical to estimate fair value of the commitments.

Other loan commitments are agreements to lend to a borrower provided there is no violation of any condition established in the contract. The Company enters into these agreements to commit to future loan fundings at predetermined interest rates. Commitments have either fixed or varying expiration dates or other termination clauses. The fair value of these commitments is insignificant.

8. Reserve for Life-Contingent Contract Benefits and Contractholder Funds

As of December 31, the reserve for life-contingent contract benefits consists of the following:

($ in millions)	2019	2018
Immediate fixed annuities:		
Structured settlement annuities	$ 6,840	$ 6,701
Other immediate fixed annuities	1,607	1,709
Traditional life insurance	2,552	2,517
Accident and health insurance	195	203
Other	78	109
Total reserve for life-contingent contract benefits	$ 11,272	$ 11,239

The following table highlights the key assumptions generally used in calculating the reserve for life-contingent contract benefits.

Product	Mortality	Interest rate	Estimation method
Structured settlement annuities	U.S. population with projected calendar year improvements; mortality rates adjusted for each impaired life based on reduction in life expectancy	Interest rate assumptions range from 3.8% to 7.5%	Present value of contractually specified future benefits
Other immediate fixed annuities	1983 group annuity mortality table with internal modifications; 1983 individual annuity mortality table; Annuity 2000 mortality table with internal modifications; Annuity 2000 mortality table; 1983 individual annuity mortality table with internal modifications	Interest rate assumptions range from 0.3% to 9.0%	Present value of expected future benefits based on historical experience
Traditional life insurance	Actual company experience plus loading	Interest rate assumptions range from 2.5% to 11.3%	Net level premium reserve method using the Company's withdrawal experience rates; includes reserves for unpaid claims
Accident and health insurance	Actual company experience plus loading	Interest rate assumptions range from 3.0% to 7.0%	Unearned premium; additional contract reserves for mortality risk and unpaid claims
Other: Variable annuity guaranteed minimum death benefits [1]	Annuity 2012 mortality table with internal modifications	Interest rate assumptions range from 2.0% to 5.8%	Projected benefit ratio applied to cumulative assessments

[1] In 2006, the Company disposed of substantially all of its variable annuity business through reinsurance agreements with The Prudential Insurance Company of America, a subsidiary of Prudential Financial, Inc. (collectively "Prudential").

To the extent that unrealized gains on fixed income securities would result in a premium deficiency had those gains actually been realized, an insurance reserves adjustment is recorded for certain immediate annuities with life contingencies. This liability is included in the reserve for life-contingent contract benefits with respect to this unrealized deficiency. The offset to this liability is recorded as a reduction of the unrealized net capital gains included in AOCI. This liability was $126 million and zero as of December 31, 2019 and 2018, respectively.

As of December 31, contractholder funds consist of the following:

($ in millions)	2019	2018
Interest-sensitive life insurance	$ 7,442	$ 7,369
Investment contracts:		
Fixed annuities	8,811	9,645
Other investment contracts	458	456
Total contractholder funds	$ 16,711	$ 17,470

The following table highlights the key contract provisions relating to contractholder funds.

Product	Interest rate	Withdrawal/surrender charges
Interest-sensitive life insurance	Interest rates credited range from 0.0% to 10.0% for equity-indexed life (whose returns are indexed to the S&P 500) and 1.0% to 6.0% for all other products	Either a percentage of account balance or dollar amount grading off generally over 20 years
Fixed annuities	Interest rates credited range from 0.5% to 7.5% for immediate annuities; (8.0)% to 10.0% for equity-indexed annuities (whose returns are indexed to the S&P 500); and 0.1% to 6.0% for all other products	Either a declining or a level percentage charge generally over ten years or less. Additionally, approximately 12.0% of fixed annuities are subject to market value adjustment for discretionary withdrawals
Other investment contracts: Guaranteed minimum income, accumulation and withdrawal benefits on variable [(1)] and fixed annuities and secondary guarantees on interest-sensitive life insurance and fixed annuities	Interest rates used in establishing reserves range from 1.7% to 10.3%	Withdrawal and surrender charges are based on the terms of the related interest-sensitive life insurance or fixed annuity contract

(1) In 2006, the Company disposed of substantially all of its variable annuity business through reinsurance agreements with Prudential.

Contractholder funds activity for the years ended December 31 is as follows:

($ in millions)	2019	2018	2017
Balance, beginning of year	$ 17,470	$ 18,592	$ 19,470
Deposits	834	863	909
Interest credited	581	597	635
Benefits	(769)	(810)	(871)
Surrenders and partial withdrawals	(844)	(1,095)	(960)
Contract charges	(637)	(645)	(655)
Net transfers from separate accounts	11	7	4
Other adjustments	65	(39)	60
Balance, end of year	$ 16,711	$ 17,470	$ 18,592

The Company offered various guarantees to variable annuity contractholders. In 2006, the Company disposed of substantially all of its variable annuity business through reinsurance agreements with Prudential. Liabilities for variable contract guarantees related to death benefits are included in the reserve for life-contingent contract benefits and the liabilities related to the income, withdrawal and accumulation benefits are included in contractholder funds. All liabilities for variable contract guarantees are reported on a gross basis on the balance sheet with a corresponding reinsurance recoverable asset for those contracts subject to reinsurance.

Absent any contract provision wherein the Company guarantees either a minimum return or account value upon death, a specified contract anniversary date, partial withdrawal or annuitization, variable annuity and variable life insurance contractholders bear the investment risk that the separate accounts' funds may not meet their stated investment objectives. The account balances of variable annuity contracts' separate accounts with guarantees included $2.66 billion and $2.45 billion of equity, fixed income and balanced mutual funds and $252 million and $245 million of money market mutual funds as of December 31, 2019 and 2018, respectively.

The table below presents information regarding the Company’s variable annuity contracts with guarantees. The Company’s variable annuity contracts may offer more than one type of guarantee in each contract; therefore, the sum of amounts listed exceeds the total account balances of variable annuity contracts’ separate accounts with guarantees.

($ in millions)	As of December 31,	
	2019	2018
In the event of death		
Separate account value	$ 2,908	$ 2,694
Net amount at risk [1]	$ 373	$ 605
Average attained age of contractholders	71 years	71 years
At annuitization (includes income benefit guarantees)		
Separate account value	$ 848	$ 778
Net amount at risk [2]	$ 173	$ 264
Weighted average waiting period until annuitization options available	None	None
For cumulative periodic withdrawals		
Separate account value	$ 190	$ 190
Net amount at risk [3]	$ 13	$ 16
Accumulation at specified dates		
Separate account value	$ 123	$ 129
Net amount at risk [4]	$ 15	$ 26
Weighted average waiting period until guarantee date	4 years	4 years

[1] Defined as the estimated current guaranteed minimum death benefit in excess of the current account balance as of the balance sheet date.

[2] Defined as the estimated present value of the guaranteed minimum annuity payments in excess of the current account balance.

[3] Defined as the estimated current guaranteed minimum withdrawal balance (initial deposit) in excess of the current account balance as of the balance sheet date.

[4] Defined as the estimated present value of the guaranteed minimum accumulation balance in excess of the current account balance.

