Section 1: 10-K (FORM 10-K)

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

FORM 10-K

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

For the fiscal year ended December 31, 2017

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 0-15341

DONEGAL GROUP INC.
(Exact name of registrant as specified in its charter)

Delaware **(State or other jurisdiction of incorporation or organization)**	**23-2424711** **(I.R.S. Employer Identification No.)**
1195 River Road, Marietta, Pennsylvania **(Address of principal executive offices)**	**17547** **(Zip code)**

Registrant's telephone number, including area code: (800) 877-0600

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

Title of Each Class	Name of Each Exchange on Which Registered
Class A Common Stock, $.01 par value	The NASDAQ Global Select Market
Class B Common Stock, $.01 par value	The NASDAQ Global Select Market

Securities registered pursuant to Section 12(g) of the Act: None.

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange 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 and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).   Yes ☒.   No ☐.

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements we incorporate by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

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 definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	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.   Yes ☐.   No ☒.

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter. $187,725,762.

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date: 22,623,231 shares of Class A common stock and 5,576,775 shares of Class B common stock outstanding on March 1, 2018.

Documents Incorporated by Reference

The registrant incorporates by reference portions of the registrant's definitive proxy statement relating to registrant's annual meeting of stockholders to be held April 19, 2018 into Part III of this report.

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DONEGAL GROUP INC.
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PART I

Item 1. Business.

Introduction

Donegal Group Inc., or DGI, is an insurance holding company whose insurance subsidiaries offer personal and commercial lines of property and casualty insurance to businesses and individuals in 22 Mid-Atlantic, Midwestern, New England and Southern states. As used in this Form 10-K Report, the terms “we,” “us” and “our” refer to Donegal Group Inc. and its subsidiaries.

Donegal Mutual Insurance Company, or Donegal Mutual, organized us as an insurance holding company on August 26, 1986. At December 31, 2017, Donegal Mutual held approximately 44% of our outstanding Class A common stock and approximately 83% of our outstanding Class B common stock. Donegal Mutual’s ownership provides Donegal Mutual with approximately 72% of the combined voting power of our outstanding shares of Class A common stock and our outstanding shares of Class B common stock. Our insurance subsidiaries and Donegal Mutual have interrelated operations due to an intercompany pooling agreement and other intercompany agreements and transactions we describe in Note 3 of the Notes to Consolidated Financial Statements. While maintaining the separate corporate existence of each company, our insurance subsidiaries and Donegal Mutual conduct business together as the Donegal Insurance Group. As such, Donegal Mutual and our insurance subsidiaries share the same business philosophy, the same management, the same employees and the same facilities and offer the same types of insurance products.

We have four segments: our investment function, our personal lines of insurance, our commercial lines of insurance and our investment in Donegal Financial Services Corporation, or DFSC. We set forth financial information about these segments in Note 19 of the Notes to Consolidated Financial Statements. The personal lines products of our insurance subsidiaries consist primarily of homeowners and private passenger automobile policies. The commercial lines products of our insurance subsidiaries consist primarily of commercial automobile, commercial multi-peril and workers’ compensation policies.

Our insurance subsidiaries and Donegal Mutual provide their policyholders with a selection of insurance products at competitive rates, while pursuing profitability by adhering to a strict underwriting discipline. Our insurance subsidiaries derive a substantial portion of their insurance business from smaller to mid-sized regional communities. We believe this focus provides our insurance subsidiaries with competitive advantages in terms of local market knowledge, marketing, underwriting, claims servicing and policyholder service. At the same time, we believe our insurance subsidiaries have cost advantages over many smaller regional insurers that result from economies of scale our insurance subsidiaries realize through centralized accounting, administrative, data processing, investment and other services.

We believe we have a substantial opportunity, as a well-capitalized regional insurance holding company with a solid business strategy, to grow profitably and compete effectively with national property and casualty insurers. Our downstream holding company structure, with Donegal Mutual holding approximately 72% of the combined voting power of our common stock, has proven its effectiveness and success over the 31 years of our existence. Over that time period, we have grown significantly in terms of revenue and financial strength, and the Donegal Insurance Group has developed an excellent reputation as a regional group of property and casualty insurers.

We have been an effective consolidator of smaller “main street” property and casualty insurance companies, and we expect to pursue opportunities to acquire other insurance companies to expand our business in a given region or to commence operations in a new region. Since 1995, we have completed six acquisitions of property and casualty insurance companies or began to participate in their business through Donegal Mutual’s entry into quota-share reinsurance agreements with them.

Donegal Mutual completed the merger of Mountain States Mutual Casualty Company, or Mountain States, with and into Donegal Mutual effective May 25, 2017. Donegal Mutual was the surviving company in the merger, and Mountain States’ insurance subsidiaries, Mountain States Indemnity Company and Mountain States Commercial Insurance Company, became insurance subsidiaries of Donegal Mutual upon completion of the merger. Upon completion of the merger, Donegal Mutual assumed all of the policy obligations of Mountain States and began to market its products together with its insurance subsidiaries as the Mountain States Insurance Group in four Southwestern states. For an indefinite period of time, Donegal Mutual will exclude the business of the Mountain States Insurance Group from the pooling agreement with Atlantic States Insurance Company, or Atlantic States, one of our insurance subsidiaries. As a result, our consolidated financial results will exclude the results of Donegal Mutual’s operations in those Southwestern states.