The liability for death and income benefit guarantees is equal to a benefit ratio multiplied by the cumulative contract charges earned, plus accrued interest less contract excess guarantee benefit payments. The benefit ratio is calculated as the estimated present value of all expected contract excess guarantee benefits divided by the present value of all expected contract charges. The establishment of reserves for these guarantees requires the projection of future fund values, mortality, persistency and customer benefit utilization rates. These assumptions are periodically reviewed and updated. For guarantees related to death benefits, benefits represent the projected excess guaranteed minimum death benefit payments. For guarantees related to income benefits, benefits represent the present value of the minimum guaranteed annuitization benefits in excess of the projected account balance at the time of annuitization.

Projected benefits and contract charges used in determining the liability for certain guarantees are developed using models and stochastic scenarios that are also used in the development of estimated expected gross profits. Underlying assumptions for the liability related to income benefits include assumed future annuitization elections based on factors such as the extent of benefit to the potential annuitant, eligibility conditions and the annuitant’s attained age. The liability for guarantees is re-evaluated periodically, and adjustments are made to the liability balance through a charge or credit to contract benefits.

Guarantees related to the majority of withdrawal and accumulation benefits are considered to be derivative financial instruments; therefore, the liability for these benefits is established based on its fair value.

The following table summarizes the liabilities for guarantees.

($ in millions)	Liability for guarantees related to death benefits and interest-sensitive life products	Liability for guarantees related to income benefits	Liability for guarantees related to accumulation and withdrawal benefits	Total
Balance, December 31, 2018 [1]	$ 307	$ 38	$ 98	$ 443
Less reinsurance recoverables	111	35	39	185
Net balance as of December 31, 2018	196	3	59	258
Incurred guarantee benefits	18	—	12	30
Paid guarantee benefits	(3)	—	—	(3)
Net change	15	—	12	27
Net balance as of December 31, 2019	211	3	71	285
Plus reinsurance recoverables	81	20	32	133
Balance, December 31, 2019 [2]	$ 292	$ 23	$ 103	$ 418
Balance, December 31, 2017 [3]	$ 261	$ 28	$ 80	$ 369
Less reinsurance recoverables	87	25	34	146
Net balance as of December 31, 2017	174	3	46	223
Incurred guarantee benefits	24	—	13	37
Paid guarantee benefits	(2)	—	—	(2)
Net change	22	—	13	35
Net balance as of December 31, 2018	196	3	59	258
Plus reinsurance recoverables	111	35	39	185
Balance, December 31, 2018 [1]	$ 307	$ 38	$ 98	$ 443

[1] Included in the total liability balance as of December 31, 2018 are reserves for variable annuity death benefits of $109 million, variable annuity income benefits of $36 million, variable annuity accumulation benefits of $25 million, variable annuity withdrawal benefits of $14 million and other guarantees of $259 million.

[2] Included in the total liability balance as of December 31, 2019 are reserves for variable annuity death benefits of $78 million, variable annuity income benefits of $21 million, variable annuity accumulation benefits of $18 million, variable annuity withdrawal benefits of $14 million and other guarantees of $287 million.

[3] Included in the total liability balance as of December 31, 2017 are reserves for variable annuity death benefits of $85 million, variable annuity income benefits of $26 million, variable annuity accumulation benefits of $22 million, variable annuity withdrawal benefits of $12 million and other guarantees of $224 million.

9. Reinsurance

The Company reinsures certain of its risks to other insurers primarily under yearly renewable term, coinsurance and modified coinsurance agreements. These agreements result in a passing of the agreed-upon percentage of risk to the reinsurer in exchange for negotiated reinsurance premium payments. Modified coinsurance is similar to coinsurance, except that the cash and investments that support the liability for contract benefits are not transferred to the assuming company and settlements are made on a net basis between the companies.

For certain term life insurance policies issued prior to October 2009, the Company ceded up to 90% of the mortality risk depending on the year of policy issuance under coinsurance agreements to a pool of fourteen unaffiliated reinsurers. Effective October 2009, mortality risk on term business is ceded under yearly renewable term agreements under which the Company cedes mortality in excess of its retention, which is consistent with how the Company generally reinsures its permanent life insurance business. The following table summarizes those retention limits by period of policy issuance.

Period	Retention limits
April 2015 through current	Single life: $2 million per life Joint life: no longer offered
April 2011 through March 2015	Single life: $5 million per life, $3 million age 70 and over, and $10 million for contracts that meet specific criteria Joint life: $8 million per life, and $10 million for contracts that meet specific criteria
July 2007 through March 2011	$5 million per life, $3 million age 70 and over, and $10 million for contracts that meet specific criteria
September 1998 through June 2007	$2 million per life, in 2006 the limit was increased to $5 million for instances when specific criteria were met
August 1998 and prior	Up to $1 million per life

In addition, the Company has used reinsurance to effect the disposition of certain blocks of business. The Company had reinsurance recoverables of $1.29 billion and $1.36 billion as of December 31, 2019 and 2018, respectively, due from Prudential related to the disposal of substantially all of its variable annuity business that was effected through reinsurance agreements.

The amounts ceded to Prudential for the years ended December 31 are as follows:

($ in millions)	2019	2018	2017
Premiums and contract charges	$ 65	$ 72	$ 76
Contract benefits	4	87	7
Interest credited to contractholder funds	19	20	20
Operating costs and expenses	12	14	15

As of December 31, 2019 and 2018, the Company had reinsurance recoverables of $112 million and $118 million, respectively, due from subsidiaries of Citigroup (Triton Insurance and American Health and Life Insurance) and Scottish Re (U.S.), Inc. in connection with the disposition of substantially all of the direct response distribution business in 2003.

As of December 31, 2019, the Company had $70 million of reinsurance recoverables, net of an allowance for estimated uncollectible amounts, related to Scottish Re (U.S.), Inc. On December 14, 2018, the Delaware Insurance Commissioner placed Scottish Re (U.S.), Inc. under regulatory supervision. On March 6, 2019, the Chancery Court of the State of Delaware entered a Rehabilitation and Injunction Order (the "Rehabilitation Order") in response to a petition filed by the Insurance Commissioner (the "Petition"). Pursuant to the Petition, it is expected that Scottish Re (U.S.), Inc. will submit a Plan of Rehabilitation. The Company joined in a joint motion filed on behalf of several affected parties asking the court to allow a specified amount of offsetting claim payments and losses against premiums remitted to Scottish Re (U.S.), Inc. The Company also filed a separate motion related to the reimbursement of claim payments where Scottish Re (U.S.), Inc. is also acting as administrator. The Court has not yet ruled on either of these motions. In the interim, the Company and several other affected parties have been permitted to exercise certain setoff rights while the parties address any potential disputes. The Company continues to monitor Scottish Re (U.S.), Inc. for future developments and will reevaluate its allowance for uncollectible amounts as new information becomes available.

The Company is the assuming reinsurer for Lincoln Benefit Life Company's ("LBL's") life insurance business sold through the Allstate agency channel and LBL's payout annuity business in force prior to the sale of LBL on April 1, 2014. Under the terms of the reinsurance agreement, the Company is required to have a trust with assets greater than or equal to the statutory reserves ceded by LBL to the Company, measured on a monthly basis. As of December 31, 2019, the trust held $6.25 billion of investments, which are reported in the Consolidated Statement of Financial Position.