We own 48.2% of DFSC. DFSC is a grandfathered unitary savings and loan holding company that owns all of the outstanding capital stock of Union Community Bank, a state savings bank, or UCB. UCB has 15 banking offices, substantially all of which are located in Lancaster County, Pennsylvania. Donegal Mutual owns the remaining 51.8% of DFSC. For further information regarding DFSC, we refer to "Business - Donegal Financial Services Corporation" in this Form 10-K Report.

Available Information

You may obtain our Annual Reports on Form 10-K, including this Form 10-K Report, our quarterly reports on Form 10-Q, our current reports on Form 8-K, our proxy statement and our other filings pursuant to the Securities Exchange Act of 1934, or the Exchange Act, without charge by viewing our website at www.donegalgroup.com. You may also view our Code of Business Conduct and Ethics and the charters of the executive committee, the audit committee, the compensation committee and the nominating committee of our board of directors on our website. Upon request to our corporate secretary, we will also provide printed copies of any of these documents to you without charge. We have provided the address of our website solely for the information of investors. We do not intend the reference to our website address to be an active link or to otherwise incorporate the contents of our website into this Form 10-K Report.

History and Organizational Structure

In the mid-1980's, Donegal Mutual, as a mutual insurance company, recognized the desirability of developing additional sources of capital and surplus so it could remain competitive and have the surplus to expand its business and ensure its long-term viability. Accordingly, Donegal Mutual determined to implement a downstream holding company structure as one of its business strategies. Thus, in 1986, Donegal Mutual formed us as a downstream holding company. After Donegal Mutual formed us, we in turn formed Atlantic States as our wholly owned property and casualty insurance company subsidiary.

In connection with the formation of Atlantic States and the establishment of our downstream insurance holding company system, Donegal Mutual and DGI entered into a proportional reinsurance agreement, or pooling agreement, that became effective October 1, 1986. Under the pooling agreement, Donegal Mutual and Atlantic States pool substantially all of their respective premiums, losses and loss expenses to the reinsurance pool, and the reinsurance pool, acting through Donegal Mutual, then cedes a portion of the pooled business, currently 80%, to Atlantic States. Donegal Mutual and Atlantic States share the underwriting results in proportion to their respective participation in the underwriting pool.

Since we established Atlantic States in 1986, Donegal Mutual and our insurance subsidiaries have conducted business together as the Donegal Insurance Group. As the Donegal Insurance Group, Donegal Mutual and our insurance subsidiaries share a combined business plan to enhance market penetration and underwriting profitability objectives. We believe Donegal Mutual's majority interest in the combined voting power of our Class A common stock and of our Class B common stock fosters our ability to implement our business philosophies, enjoy management continuity, maintain superior employee relations and provide a stable environment within which we can grow our businesses.

The products Donegal Mutual and our insurance subsidiaries offer are generally complementary, which permits the Donegal Insurance Group to offer a broad range of products in a given market and to expand the Donegal Insurance Group's ability to service an entire personal lines or commercial lines account. Distinctions within the products Donegal Mutual and our insurance subsidiaries offer generally relate to specific risk profiles within similar classes of business, such as preferred tier products versus standard tier products. Donegal Mutual and we do not allocate all of the standard risk gradients to one company. As a result, the underwriting profitability of the business the individual companies write directly will vary. However, the underwriting pool homogenizes the risk characteristics of all business Donegal Mutual and Atlantic States write directly. We receive 80% of the results of the underwriting pool because Atlantic States has an 80% participation in the pool. The business Atlantic States derives from the underwriting pool represents a significant percentage of our total consolidated revenues. However, that percentage has gradually decreased over the past few years as we have acquired a number of other property and casualty insurance companies that do not participate in the underwriting pool.

As the capital of Atlantic States and our other insurance subsidiaries has increased, the underwriting capacity of our insurance subsidiaries has increased proportionately. The size of the underwriting pool has also increased substantially. Therefore, as we originally planned in the mid-1980s, Atlantic States has successfully raised the capital necessary to support the growth of its direct business as well as to accept increases in its allocation of business from the underwriting pool. The portion of the underwriting pool allocated to Atlantic States has increased from an initial allocation of 35% in 1986 to an 80% allocation since March 1, 2008. We do not anticipate any further change in the pooling agreement between Atlantic States and Donegal Mutual, including any change in the percentage participation of Atlantic States in the underwriting pool.

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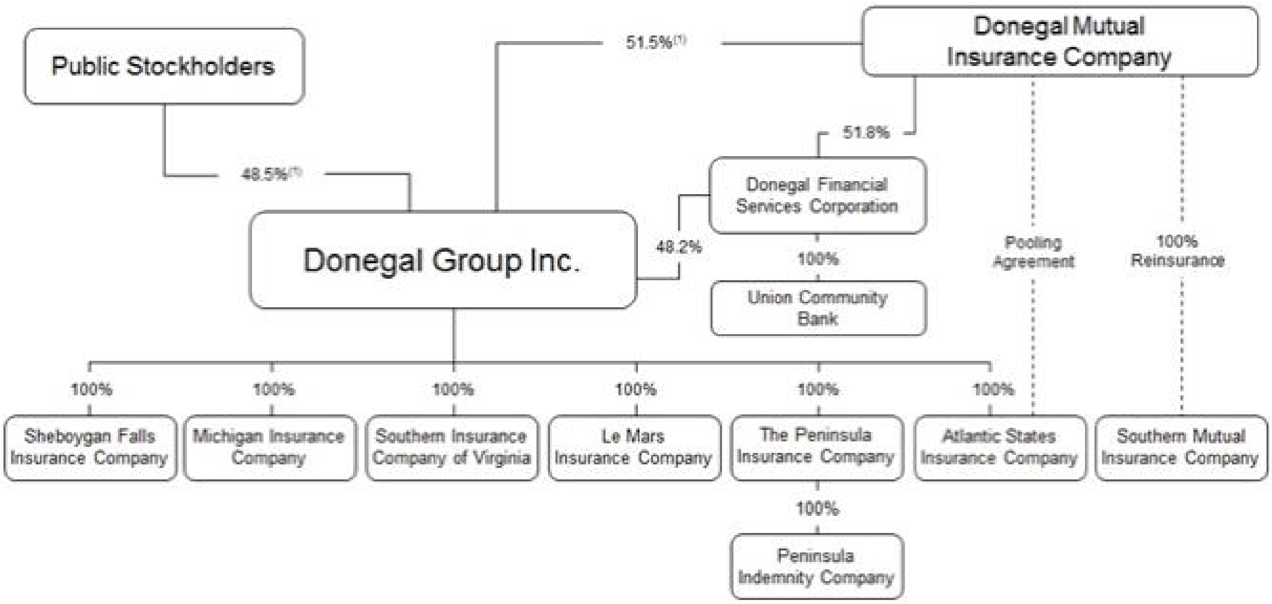
In addition to Atlantic States, our insurance subsidiaries are Southern Insurance Company of Virginia, or Southern, Le Mars Insurance Company, or Le Mars, The Peninsula Insurance Company and its wholly owned subsidiary, Peninsula Indemnity Company, or collectively, Peninsula, Sheboygan Falls Insurance Company, or Sheboygan, and Michigan Insurance Company, or MICO. In addition, Donegal Mutual has a 100% quota-share reinsurance agreement with Southern Mutual Insurance Company, or Southern Mutual, and Donegal Mutual places its assumed business from Southern Mutual into the underwriting pool.

The following chart depicts our organizational structure, including all of our property and casualty insurance subsidiaries, Southern Mutual and our interest in DFSC:



(1) Because of the different relative voting power of our Class A common stock and our Class B common stock, our public stockholders hold approximately 28% of the combined voting power of our Class A common stock and our Class B common stock and Donegal Mutual holds approximately 72% of the combined voting power of our Class A common stock and our Class B common stock.

Relationship with Donegal Mutual

Donegal Mutual provides facilities, personnel and other services to us and our insurance subsidiaries. Donegal Mutual allocates certain related expenses to Atlantic States in relation to the relative participation of Donegal Mutual and Atlantic States in the underwriting pool they maintain. Our insurance subsidiaries other than Atlantic States reimburse Donegal Mutual for their respective personnel costs and bear their proportionate share of information services costs based on each subsidiaries' respective percentage of the total net premiums written of the Donegal Insurance Group. Charges for these services to Atlantic States and our other insurance subsidiaries totaled $125.0 million, $122.4 million and $108.5 million for 2017, 2016 and 2015, respectively.

Our insurance subsidiaries have various reinsurance arrangements with Donegal Mutual. These agreements include:

- excess of loss reinsurance agreements with Le Mars, MICO, Peninsula, Sheboygan and Southern;
- catastrophe reinsurance agreements with Atlantic States, Le Mars and Southern; and
- quota-share reinsurance agreements with MICO and Peninsula.

The purpose of the excess of loss and catastrophe reinsurance agreements is to lessen the effects of a single large loss, or an accumulation of smaller losses arising from one event, to levels that are appropriate given each subsidiary's size, underwriting profile and amount of surplus.

The purpose of the quota-share reinsurance agreement with Peninsula is to transfer to Donegal Mutual 100% of the premiums and losses related to the workers' compensation product line of Peninsula in certain states, which provides the availability of an additional workers' compensation tier for Donegal Mutual's commercial accounts. Donegal Mutual places its assumed business from Peninsula into the underwriting pool.

The purpose of the quota-share reinsurance agreement with MICO is to transfer to Donegal Mutual 25% of the premiums and losses related to MICO's business. Donegal Mutual places its assumed business from MICO into the underwriting pool.

We and Donegal Mutual have maintained a coordinating committee since our formation in 1986. The coordinating committee consists of two members of our board of directors, neither of whom is a member of Donegal Mutual's board of directors, and two members of Donegal Mutual's board of directors, neither of whom is a member of our board of directors. The purpose of the coordinating committee is to establish and maintain a process for an annual evaluation of the transactions between Donegal Mutual, our insurance subsidiaries and us. The coordinating committee considers the fairness of each intercompany transaction to Donegal Mutual and its policyholders and to us and our stockholders.

A new agreement or any change to a previously approved agreement must receive coordinating committee approval. The approval process for a new agreement between Donegal Mutual and us or one of our insurance subsidiaries or a change in such an agreement is as follows:

- both of our members on the coordinating committee must determine that the new agreement or the change in an existing agreement is fair and equitable to us and in the best interests of our stockholders;
- both of Donegal Mutual's members on the coordinating committee must determine that the new agreement or the change in an existing agreement is fair and equitable to Donegal Mutual and in the best interests of its policyholders;
- our board of directors must approve the new agreement or the change in an existing agreement; and
- Donegal Mutual's board of directors must approve the new agreement or the change in an existing agreement.

The coordinating committee also meets annually to review each existing agreement between Donegal Mutual and us or our insurance subsidiaries, including all reinsurance agreements between Donegal Mutual and our insurance subsidiaries. The purpose of this annual review is to examine the results of the agreements over the past year and, in the case of reinsurance agreements, over several years and to determine if the results of the existing agreements remain fair and equitable to us and our stockholders and fair and equitable to Donegal Mutual and its policyholders or if Donegal Mutual and we should mutually agree to certain adjustments to the terms of the agreements. In the case of these reinsurance agreements, the annual adjustments typically relate to the reinsurance premiums, losses and reinstatement premiums. These agreements are ongoing in nature and will continue in effect throughout 2018 in the ordinary course of our business.