ALIC and its subsidiary ALNY are parties to a reinsurance treaty through which ALNY cedes reinvestment related risk on its structured settlement annuities to ALIC. The reinsurance treaty is eliminated in consolidation. In 2019, ALIC established a trust for the benefit of ALNY and will maintain it with assets equal to or greater than ALNY's statutory-basis cession. As of December 31, 2019, the trust held $1.45 billion of investments, which are reported in the Consolidated Statement of Financial Position.

As of December 31, 2019, the gross life insurance in force was $391.53 billion of which $4.40 billion and $70.76 billion were ceded to affiliated and unaffiliated reinsurers, respectively.

The effects of reinsurance on premiums and contract charges for the years ended December 31 are as follows:

($ in millions)	2019	2018	2017
Direct	$ 748	$ 743	$ 734
Assumed			
Affiliate	231	241	227
Non-affiliate	699	741	772
Ceded			
Affiliate	(49)	(51)	(52)
Non-affiliate	(270)	(275)	(288)
Premiums and contract charges, net of reinsurance	$ 1,359	$ 1,399	$ 1,393

The effects of reinsurance on contract benefits for the years ended December 31 are as follows:

($ in millions)	2019	2018	2017
Direct	$ 1,038	$ 1,062	$ 1,003
Assumed			
Affiliate	137	149	130
Non-affiliate	493	484	505
Ceded			
Affiliate	(35)	(35)	(33)
Non-affiliate	(152)	(214)	(175)
Contract benefits, net of reinsurance	$ 1,481	$ 1,446	$ 1,430

The effects of reinsurance on interest credited to contractholder funds for the years ended December 31 are as follows:

($ in millions)	2019	2018	2017
Direct	$ 463	$ 533	$ 546
Assumed			
Affiliate	8	8	8
Non-affiliate	154	104	131
Ceded			
Affiliate	(20)	(20)	(21)
Non-affiliate	(20)	(24)	(25)
Interest credited to contractholder funds, net of reinsurance	$ 585	$ 601	$ 639

Reinsurance recoverables on paid and unpaid benefits as of December 31 are summarized in the following table.

($ in millions)	2019	2018
Annuities	$ 1,293	$ 1,369
Life insurance	1,145	1,183
Other	52	53
Total	$ 2,490	$ 2,605

As of both December 31, 2019 and 2018, approximately 78% of the Company's reinsurance recoverables are due from companies rated A- or better by S&P.

10. Deferred Policy Acquisition and Sales Inducement Costs

Deferred policy acquisition costs for the years ended December 31 are as follows:

($ in millions)	2019	2018	2017
Balance, beginning of year	$ 1,232	$ 1,156	$ 1,187
Acquisition costs deferred	55	78	122
Amortization charged to income	(180)	(146)	(152)
Effect of unrealized gains and losses	(160)	144	(46)
Reinsurance assumed from AAC	—	—	45
Balance, end of year	$ 947	$ 1,232	$ 1,156

DSI activity, which primarily relates to fixed annuities and interest-sensitive life contracts, for the years ended December 31 was as follows:

($ in millions)	2019	2018	2017
Balance, beginning of year	$ 34	$ 36	$ 40
Amortization charged to income	(5)	(4)	(4)
Effect of unrealized gains and losses	(2)	2	—
Balance, end of year	$ 27	$ 34	$ 36

11. Guarantees and Contingent Liabilities

Guaranty funds

Under state insurance guaranty fund laws, insurers doing business in a state can be assessed, up to prescribed limits, for certain obligations of insolvent insurance companies to policyholders and claimants. Amounts assessed to each company are typically related to its proportion of business written in each state. The Company's policy is to accrue assessments when the entity for which the insolvency relates has met its state of domicile's statutory definition of insolvency and the amount of the loss is reasonably estimable. In most states, the definition is met with a declaration of financial insolvency by a court of competent jurisdiction. In certain states there must also be a final order of liquidation. Since most states allow a credit against premium or other state related taxes for assessments, an asset is recorded based on paid and accrued assessments for the amount the Company expects to recover on the respective state's tax return and is realized over the period allocated by each state. As of both December 31, 2019 and 2018, the liability balance included in other liabilities and accrued expenses was $4 million. The related premium tax offsets included in other assets were $6 million and $7 million as of December 31, 2019 and 2018, respectively.

Guarantees

In the normal course of business, the Company provides standard indemnifications to contractual counterparties in connection with numerous transactions, including acquisitions and divestitures. The types of indemnifications typically provided include indemnifications for breaches of representations and warranties, taxes and certain other liabilities, such as third-party lawsuits. The indemnification clauses are often standard contractual terms and are entered into in the normal course of business based on an assessment that the risk of loss would be remote. The terms of the indemnifications vary in duration and nature. In many cases, the maximum obligation is not explicitly stated and the contingencies triggering the obligation to indemnify have not occurred and are not expected to occur. Consequently, the maximum amount of the obligation under such indemnifications is not determinable. Historically, the Company has not made any material payments pursuant to these obligations.

Related to the sale of LBL on April 1, 2014, the Company agreed to indemnify Resolution Life Holdings, Inc. in connection with certain representations, warranties and covenants of the Company, and certain liabilities specifically excluded from the transaction, subject to specific contractual limitations regarding the Company's maximum obligation. Management does not believe these indemnifications will have a material effect on results of operations, cash flows or financial position of the Company.

The aggregate liability balance related to all guarantees was not material as of December 31, 2019.

Regulation and compliance

The Company is subject to extensive laws, regulations and regulatory actions. From time to time, regulatory authorities or legislative bodies seek to impose additional regulations regarding agency and broker compensation, regulate the nature of and amount of investments, impose fines and penalties for unintended errors or mistakes, impose additional regulations regarding cybersecurity and privacy, and otherwise expand overall regulation of insurance products and the insurance industry. In addition, the Company is subject to laws and regulations administered and enforced by federal agencies, international agencies, and other organizations, including but not limited to the Securities and Exchange Commission, the Financial Industry Regulatory Authority, and the U.S. Department of Justice. The Company has established procedures and policies to facilitate compliance with laws and regulations, to foster prudent business operations, and to support financial reporting. The Company routinely reviews its practices to validate compliance with laws and regulations and with internal procedures and policies. As a result of these reviews, from time to time the Company may decide to modify some of its procedures and policies. Such modifications, and the reviews that led to them, may be accompanied by payments being made and costs being incurred. The ultimate changes and eventual effects of these actions on the Company's business, if any, are uncertain.

12. Income Taxes

ALIC and its subsidiaries (the "Allstate Life Group") join with the Corporation (the "Allstate Group") in the filing of a consolidated federal income tax return and are party to a federal income tax allocation agreement (the "Allstate Tax Sharing Agreement"). Under the Allstate Tax Sharing Agreement, the Allstate Life Group pays to or receives from the Corporation the amount, if any, by which the Allstate Group's federal income tax liability is affected by virtue of inclusion of the Allstate Life Group in the consolidated federal income tax return. Effectively, this results in the Allstate Life Group's annual income tax provision being computed, with adjustments, as if the Allstate Life Group filed a separate return.

Deferred income taxes result from temporary differences between the tax basis of assets and liabilities and their reported amounts in the financial statements that will result in taxable or deductible amounts in future years. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in years in which those temporary differences are expected to be recovered or settled. Deferred tax assets and liabilities are adjusted through income tax expense as changes in tax laws or rates are enacted.

The Internal Revenue Service ("IRS") is currently examining the Allstate Group's 2015 and 2016 federal income tax returns and is expected to complete its exam by mid-2020. The 2017 and 2018 audit cycle is expected to begin mid-2020. The 2013 and

2014 federal income tax return audit is complete through the exam phase and the Allstate Group has reached a tentative agreement on one outstanding issue, pending final review by the Joint Committee of Taxation expected in 2020. Any adjustments that may result from IRS examinations of the Allstate Group's tax returns are not expected to have a material effect on the consolidated financial statements.

The Company recognizes tax positions in the consolidated financial statements only when it is more likely than not that the position will be sustained on examination by the relevant taxing authority based on the technical merits of the position. A position that meets this standard is measured at the largest amount of benefit that will more likely than not be realized on settlement. A liability is established for differences between positions taken in a tax return and amounts recognized in the consolidated financial statements.

The Company had $14 million, $14 million and $2 million liability for unrecognized tax benefits as of December 31, 2019, 2018 and 2017, respectively. The change in the liability for unrecognized tax benefits in 2018 related to the increase for tax positions taken in the current year. The Company believes it is reasonably possible that a decrease of up to $2 million in unrecognized tax benefits may occur within the next twelve months due to IRS settlements.

The components of the deferred income tax assets and liabilities as of December 31 are as follows:

($ in millions)	2019	2018
Deferred tax assets		
Deferred reinsurance gain	$ 6	$ 7
Other assets	1	1
Total deferred tax assets	7	8
Deferred tax liabilities		
Life and annuity reserves	(253)	(223)
Unrealized net capital gains	(245)	(65)
Investments	(185)	(131)
DAC	(169)	(201)
Other liabilities	(49)	(51)
Total deferred tax liabilities	(901)	(671)
Net deferred tax liability	$ (894)	$ (663)

Although realization is not assured, management believes it is more likely than not that the deferred tax assets will be realized based on the Company's assessment that the deductions ultimately recognized for tax purposes will be fully utilized.

The components of income tax expense (benefit) for the years ended December 31 are as follows:

($ in millions)	2019	2018	2017
Current	$ 76	$ 116	$ 104
Deferred	52	(99)	(382)
Total income tax expense (benefit)	$ 128	$ 17	$ (278)

The Company paid taxes of $62 million and $30 million in 2019 and 2018, respectively, and received refunds of $1 million in 2017. The Company had current income tax payable of $29 million and $78 million as of December 31, 2019 and 2018, respectively.

A reconciliation of the statutory federal income tax rate to the effective income tax rate on income from operations for the years ended December 31 is as follows:

($ in millions)	2019	2018	2017
Statutory federal income tax rate - expense	21.0 %	21.0 %	35.0 %
Tax credits	(1.9)	(3.2)	(1.7)
Dividends received deduction	(0.5)	(0.7)	(0.6)
State income taxes	0.5	1.5	0.6
Adjustments to prior year tax liabilities	0.2	(0.3)	(0.3)
Non-deductible expenses	0.1	—	0.1
Tax Legislation benefit	—	(14.0)	(71.8)
Other	—	0.1	—
Effective income tax rate expense (benefit)	19.4 %	4.4 %	(38.7)%

13. Capital Structure

Debt outstanding

All of the Company's outstanding debt as of December 31, 2019 and 2018 relates to intercompany obligations. These obligations reflect notes due to related parties and are discussed in Note 4. The Company paid $5 million, $5 million and $6 million of interest on debt in 2019, 2018 and 2017, respectively.

The Company had $61 million and $62 million of investment-related debt that is reported in other liabilities and accrued expenses as of December 31, 2019 and 2018, respectively.

14. Statutory Financial Information and Dividend Limitations

ALIC and its insurance subsidiaries prepare their statutory-basis financial statements in conformity with accounting practices prescribed or permitted by the insurance department of the applicable state of domicile. Prescribed statutory accounting practices include a variety of publications of the National Association of Insurance Commissioners ("NAIC"), as well as state laws, regulations and general administrative rules. Permitted statutory accounting practices encompass all accounting practices not so prescribed.

All states require domiciled insurance companies to prepare statutory-basis financial statements in conformity with the NAIC Accounting Practices and Procedures Manual, subject to any deviations prescribed or permitted by the applicable insurance commissioner and/or director. Statutory accounting practices differ from GAAP primarily since they require charging policy acquisition and certain sales inducement costs to expense as incurred, establishing life insurance reserves based on different actuarial assumptions, and valuing certain investments and establishing deferred taxes on a different basis.

Statutory net income of ALIC and its insurance subsidiaries was $363 million, $410 million and $279 million in 2019, 2018 and 2017, respectively. Statutory capital and surplus was $3.81 billion and $3.47 billion as of December 31, 2019 and 2018, respectively.

Dividend Limitations

The ability of ALIC to pay dividends is dependent on business conditions, income, cash requirements and other relevant factors. The payment of shareholder dividends by ALIC to AIC without the prior approval of the Illinois Department of Insurance ("IL DOI") is limited to formula amounts based on net income and capital and surplus, determined in conformity with statutory accounting practices, as well as the timing and amount of dividends paid in the preceding twelve months. The Company paid dividends of $75 million in 2019. The maximum amount of dividends ALIC will be able to pay without prior IL DOI approval at a given point in time during 2020 is $487 million, less dividends paid during the preceding twelve months measured at that point in time. The payment of a dividend in excess of this amount requires 30 days advance written notice to the IL DOI. The dividend is deemed approved, unless the IL DOI disapproves it within the 30 day notice period. Additionally, any dividend must be paid out of unassigned surplus excluding unrealized appreciation from investments, which for ALIC totaled $648 million as of December 31, 2019, and cannot result in capital and surplus being less than the minimum amount required by law.

ALIC may receive dividends from time to time from its insurance subsidiaries. The ability of these insurance subsidiaries to pay dividends is generally dependent on business conditions, income, cash requirements, and other relevant factors. The maximum amount of dividends insurance subsidiaries can pay to ALIC without prior DOI approval at any given point during 2020 is $61 million. ALIC did not receive dividends from its insurance subsidiaries during 2019 or 2018.

Under state insurance laws, insurance companies are required to maintain paid up capital of not less than the minimum capital requirement applicable to the types of insurance they are authorized to write. Insurance companies are also subject to risk-based capital ("RBC") requirements adopted by state insurance regulators. A company's "authorized control level RBC" is calculated using various factors applied to certain financial balances and activity. Companies that do not maintain adjusted statutory capital and surplus at a level in excess of the company action level RBC, which is two times authorized control level RBC, are required to take specified actions. Company action level RBC is significantly in excess of the minimum capital requirements. Total adjusted statutory capital and surplus and authorized control level RBC of ALIC were $4.30 billion and $644 million, respectively, as of December 31, 2019. ALIC's insurance subsidiaries are included as a component of ALIC's total statutory capital and surplus.

Intercompany transactions

Notification and approval of intercompany lending activities is also required by the IL DOI when ALIC does not have unassigned surplus and for transactions that exceed a level that is based on a formula using statutory admitted assets and statutory surplus.