Our members on the coordinating committee, as of the date of this Form 10-K Report, are Robert S. Bolinger and Richard D. Wampler, II. Donegal Mutual's members on the coordinating committee as of such date are Dennis J. Bixenman and John E. Hiestand. We refer to our proxy statement for our annual meeting of stockholders to be held on April 19, 2018 for further information about the members of the coordinating committee.

We believe our relationships with Donegal Mutual offer us and our insurance subsidiaries a number of competitive advantages, including the following:

- enabling our stable management, the consistent underwriting discipline of our insurance subsidiaries, external growth, long-term profitability and financial strength;
- creating operational and expense synergies from the combination of resources and integrated operations of Donegal Mutual and our insurance subsidiaries;
- enhancing our opportunities to expand by acquisition because of the ability of Donegal Mutual to affiliate with and acquire control of other mutual insurance companies and, thereafter, demutualize them and allow us to acquire all of their outstanding stock;
- producing more stable and uniform underwriting results for our insurance subsidiaries over extended periods of time than we could achieve without our relationship with Donegal Mutual;

- providing opportunities for growth because of the ability of Donegal Mutual to enter into reinsurance agreements with other mutual insurance companies and place the business it assumes into the pooling agreement; and
- providing Atlantic States with a significantly larger underwriting capacity because of the underwriting pool Donegal Mutual and Atlantic States have maintained since 1986.

In the first quarter of 2018, our board of directors and the board of directors of Donegal Mutual each undertook a review of the relationships between Donegal Mutual and DGI and determined that continuing the current relationships and the current corporate structure of Donegal Mutual and DGI is in the best interests of DGI and its various constituencies.

Business Strategy

Our strategy is designed to allow our insurance subsidiaries to achieve their longstanding goal of outperforming the United States property and casualty insurance industry in terms of profitability and service, thereby providing value to the policyholders of our insurance subsidiaries and, ultimately, providing value to our stockholders. The annual net premiums earned of our insurance subsidiaries have increased from $301.5 million in 2006 to $702.5 million in 2017, a compound annual growth rate of 8.0%.

The combined ratio of our insurance subsidiaries and that of the United States property and casualty insurance industry as computed using United States generally accepted accounting principles, or GAAP, and statutory accounting principles, or SAP, for the years 2013 through 2017 are shown in the following table:

	2017	2016	2015	2014	2013
Our GAAP combined ratio	103.0%	98.1%	99.0%	101.7%	98.8%
Our SAP combined ratio	101.7	96.8	97.4	100.5	97.4
Industry SAP combined ratio (1)	105.1	100.9	98.3	97.4	96.4

(1) As reported (projected for 2017) by A.M. Best Company.

We and Donegal Mutual believe we can continue to expand our insurance operations over time through organic growth and acquisitions of, or affiliations with, other insurance companies. We and Donegal Mutual have enhanced the performance of companies we have acquired, while leveraging the acquired companies' core strengths and local market knowledge to expand their operations. Our insurance subsidiaries and Donegal Mutual also seek to increase their premium base by making quality independent agency appointments, enhancing their competitive position within each agency, introducing new and enhanced insurance products and developing and maintaining automated systems to improve service, communications and efficiency.

We translate these initiatives into our book value growth in a number of ways, including the following:

- maintaining a conservative underwriting culture and pricing discipline to sustain our record of long-term underwriting profitability;
- continuing our investment in technology to achieve operating efficiencies that lower expenses, enhance the service we provide to agencies and policyholders and increase the speed of our communications with agencies and policyholders; and
- maintaining a conservative investment approach.

A detailed review of our business strategies follows:

- ***Achieving underwriting profitability.***

Our insurance subsidiaries seek to achieve a combined ratio of less than 100%. We remain committed to achieving consistent underwriting profitability. We believe that underwriting profitability is a fundamental component of our long-term financial strength because it allows our insurance subsidiaries to generate profits without relying exclusively on their investment income for profitability. Our insurance subsidiaries seek to enhance their underwriting results by:

- carefully selecting the product lines they underwrite;

- carefully selecting the individual risks they underwrite;
- minimizing their individual exposure to catastrophe-prone areas; and
- evaluating their claims history on a regular basis to ensure the adequacy of their underwriting guidelines and product pricing.

Our insurance subsidiaries have no material exposures to asbestos or environmental liabilities. Our insurance subsidiaries seek to provide more than one policy to a given personal lines or commercial lines customer because this "account selling" strategy diversifies their risk and has historically improved their underwriting results. Our insurance subsidiaries also use reinsurance to manage their exposure and limit their maximum net loss from large single risks or risks in concentrated areas.

- ***Pursuing profitable growth by organic expansion within the traditional operating territories of our insurance subsidiaries through developing and maintaining quality agency representation.***

We believe that continued expansion of our insurance subsidiaries within their existing markets will be a key source of their continued premium growth and that maintaining an effective and growing network of independent agencies is integral to their expansion. Our insurance subsidiaries seek to be among the top three insurers within each of the independent agencies for the lines of business our insurance subsidiaries write by providing a consistent, competitive and stable market for their products. We believe that the consistency of the product offerings of our insurance subsidiaries enables our insurance subsidiaries to compete effectively for independent agents with other insurers whose product offerings may fluctuate based on industry conditions. Our insurance subsidiaries offer a competitive compensation program to their independent agents that rewards them for producing profitable growth for our insurance subsidiaries. Our insurance subsidiaries provide their independent agents with ongoing support to enable them to better attract and service customers, including:

- fully automated underwriting and policy issuance systems for personal, commercial and farm lines of insurance;
- training programs;
- marketing support;
- availability of a service center that provides comprehensive service for our personal lines policyholders; and
- field visitations by marketing and underwriting personnel and senior management of our insurance subsidiaries.

Our insurance subsidiaries appoint independent agencies with a strong underwriting and growth track record. We believe that our insurance subsidiaries, by carefully selecting, motivating and supporting their independent agencies, will drive continued long-term growth.

- ***Acquiring property and casualty insurance companies to augment the organic growth of our insurance subsidiaries in existing markets and to expand into new geographic regions.***

We have been an effective consolidator of smaller "main street" property and casualty insurance companies, and we expect to continue to acquire other insurance companies to expand our business in a given region or to commence operations in a new region.

Since 1995, we have completed six acquisitions of property and casualty insurance companies or participated in their business through Donegal Mutual's entry into quota-share reinsurance agreements with them. We intend to continue our growth by pursuing affiliations and acquisitions that meet our criteria. Our primary criteria are:

- location in regions where our insurance subsidiaries are currently conducting business or that offer an attractive opportunity to conduct profitable business;
- a mix of business similar to the mix of business of our insurance subsidiaries;
- annual premium volume up to $100.0 million; and
- fair and reasonable transaction terms.

We believe that our relationship with Donegal Mutual assists us in pursuing affiliations with, and subsequent acquisitions of, mutual insurance companies because, through Donegal Mutual, we understand the concerns and issues that mutual insurance companies face. In particular, Donegal Mutual has had success affiliating with underperforming mutual insurance companies, and we have either acquired them following their conversion to a stock company or benefited from their underwriting results as a result of Donegal Mutual's entry into a 100% quota-share reinsurance agreement with them and placement of its assumed business into the pooling agreement. We have utilized our strengths and financial position to improve the operations of those underperforming insurance companies. We evaluate a number of areas for operational synergies when considering acquisitions, including product underwriting, expenses, the cost of reinsurance and technology.

We and Donegal Mutual have the ability to employ a number of acquisition and affiliation methods. Our prior acquisitions and affiliations have taken one of the following forms:

- purchase of all of the outstanding stock of a stock insurance company;
- purchase of a book of business;
- quota-share reinsurance transaction;
- merger of a mutual company into Donegal Mutual; or
- two-step acquisition of a mutual insurance company in which:
  - as the first step, Donegal Mutual purchases a surplus note from the mutual insurance company, Donegal Mutual enters into a services agreement with the mutual insurance company and Donegal Mutual's designees become a majority of the members of the board of directors of the mutual insurance company; and
  - as the second step, the mutual insurance company enters into a quota-share reinsurance agreement with Donegal Mutual or demutualizes, or converts, into a stock insurance company. Upon the demutualization or conversion, we purchase the surplus note from Donegal Mutual and exchange it for all of the stock of the stock insurance company resulting from the demutualization or conversion.

We believe that our ability to make direct acquisitions of stock insurance companies and to make indirect acquisitions of mutual insurance companies through a sponsored conversion or a quota-share reinsurance agreement provides us with flexibility that is a competitive advantage in making acquisitions. We also believe our historic record clearly demonstrates our ability to acquire control of an underperforming insurance company, re-underwrite its book of business, reduce its cost structure and return it to sustained profitability.

While Donegal Mutual and we generally engage in preliminary discussions with potential direct or indirect acquisition candidates on an almost continuous basis and are so engaged at the date of this Form 10-K Report, neither Donegal Mutual nor we make any public disclosure regarding a proposed acquisition until Donegal Mutual or we have entered into a definitive acquisition agreement.

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The following table highlights our history of insurance company acquisitions and affiliations since 1988:

Company Name	State of Domicile	Year Control Acquired	Method of Acquisition/Affiliation
Southern Mutual Insurance Company and now Southern Insurance Company of Virginia	Virginia	1984	Surplus note investment by Donegal Mutual in 1984; demutualization in 1988; acquisition of stock by us in 1988.
Pioneer Mutual Insurance Company and then Pioneer Insurance Company (1)(2)	Ohio	1992	Surplus note investment by Donegal Mutual in 1992; demutualization in 1993; acquisition of stock by us in 1997.
Delaware Mutual Insurance Company and then Delaware Atlantic Insurance Company (1)(2)	Delaware	1993	Surplus note investment by Donegal Mutual in 1993; demutualization in 1994; acquisition of stock by us in 1995.
Pioneer Mutual Insurance Company and then Pioneer Insurance Company (1)(2)	New York	1995	Surplus note investment by Donegal Mutual in 1995; demutualization in 1998; acquisition of stock by us in 2001.
Southern Heritage Insurance Company (2)	Georgia	1998	Purchase of stock by us in 1998.
Le Mars Mutual Insurance Company of Iowa and now Le Mars Insurance Company (1)	Iowa	2002	Surplus note investment by Donegal Mutual in 2002; demutualization in 2004; acquisition of stock by us in 2004.
Peninsula Insurance Group	Maryland	2004	Purchase of stock by us in 2004.
Sheboygan Falls Mutual Insurance Company and now Sheboygan Falls Insurance Company (1)	Wisconsin	2007	Contribution note investment by Donegal Mutual in 2007; demutualization in 2008; acquisition of stock by us in 2008.
Southern Mutual Insurance Company (3)	Georgia	2009	Surplus note investment by Donegal Mutual and quota-share reinsurance in 2009.
Michigan Insurance Company	Michigan	2010	Purchase of stock by us and surplus note investment by Donegal Mutual in 2010.