15. Benefit Plans

Pension and other postretirement plans

Defined benefit pension plans and other postretirement plans, sponsored by the Corporation, cover most full-time employees, certain part-time employees and employee-agents. Benefits under the pension plans are based upon the employee's length of service and eligible annual compensation. The Corporation also provides a medical coverage subsidy for eligible employees hired before January 1, 2003, including their eligible dependents, when they retire. The cost allocated to the Company for these plans was $3 million, $2 million and $7 million in 2019, 2018 and 2017, respectively.

The Corporation has reserved the right to modify or terminate its benefit plans at any time and for any reason.

Allstate 401(k) Savings Plan

Employees of AIC are eligible to become members of the Allstate 401(k) Savings Plan ("Allstate Plan"). The Corporation's contributions are based on the Corporation's matching obligation. The cost allocated to the Company for the Allstate Plan was $4 million, $5 million and $4 million in 2019, 2018 and 2017, respectively.

16. Other Comprehensive Income

The components of other comprehensive income (loss) on a pre-tax and after-tax basis for the years ended December 31 are as follows:

($ in millions)	2019			2018			2017		
	Pre-tax	Tax	After-tax	Pre-tax	Tax	After-tax	Pre-tax	Tax	After-tax
Unrealized net holding gains and losses arising during the period, net of related offsets	$ 878	$ (184)	$ 694	$ (483)	$ 101	$ (382)	$ 51	$ (18)	$ 33
Less: reclassification adjustment of realized capital gains and losses	19	(4)	15	(35)	7	(28)	43	(15)	28
Unrealized net capital gains and losses	859	(180)	679	(448)	94	(354)	8	(3)	5
Unrealized foreign currency translation adjustments	(22)	5	(17)	—	—	—	17	(6)	11
Other comprehensive income (loss)	$ 837	$ (175)	$ 662	$ (448)	$ 94	$ (354)	$ 25	$ (9)	$ 16

17. Quarterly Results (unaudited)

($ in millions)	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
	2019	2018	2019	2018	2019	2018	2019	2018
Revenues	$ 816	$ 736	$ 814	$ 783	$ 742	$ 787	$ 781	$ 541
Net income (loss)	164	90	157	134	80	193	129	(52)

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholder of
Allstate Life Insurance Company
Northbrook, Illinois 60062

Opinion on the Financial Statements

We have audited the accompanying Consolidated Statements of Financial Position of Allstate Life Insurance Company and subsidiaries (the "Company"), an affiliate of The Allstate Corporation, as of December 31, 2019 and 2018, and the related Consolidated Statements of Operations and Comprehensive Income, Shareholder's Equity, and Cash Flows for each of the three years in the period ended December 31, 2019, and the related notes and the schedules listed in the Index at Item 15 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 2 to the financial statements, the Company changed its presentation and method of accounting for the recognition and measurement of financial assets and financial liabilities on January 1, 2018, due to the adoption of FASB Accounting Standards Update No. 2016-01, *Financial Instruments - Overall (Subtopic 825-10)*.

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 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 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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

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.

/s/ DELOITTE & TOUCHE LLP

Chicago, Illinois
February 28, 2020

We have served as the Company's auditor since 2001.

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures. We maintain disclosure controls and procedures as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934. Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Based upon this evaluation, the principal executive officer and the principal financial officer concluded that our disclosure controls and procedures are effective in providing reasonable assurance that material information required to be disclosed in our reports filed with or submitted to the Securities and Exchange Commission under the Securities Exchange Act is recorded, processed, summarized and reported within the time periods specified by the Securities Exchange Act and made known to management, including the principal executive officer and the principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting. Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2019 based on the criteria related to internal control over financial reporting described in "Internal Control – Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2019.

Changes in Internal Control over Financial Reporting. During the fiscal quarter ended December 31, 2019, there have been no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

Item 14. Principal Accounting Fees and Services

(1), (2), (3) and (4) Disclosure of fees -

The following fees have been, or are anticipated to be billed by Deloitte & Touche LLP, the member firms of Deloitte & Touche Tohmatsu, and their respective affiliates, for professional services rendered to us for the fiscal years ending December 31, 2019 and 2018.

	2019	2018
Audit fees [(a)]	$ 2,639,000	$ 2,476,000
Tax fees [(b)]	8,000	—
Total fees	$ 2,647,000	$ 2,476,000

(a) Fees for audits of annual financial statements, reviews of quarterly financial statements, statutory audits, attest services, comfort letters, consents, and review of documents filed with the Securities and Exchange Commission. The amount disclosed does not reflect reimbursed audit fees received from third-party reinsurers in the amounts of $160,000 and $158,000 for 2019 and 2018, respectively.

(b) Relates to fees for income tax return preparation.

(5)(i) and (ii) Audit Committee’s pre-approval policies and procedures -

The Audit Committees of The Allstate Corporation and Allstate Life Insurance Company have adopted a policy regarding pre-approval of all audit and permissible non-audit services provided by the independent registered public accountant. The policy identifies the basic principles that must be considered by the Audit Committee in approving services to ensure that the registered public accountant’s independence is not impaired, describes the type of audit, audit-related, tax and other services that may be provided, and lists the non-audit services that may not be performed. The independent registered public accountant or management will submit to the Audit Committee detailed schedules with all of the proposed services within each category, together with the estimated fees. Each specific service will require approval before the service can begin. Prior to requesting approval from the Audit Committee, the registered public accountant and management consider and conclude that the services are permissible in that they: (1) do not place the registered public accountant in the position of auditing their own work, (2) do not result in the registered public accountant’s personnel acting as management or an employee of Allstate, (3) do not place the registered public accountant in a position of being an advocate for Allstate, (4) do not create a mutual or conflicting interest between the registered public accountant and Allstate and (5) are not based on a contingent fee arrangement. The Audit Committee’s policy delegates to the chair the authority to grant approvals, but the decisions of the chair must be reported to the Audit Committee at its next regularly scheduled meeting. All services provided by Deloitte & Touche LLP in 2019 and 2018 were approved in accordance with the pre-approval policy by The Allstate Corporation and Allstate Life Audit Committees.

Part IV

Item 15. (a) (1) Exhibits and Financial Statement Schedules.

The following consolidated financial statements, notes thereto and related information of Allstate Life Insurance Company (the "Company") are included in Item 8.

Consolidated Statements of Operations and Comprehensive Income
Consolidated Statements of Financial Position
Consolidated Statements of Shareholder's Equity
Consolidated Statements of Cash Flows
Notes to the Consolidated Financial Statements
Report of Independent Registered Public Accounting Firm

Item 15. (a) (2)

The following additional financial statement schedules are furnished herewith pursuant to the requirements of Form 10-K.

Allstate Life Insurance Company		**Page**
Schedules required to be filed under the provisions of Regulation S-X Article 7:		
Schedule I	Summary of Investments - Other than Investments in Related Parties	S-1
Schedule IV	Reinsurance	S-2
Schedule V	Valuation Allowances and Qualifying Accounts	S-3

All other schedules are omitted because they are not applicable, or not required, or because the required information is included in the Consolidated Financial Statements or in notes thereto.

Item 15. (a) (3)

The following is a list of the exhibits filed as part of this Form 10-K.

		Incorporated by Reference				
Exhibit Number	**Exhibit Description**	**Form**	**File Number**	**Exhibit**	**Filing Date**	**Filed or Furnished Herewith**
3(i)	Articles of Amendment to the Articles of Incorporation of Allstate Life Insurance Company dated December 29, 1999.	10	000-31248	3.1	April 24, 2002	
3(ii)	Amended and Restated By-Laws of Allstate Life Insurance Company effective March 15, 2007.	8-K	000-31248	3(ii)	March 20, 2007	
4.1	See Exhibits 3 (i) and 3 (ii).					
4.2	Description of Registrant's Securities					X
10.1	Credit Agreement dated April 27, 2012 among The Allstate Corporation, Allstate Insurance Company and Allstate Life Insurance Company, as Borrowers; the Lenders party thereto, Wells Fargo Bank, National Association, as Syndication Agent; Citibank, N.A. and Bank of America, N.A., as Documentation Agents; and JPMorgan Chase Bank, N.A., as Administrative Agent.	10-Q	1-11840	10.6	May 2, 2012	
10.2	Amendment No. 1 to Credit Agreement dated as of April 27, 2014	8-K	1-11840	10.1	April 29, 2014	
10.3	Intercompany Loan Agreement among The Allstate Corporation, Allstate Life Insurance Company, and other certain subsidiaries of The Allstate Corporation effective February 1, 1996.	10-K	000-31248	10.24	March 13, 2007	
10.4	Amended and Restated Intercompany Liquidity Agreement between Allstate Insurance Company, Allstate Life Insurance Company and The Allstate Corporation effective as of May 8, 2008.	10-Q	000-31248	10.2	May 14, 2008	
10.5	Revolving Loan Credit Agreement, effective December 20, 2010 between American Heritage Life Insurance Company and Road Bay Investments, LLC.	8-K	000-31248	10.1	December 27, 2010	

10.6	Pledge and Security Agreement, dated as of December 20, 2010, between Road Bay Investments, LLC and American Heritage Life Insurance Company securing obligations under the Revolving Loan Credit Agreement.	8-K	000-31248	10.2	December 27, 2010	
10.7	Capital Support Agreement between Allstate Life Insurance Company and Allstate Insurance Company effective December 14, 2007.	8-K	000-31248	10.1	February 7, 2008	
10.8	Form of Amended and Restated Service and Expense Agreement among Allstate Insurance Company, The Allstate Corporation and certain affiliates effective January 1, 2004.	10-K	000-31248	10.1	March 17, 2008	
10.9	Form of Amendment No. 1 effective January 1, 2009 to Amended and Restated Service and Expense Agreement among Allstate Insurance Company, The Allstate Corporation and certain affiliates dated as of January 1, 2009.	8-K	000-31248	10.1	February 17, 2010	
10.10	Letter Agreement among Allstate Insurance Company, The Allstate Corporation and certain affiliates, including Allstate Life Insurance Company, effective December 1, 2007.	8-K	000-31248	10.1	May 23, 2008	
10.11	Addendum among Allstate Insurance Company and certain affiliates dated August 17, 2011 to Amended and Restated Service and Expense Agreement among Allstate Insurance Company, The Allstate Corporation and certain affiliates effective as of January 1, 2004, as amended by amendment No. 1 effective as of January 1, 2009.	10-K	000-31248	10.20	March 8, 2012	
10.12	New York Insurer Supplement to Amended and Restated Service and Expense Agreement among Allstate Insurance Company, The Allstate Corporation, Allstate Life Insurance Company of New York and Intramerica Life Insurance Company, effective March 5, 2005.	10-Q	000-31248	10.2	August 8, 2005	
10.13	Limited Servicing Agreement among Allstate Life Insurance Company, Allstate Distributors, L.L.C. and Allstate Financial Services, LLC effective October 1, 2002.	10-K	000-31248	10.40	March 17, 2008	
10.14	Form of Investment Management Agreement among Allstate Investment Management Company, The Allstate Corporation and certain affiliates effective February 1, 2012.	8-K	000-31248	10.1	February 7, 2012	
10.15	Form of Investment Management Agreement among Allstate Investments, LLC, Allstate Insurance Company, The Allstate Corporation and certain affiliates effective January 1, 2007.	10-K	000-31248	10.12	March 17, 2008	
10.16	Investment Advisory Agreement and Amendment to Service Agreement as of January 1, 2002 between Allstate Insurance Company, Allstate Investments, LLC and Allstate Life Insurance Company of New York.	10	000-31248	10.31	April 24, 2002	
10.17	Investment Management Agreement between Allstate Investments, LLC and ALIC Reinsurance Company, effective July 1, 2005.	10-Q	000-31248	10.1	November 7, 2005	
10.18	Investment Management Agreement between Allstate Investments, LLC and ALIC Reinsurance Company effective as of March 31, 2008.	8-K	000-31248	10.1	December 23, 2008	
10.19	Assignment & Delegation of Administrative Services Agreements, Underwriting Agreements, and Selling Agreements entered into as of September 1, 2011 between ALFS, Inc., Allstate Life Insurance Company, Allstate Life Insurance Company of New York, Allstate Distributors, L.L.C., Intramerica Life Insurance Company, and Allstate Financial Services, LLC.	8-K	000-31248	10.1	September 1, 2011	
10.20	Selling Agreement by and among Allstate Life Insurance Company, Allstate Distributors, L.L.C. (ALFS, Inc., f/k/a Allstate Life Financial Services, Inc., merged with and into Allstate Distributors, L.L.C. effective September 1, 2011) and Allstate Financial Services, LLC (f/k/a LSA Securities, Inc.) effective July 26, 1999.	10-K	000-31248	10.6	March 26, 2004	