(1) Each of these acquisitions initially took the form of an affiliation with Donegal Mutual. Donegal Mutual provided surplus note financing to the insurance company, and, in connection with that financing, sufficient designees of Donegal Mutual were appointed so as to constitute a majority of the members of the board of directors of the insurance company. Donegal Mutual and the insurance company simultaneously entered into a services agreement whereby Donegal Mutual provided services to improve the operations of the insurance company. Once the insurance company's results of operations improved to the satisfaction of Donegal Mutual, Donegal Mutual sponsored the demutualization of the insurance company. Upon the consummation of the demutualization, Donegal Mutual converted the surplus note to capital stock of the newly demutualized insurance company. We then purchased all of the capital stock of the insurance company from Donegal Mutual and made an additional capital contribution in cash to provide adequate surplus to support the insurance company's planned premium growth.

(2) To reduce administrative and compliance costs and expenses, these subsidiaries subsequently merged into one of our existing insurance subsidiaries.

(3) Control acquired by Donegal Mutual.

- ***Providing responsive and friendly customer and agent service to enable our insurance subsidiaries to attract new policyholders and retain existing policyholders.***

We believe that excellent policyholder service is important in attracting new policyholders and retaining existing policyholders. Our insurance subsidiaries work closely with their independent agents to provide a consistently responsive level of claims service, underwriting and customer support. Our insurance subsidiaries seek to respond expeditiously and effectively to address customer and independent agent inquiries in a number of ways, including:

- availability of a customer call center for claims reporting;

- availability of a secure website for access to policy information and documents, payment processing and other features;
- timely replies to information requests and policy submissions; and
- prompt responses to, and processing of, claims.

Our insurance subsidiaries periodically conduct policyholder surveys to evaluate the effectiveness of their service to policyholders. The management of our insurance subsidiaries meets on a regular basis with the personnel of the independent insurance agents our insurance subsidiaries appoint to seek service improvement recommendations, react to service issues and better understand local market conditions.

- ***Maintaining premium rate adequacy to enhance the underwriting results of our insurance subsidiaries, while maintaining their existing book of business and preserving their ability to write new business.***

Our insurance subsidiaries maintain discipline in their pricing by effecting rate increases to sustain or improve their underwriting results without unduly affecting their customer retention. In addition to appropriate pricing, our insurance subsidiaries seek to ensure that their premium rates are adequate relative to the amount of risk they insure. Our insurance subsidiaries review loss trends on a periodic basis to identify changes in the frequency and severity of their claims and to assess the adequacy of their rates and underwriting standards. Our insurance subsidiaries also carefully monitor and audit the information they use to price their policies for the purpose of enabling them to receive an adequate level of premiums for the risk they assume. For example, our insurance subsidiaries inspect substantially all commercial lines risks and a substantial number of personal lines property risks before they commit to insure them to determine the adequacy of the insured amount to the value of the insured property, assess property conditions and identify any liability exposures. Our insurance subsidiaries audit the payroll data of their workers' compensation customers to verify that the assumptions used to price a particular policy were accurate. By implementing appropriate rate increases and understanding the risks our insurance subsidiaries agree to insure, our insurance subsidiaries seek to achieve consistent underwriting profitability.

- ***Focusing on expense controls and utilization of technology to increase the operating efficiency of our insurance subsidiaries.***

Our insurance subsidiaries maintain stringent expense controls under direct supervision of their senior management. We centralize many processing and administrative activities of our insurance subsidiaries to realize operating synergies and better expense control. Our insurance subsidiaries utilize technology to automate much of their underwriting and to facilitate agency and policyholder communications on an efficient, timely and cost-effective basis. We operate on a paperless basis. Our insurance subsidiaries have increased their annual premium per employee, a measure of efficiency that our insurance subsidiaries use to evaluate their operations, from approximately $470,000 in 1999 to approximately $1.1 million in 2017.

Our insurance subsidiaries maintain technology comparable to that of their larger competitors. "Ease of doing business" is an increasingly important component of an insurer's value to an independent agency. Our insurance subsidiaries provide a fully automated personal lines underwriting and policy issuance system called "WritePro®." WritePro® is a web-based user interface that substantially eases data entry and facilitates the quoting and issuance of policies for the independent agents of our insurance subsidiaries. Our insurance subsidiaries also provide a similar commercial business system called "WriteBiz®." WriteBiz® is a web-based user interface that provides the independent agents of our insurance subsidiaries with an online ability to quote and issue commercial automobile, workers' compensation, business owners and tradesman policies automatically. WriteFarm® is a web-based user interface that provides the independent agents of our insurance subsidiaries with an online ability to quote and issue farm policies. As a result, applications of the independent agents for our insurance subsidiaries can result in policy issuance without further re-entry of information. These systems also interface with the policy management systems of the independent agents of our insurance subsidiaries.

- ***Maintaining a conservative investment approach.***

Return on invested assets is an important element of the financial results of our insurance subsidiaries. The investment strategy of our insurance subsidiaries is to generate an appropriate amount of after-tax income on invested assets while minimizing credit risk through investments in high-quality securities. As a result, our insurance subsidiaries seek to invest a high percentage of their assets in diversified, highly rated and marketable fixed-maturity instruments. The fixed-maturity portfolios of our insurance subsidiaries consist of both taxable and tax-exempt securities. Our insurance subsidiaries maintain a portion of their portfolios in short-term securities to provide liquidity for the payment of claims and operation of their respective businesses. Our insurance subsidiaries maintain a small percentage (5.0% at December 31, 2017) of their portfolios in equity securities.

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Competition

The property and casualty insurance industry is highly competitive on the basis of both price and service. Numerous companies compete for business in the geographic areas where our insurance subsidiaries operate. Many of these other insurance companies are substantially larger and have greater financial resources than those of our insurance subsidiaries. In addition, because our insurance subsidiaries and Donegal Mutual market their respective insurance products exclusively through independent insurance agencies, most of which represent more than one insurance company, our insurance subsidiaries face competition within agencies, as well as competition to retain qualified independent agents.

Products and Underwriting

We report the results of our insurance operations in two segments: personal lines of insurance and commercial lines of insurance. The personal lines our insurance subsidiaries write consist primarily of private passenger automobile and homeowners insurance. The commercial lines our insurance subsidiaries write consist primarily of commercial automobile, commercial multi-peril and workers' compensation insurance. We describe these lines of insurance in greater detail below:

Personal

- Private passenger automobile — policies that provide protection against liability for bodily injury and property damage arising from automobile accidents and protection against loss from damage to automobiles owned by the insured.
- Homeowners — policies that provide coverage for damage to residences and their contents from a broad range of perils, including fire, lightning, windstorm and theft. These policies also cover liability of the insured arising from injury to other persons or their property while on the insured's property and under other specified conditions.

Commercial

- Commercial automobile — policies that provide protection against liability for bodily injury and property damage arising from automobile accidents and protection against loss from damage to automobiles owned by the insured.
- Commercial multi-peril — policies that provide protection to businesses against many perils, usually combining liability and physical damage coverages.
- Workers' compensation — policies employers purchase to provide benefits to employees for injuries sustained during employment. The workers' compensation laws of each state determine the extent of the coverage we provide.

The following table sets forth the net premiums written of our insurance subsidiaries by line of insurance for the periods indicated:

	Year Ended December 31,					
	2017		2016		2015	
(dollars in thousands)	Amount	%	Amount	%	Amount	%
Personal lines:						
Automobile	$255,297	35.0%	$229,789	33.7%	$214,610	34.1%
Homeowners	125,054	17.2	122,811	18.0	119,541	19.0
Other	19,672	2.7	19,057	2.8	18,176	2.9
Total personal lines	400,023	54.9	371,657	54.5	352,327	56.0
Commercial lines:						
Automobile	99,333	13.6	87,849	12.9	76,729	12.2
Commercial multi-peril	110,313	15.1	104,728	15.4	94,219	15.0
Workers' compensation	109,884	15.1	108,349	15.9	98,079	15.6
Other	9,586	1.3	9,451	1.3	7,483	1.2
Total commercial lines	329,116	45.1	310,377	45.5	276,510	44.0
Total business	$729,139	100.0%	$682,034	100.0%	$628,837	100.0%

The personal lines and commercial lines underwriting departments of our insurance subsidiaries evaluate and select those risks that they believe will enable our insurance subsidiaries to achieve an underwriting profit. The underwriting departments have significant interaction with the independent agents regarding the underwriting philosophy and the underwriting guidelines of our insurance subsidiaries. Our underwriting personnel also assist the research and development department in the development of quality products at competitive prices to promote growth and profitability.

In order to achieve underwriting profitability on a consistent basis, our insurance subsidiaries:

- assess and select primarily standard and preferred risks;
- adhere to disciplined underwriting guidelines;
- inspect substantially all commercial lines risks and a substantial number of personal lines property risks; and
- utilize various types of risk management and loss control services.

Our insurance subsidiaries also review their existing policies and accounts to determine whether those risks continue to meet their underwriting guidelines. If a given policy or account no longer meets those underwriting guidelines, our insurance subsidiaries will take appropriate action regarding that policy or account, including raising premium rates or non-renewing the policy to the extent applicable law permits.

As part of the effort of our insurance subsidiaries to maintain acceptable underwriting results, they conduct annual reviews of agencies that have failed to meet their underwriting profitability criteria. The review process includes an analysis of the underwriting and re-underwriting practices of the agency, the completeness and accuracy of the applications the agency submits, the adequacy of the training of the agency's staff and the agency's record of adherence to the underwriting guidelines and service standards of our insurance subsidiaries. Based on the results of this review process, the marketing and underwriting personnel of our insurance subsidiaries develop, together with the agency, a plan to improve its underwriting profitability. Our insurance subsidiaries monitor the agency's compliance with the plan and take other measures as required in the judgment of our insurance subsidiaries, including the termination to the extent applicable law permits of agencies that are unable to achieve acceptable underwriting profitability.

Distribution

Our insurance subsidiaries market their products primarily in the Mid-Atlantic, Midwestern, New England and Southern regions through approximately 2,400 independent insurance agencies. At December 31, 2017, the Donegal Insurance Group actively wrote business in 22 states (Alabama, Delaware, Georgia, Illinois, Indiana, Iowa, Maine, Maryland, Michigan, Nebraska, New Hampshire, New York, North Carolina, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee, Vermont, Virginia, West Virginia and Wisconsin). Donegal Mutual and its subsidiaries also write business in four Southwestern states (Colorado, New Mexico, Texas and Utah). Donegal Mutual currently excludes the business written in these four states from the pooling agreement between Donegal Mutual and Atlantic States. As a result, this business has no impact on our results of operations. We believe the relationships of our insurance subsidiaries with their independent agents are valuable in identifying, obtaining and retaining profitable business. Our insurance subsidiaries maintain a stringent agency selection procedure that emphasizes appointing agencies with proven marketing strategies for the development of profitable business, and our insurance subsidiaries only appoint agencies with a strong underwriting history and potential growth capabilities. Our insurance subsidiaries also regularly evaluate the independent agencies that represent them based on their profitability and performance in relation to the objectives of our insurance subsidiaries. Our insurance subsidiaries seek to be among the top three insurers within each of their agencies for the lines of business our insurance subsidiaries write.