10.21	Amendment effective August 1, 1999 to Selling Agreement between Allstate Life Insurance Company, Allstate Distributors, L.L.C. (ALFS, Inc. merged with and into Allstate Distributors, L.L.C. effective September 1, 2011) and Allstate Financial Services, LLC effective July 26, 1999.	10-Q	000-31248	10.1	November 10, 2004	
10.22	Amendment effective September 28, 2001 to Selling Agreement between Allstate Life Insurance Company, Allstate Distributors, L.L.C. (ALFS, Inc. merged with and into Allstate Distributors, L.L.C. effective September 1, 2011) and Allstate Financial Services, LLC effective July 26, 1999.	10-Q	000-31248	10.2	November 10, 2004	
10.23	Amendment effective February 15, 2002 to Selling Agreement between Allstate Life Insurance Company, Allstate Distributors, L.L.C. (ALFS, Inc. merged with and into Allstate Distributors, L.L.C. effective September 1, 2011) and Allstate Financial Services, LLC effective July 26, 1999.	10-Q	000-31248	10.3	November 10, 2004	
10.24	Amendment effective April 21, 2003 to Selling Agreement between Allstate Life Insurance Company, Allstate Distributors, L.L.C. (ALFS, Inc. merged with and into Allstate Distributors, L.L.C. effective September 1, 2011) and Allstate Financial Services, LLC effective July 26, 1999.	10-Q	000-31248	10.4	November 10, 2004	
10.25	Selling Agreement and Addenda to Agreement between Allstate Life Insurance Company as successor in interest to Glenbrook Life and Annuity Company, Allstate Distributors, L.L.C. (ALFS, Inc. merged with and into Allstate Distributors, L.L.C. effective September 1, 2011) and Allstate Financial Services, LLC effective May 17, 2001, December 31, 2001 and November 18, 2002, respectively.	10-K	000-31248	10.39	March 17, 2008	
10.26	Selling Agreement by and among Allstate Life Insurance Company of New York, Allstate Distributors, L.L.C. (ALFS, Inc. merged with and into Allstate Distributors, L.L.C. effective September 1, 2011) and Allstate Financial Services, LLC effective May 1, 2005.	10-K	000-31248	10.7	March 26, 2004	
10.27	Selling Agreement by and between Lincoln Benefit Life Company, Allstate Distributors, L.L.C. (ALFS, Inc. merged with and into Allstate Distributors, L.L.C. effective September 1, 2011) and Allstate Financial Services, LLC effective August 2, 1999.	10-K	000-31248	10.8	March 26, 2004	
10.28	Marketing Coordination and Administrative Services Agreement among Allstate Insurance Company, Allstate Life Insurance Company and Allstate Financial Services, LLC effective January 1, 2003.	10-K	000-31248	10.9	March 26, 2004	
10.29	First Amendment to Marketing Coordination and Administrative Services Agreement by and among Allstate Life Insurance Company, Allstate Financial Services, LLC and Allstate Insurance Company effective January 1, 2006.	10-Q	000-31248	10.1	August 8, 2006	
10.30	Marketing Agreement by and among Allstate Life Insurance Company as successor in interest to Glenbrook Life and Annuity Company, Allstate Distributors, L.L.C. (ALFS, Inc. merged with and into Allstate Distributors, L.L.C. effective September 1, 2011) and Allstate Financial Services, LLC effective June 10, 2003.	10-K	000-31248	10.41	March 17, 2008	
10.31	Reinsurance and Administrative Services Agreement by and between American Heritage Life Insurance Company and Columbia Universal Life Insurance Company effective February 1, 1998.	8-K	000-31248	10.3	January 30, 2008	
10.32	Novation and Assignment Agreement by and among Allstate Life Insurance Company, American Heritage Life Insurance Company and Columbia Universal Life Insurance Company effective June 30, 2004.	8-K	000-31248	10.2	January 30, 2008	
10.33	Amendment to Reinsurance Agreement effective December 1, 2007, by and between American Heritage Life Insurance Company and Allstate Life Insurance Company.	8-K	000-31248	10.1	January 30, 2008	
10.34	Reinsurance Agreement between Allstate Life Insurance Company and American Heritage Life Insurance Company effective December 31, 2004.	8-K	000-31248	10.2	January 9, 2008	

10.35	Amendment No. 1 dated as of January 1, 2008 to Reinsurance Agreement between Allstate Life Insurance Company and American Heritage Life Insurance Company effective December 31, 2004.	8-K	000-31248	10.1	January 9, 2008	
10.36	Amendment No. 2 dated and effective as of April 1, 2011 to Reinsurance Agreement between Allstate Life Insurance Company and American Heritage Life Insurance Company effective December 31, 2004.	10-Q	000-31248	10.4	August 5, 2011	
10.37	Retrocessional Reinsurance Agreement between Allstate Life Insurance Company and American Heritage Life Insurance Company effective December 31, 2004.	10-K	000-31248	10.23	March 16, 2005	
10.38	Reinsurance Agreement effective October 1, 2008 between American Heritage Life Insurance Company and Allstate Life Insurance Company.	8-K	000-31248	10.1	October 28, 2008	
10.39	Reinsurance Agreement effective July 1, 2010 between Allstate Life Insurance Company and American Heritage Life Insurance Company.	8-K	000-31248	10.1	July 15, 2010	
10.40	Amendment No. 1 dated and effective as of July 18, 2011 to Reinsurance Agreement effective July 1, 2010 between Allstate Life Insurance Company and American Heritage Life Insurance Company.	10-Q	000-31248	10.3	August 5, 2011	
10.41	Form of Tax Sharing Agreement by and among The Allstate Corporation and certain affiliates dated as of November 12, 1996.	10-K	000-31248	10.24	March 17, 2008	
10.42	Agreement for the Settlement of State and Local Tax Credits among Allstate Insurance Company and certain of its affiliates, including Allstate Life Insurance Company effective January 1, 2007.	8-K	000-31248	10.1	February 21, 2008	
10.43	Amended and Restated Reinsurance Agreement, dated April 1, 2014, between the Registrant and Lincoln Benefit Life Company	8-K	1-11840	10.1	April 7, 2014	
10.44	Reinsurance Agreement between the Registrant and Allstate Assurance Company effective April 1, 2015	10-Q	000-31248	10.1	May 7, 2015	
10.45	Surplus Note between the Registrant and Allstate Assurance Company dated December 2, 2016	8-K	000-31248	10.1	December 7, 2016	
10.46	Reinsurance Agreement between the Registrant and Allstate Assurance Company dated January 19, 2017	8-K	000-31248	10.1	January 25, 2017	
23	Consent of Independent Registered Public Accounting Firm					X
31(i)	Rule 13a-14(a) Certification of Principal Executive Officer					X
31(i)	Rule 13a-14(a) Certification of Principal Financial Officer					X
32	Section 1350 Certifications					X
99	The Allstate Corporation Policy Regarding Pre-Approval of Independent Registered Public Accountant's Services effective February 23, 2009.	10-K	000-31248	99	March 19, 2009	
101.INS	Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document					X
101.SCH	Inline XBRL Taxonomy Extension Schema					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase					X
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)					X

Item 15. (b)

The exhibits are listed in Item 15. (a)(3) above.

Item 15. (c)

The financial statement schedules are listed in Item 15. (a)(2) above.

Item 16.

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.

ALLSTATE LIFE INSURANCE COMPANY
(Registrant)

/s/ John C. Pintozzi

By: John C. Pintozzi
Senior Vice President and Controller
February 28, 2020

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Steven E. Shebik Steven E. Shebik	Chief Executive Officer and a Director (Principal Executive Officer)	February 28, 2020
/s/ Mario Rizzo Mario Rizzo	Chief Financial Officer and a Director (Principal Financial Officer)	February 28, 2020
/s/ John C. Pintozzi John C. Pintozzi	Senior Vice President and Controller and a Director (Principal Accounting Officer)	February 28, 2020
/s/ Thomas J. Wilson Thomas J. Wilson	Chairman of the Board and a Director	February 28, 2020
/s/ John E. Dugenske John E. Dugenske	Director	February 28, 2020
/s/ Angela K. Fontana Angela K. Fontana	Director	February 28, 2020
/s/ Mary Jane Fortin Mary Jane Fortin	Director	February 28, 2020
/s/ Mario Imbarrato Mario Imbarrato	Director	February 28, 2020
/s/ Jesse E. Merten Jesse E. Merten	Director	February 28, 2020
/s/ Julie Parsons Julie Parsons	Director	February 28, 2020
/s/ Glenn T. Shapiro Glenn T. Shapiro	Director	February 28, 2020
/s/ Brian P. Stricker Brian P. Stricker	Director	February 28, 2020

ALLSTATE LIFE INSURANCE COMPANY AND SUBSIDIARIES
SCHEDULE I - SUMMARY OF INVESTMENTS
OTHER THAN INVESTMENTS IN RELATED PARTIES
DECEMBER 31, 2019

($ in millions)	**Cost/ amortized cost**	**Fair value**	**Amount shown in the Balance Sheet**
Type of investment			
Fixed maturities:			
Bonds:			
United States government, government agencies and authorities	$ 848	$ 882	$ 882
States, municipalities and political subdivisions	1,483	1,755	1,755
Foreign governments	142	149	149
Public utilities	3,072	3,390	3,390
All other corporate bonds	14,229	15,051	15,051
Asset-backed securities	316	317	317
Mortgage-backed securities	127	181	181
Total fixed maturities	20,217	$ 21,725	21,725
Equity securities:			
Common stocks:			
Public utilities	20	$ 30	30
Banks, trusts and insurance companies	111	158	158
Industrial, miscellaneous and all other	967	1,252	1,252
Nonredeemable preferred stocks	25	29	29
Total equity securities	1,123	$ 1,469	1,469
Mortgage loans on real estate	3,988	$ 4,176	3,988
Real estate (none acquired in satisfaction of debt)	292		292
Policy loans	557		557
Derivative instruments	124	$ 124	124
Limited partnership interests	3,250		3,250
Other long-term investments	1,011		1,011
Short-term investments	1,191	$ 1,191	1,191
Total investments	$ 31,753		$ 33,607

ALLSTATE LIFE INSURANCE COMPANY AND SUBSIDIARIES
SCHEDULE IV - REINSURANCE

($ in millions)	Gross amount	Ceded to other companies [1]	Assumed from other companies	Net amount	Percentage of amount assumed to net
Year ended December 31, 2019					
Life insurance in force	$ 107,014	$ 75,159	$ 284,518	$ 316,373	89.9%
Premiums and contract charges:					
Life insurance	$ 683	$ 302	$ 858	$ 1,239	69.2%
Accident and health insurance	65	17	72	120	60.0%
Total premiums and contract charges	$ 748	$ 319	$ 930	$ 1,359	68.4%
Year ended December 31, 2018					
Life insurance in force	$ 113,202	$ 83,166	$ 301,316	$ 331,352	90.9%
Premiums and contract charges:					
Life insurance	$ 679	$ 308	$ 906	$ 1,277	70.9%
Accident and health insurance	64	18	76	122	62.3%
Total premiums and contract charges	$ 743	$ 326	$ 982	$ 1,399	70.2%
Year ended December 31, 2017					
Life insurance in force	$ 114,354	$ 89,603	$ 321,331	$ 346,082	92.8%
Premiums and contract charges:					
Life insurance	$ 677	$ 320	$ 925	$ 1,282	72.2%
Accident and health insurance	57	20	74	111	66.7%
Total premiums and contract charges	$ 734	$ 340	$ 999	$ 1,393	71.7%

[1] No reinsurance or coinsurance income was netted against premium ceded in 2019, 2018 or 2017.

ALLSTATE LIFE INSURANCE COMPANY AND SUBSIDIARIES
SCHEDULE V - VALUATION ALLOWANCES AND QUALIFYING ACCOUNTS

($ in millions)

Description	Balance as of beginning of period	Additions: Charged to costs and expenses	Additions: Other additions	Deductions	Balance as of end of period
Year ended December 31, 2019					
Allowance for reinsurance recoverables	$ —	$ 3	$ —	$ —	$ 3
Allowance for estimated losses on mortgage loans	3	—	—	—	3
Allowance for estimated losses on agent loans	2	1	—	—	3
Year ended December 31, 2018					
Allowance for estimated losses on mortgage loans	$ 3	$ —	$ —	$ —	$ 3
Allowance for estimated losses on agent loans	2	—	—	—	2
Year ended December 31, 2017					
Allowance for estimated losses on mortgage loans	$ 3	$ 1	$ —	$ 1	$ 3
Allowance for estimated losses on agent loans	2	—	—	—	2

Exhibit 4.2

DESCRIPTION OF ALLSTATE LIFE INSURANCE COMPANY’S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

References herein to “we,” “us,” “our” and “Allstate” are references to Allstate Life Insurance Company, and not to any of our subsidiaries, unless we state otherwise or the context otherwise requires.

DESCRIPTION OF CAPITAL STOCK

The following summary of the terms of our capital stock is based upon our Articles of Amendment to the Articles of Incorporation and our Amended and Restated Bylaws and the Illinois Insurance Code. The summary is not complete, and is qualified by reference to our Articles of Amendment to the Articles of Incorporation and our Amended and Restated Bylaws, which are filed as exhibits to this Annual Report on Form 10-K and are incorporated by reference herein.

Our Articles of Amendment to the Articles of Incorporation authorizes us to issue up to 23,800 shares of common stock, par value of $227.00 per share, and 3,000,000 shares of non-voting preferred stock, par value of $100.00 per share. All 23,800 shares of common stock are issued and outstanding and owned by Allstate Insurance Company. No shares of preferred stock are outstanding.

Common Stock

The common stockholder may receive dividends as and when declared by the board of directors. Dividends may be paid in cash, stock or property. Dividends may be declared only out of earned, as distinguished from contributed, surplus. All outstanding shares of common stock are fully paid and non-assessable. The common stockholder is notified of any stockholder's meeting in accordance with applicable law. If Allstate liquidates, dissolves, or winds-up its business, common stockholders will share equally in the assets remaining after creditors (including state guaranty funds and associations and insurance policyholders) and preferred stockholders are paid.

EXHIBIT 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following registration statements of our report dated February 28, 2020, relating to the financial statements and financial statement schedules of Allstate Life Insurance Company, appearing in this Annual Report on Form 10-K of Allstate Life Insurance Company for the year ended December 31, 2019 (which report expresses an unmodified opinion and includes an emphasis-of-matter paragraph relating to a change in accounting principle for the recognition and measurement of financial assets and financial liabilities), and to the reference to us under the heading “Experts” in the Prospectus, which is part of the registration statements.

Form S-3 Registration Statement Nos.	Form N-4 Registration Statement Nos.
333-220830	333-102934
333-220831	333-114560
333-220832	333-114561
333-220835	333-114562
333-220836	333-121693
333-220837	
333-220569	
333-220570	
333-220580	
333-220581	
333-220605	
333-220606	

/s/ DELOITTE & TOUCHE LLP

Chicago, Illinois
February 28, 2020

CERTIFICATIONS **EXHIBIT 31 (i)**

I, Steven E. Shebik, certify that:

1. I have reviewed this report on Form 10-K of Allstate Life Insurance 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, 2020

/s/ Steven E. Shebik

Steven E. Shebik

Chief Executive Officer

CERTIFICATIONS **EXHIBIT 31 (i)**

I, Mario Rizzo, certify that:

1. I have reviewed this report on Form 10-K of Allstate Life Insurance 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, 2020

/s/ Mario Rizzo

Mario Rizzo

Chief Financial Officer

EXHIBIT 32

SECTION 1350 CERTIFICATIONS

Each of the undersigned hereby certifies that to his knowledge the report on Form 10-K for the fiscal year ended December 31, 2019 of Allstate Life Insurance Company filed with the Securities and Exchange Commission fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in such report fairly presents, in all material respects, the financial condition and result of operations of Allstate Life Insurance Company.

Date: February 28, 2020

/s/ Steven E. Shebik

Steven E. Shebik

Chief Executive Officer

/s/ Mario Rizzo

Mario Rizzo

Chief Financial Officer