The following table sets forth the percentage of direct premiums our insurance subsidiaries write, including 80% of the direct premiums Donegal Mutual and Atlantic States write, in each of the states where they conducted a significant portion of their business in 2017:

Pennsylvania	34.4%
Michigan	14.9
Maryland	8.8
Virginia	8.4
Georgia	7.6
Delaware	5.5
Wisconsin	3.7
Ohio	3.2
Iowa	2.8
Nebraska	2.6
Tennessee	2.4
South Dakota	1.2
Other	4.5
Total	100.0%

Our insurance subsidiaries employ a number of policies and procedures that we believe enable them to attract, retain and motivate their independent agents. We believe that the consistency of the product offerings of our insurance subsidiaries enables our insurance subsidiaries to compete effectively for independent agents with other insurers whose product offerings may fluctuate based upon industry conditions. Our insurance subsidiaries have a competitive profit-sharing plan for their independent agents, consistent with applicable state laws and regulations, under which the independent agents may earn additional commissions based upon the volume of premiums produced and the profitability of the business our insurance subsidiaries receive from that agency.

Our insurance subsidiaries encourage their independent agents to focus on “account selling,” or serving all of a particular insured’s property and casualty insurance needs, which our insurance subsidiaries believe generally results in more favorable loss experience than covering a single risk for an individual insured.

Technology

Donegal Mutual owns the majority of the technology systems our insurance subsidiaries use. The technology systems consist primarily of an integrated central processing computer system, a series of server-based computer networks and various communication systems that allow the home office of our insurance subsidiaries and their branch offices to utilize the same systems for the processing of business. Donegal Mutual maintains backup facilities and systems at the office of one of our insurance subsidiaries and tests these backup facilities and systems on a regular basis. Our insurance subsidiaries bear their proportionate share of information services expenses based on their respective percentage of the total net premiums written of the Donegal Insurance Group during the preceding calendar year.

The business strategy of our insurance subsidiaries depends on the use, development and implementation of integrated technology systems. These systems enable our insurance subsidiaries to provide a high level of service to agents and policyholders by processing business in a timely and efficient manner, communicating and sharing data with agents, providing a variety of methods for the payment of premiums and allowing for the accumulation and analysis of information for the management of our insurance subsidiaries.

We believe the availability and use of these technology systems has resulted in improved service to agents and policyholders, increased efficiencies in processing the business of our insurance subsidiaries and lower operating costs. Key components of these integrated technology systems are the agency interface system, the WritePro®, WriteBiz® and WriteFarm® systems, a claims processing system and an imaging system. The agency interface system provides our insurance subsidiaries with a high level of data sharing both to and from agents' systems and also provides agents with an integrated means of processing new business. The WritePro®, WriteBiz® and WriteFarm® systems are fully automated underwriting and policy issuance systems that provide agents with the ability to generate underwritten quotes and automatically issue policies that meet the underwriting guidelines of our insurance subsidiaries with limited or no intervention by their personnel. The claims processing system allows our insurance subsidiaries to process claims efficiently and in an automated environment. The imaging system eliminates the need to handle paper files, while providing greater access to the same information by a variety of personnel. We believe our technology systems compare favorably to those of many national property and casualty insurance carriers in terms of quality and service levels.

Claims

The management of claims is a critical component of the philosophy of our insurance subsidiaries to achieve underwriting profitability on a consistent basis and is fundamental to the successful operations of our insurance subsidiaries and their dedication to excellent service. Our senior claims management oversees the claims processing units of each of our insurance subsidiaries to assure consistency in the claims settlement process. The field office staff of our insurance subsidiaries receives support from home office technical, litigation, material damage, subrogation and medical audit personnel.

The claims departments of our insurance subsidiaries rigorously manage claims to assure that they settle legitimate claims quickly and fairly and that they identify questionable claims for defense. In the majority of cases, the personnel of our insurance subsidiaries, who have significant experience in the property and casualty insurance industry and know the service philosophy of our insurance subsidiaries, adjust claims. Our insurance subsidiaries provide various means of claims reporting on a 24-hours a day, seven-days a week basis, including toll-free numbers and electronic reporting through our website and mobile applications. Our insurance subsidiaries strive to respond to notifications of claims promptly, generally within the day reported. Our insurance subsidiaries believe that, by responding promptly to claims, they provide quality customer service and minimize the ultimate cost of the claims. Our insurance subsidiaries engage independent adjusters as needed to handle claims in areas in which the volume of claims is not sufficient to justify the hiring of internal claims adjusters by our insurance subsidiaries. Our insurance subsidiaries also employ private adjusters and investigators, structural experts and various outside legal counsel to supplement their internal staff and to assist in the investigation of claims. Our insurance subsidiaries have a special investigative unit staffed by former law enforcement officers that attempts to identify and prevent fraud and abuse and to investigate questionable claims.

The management of the claims departments of our insurance subsidiaries develops and implements policies and procedures for the establishment of adequate claim reserves. Our insurance subsidiaries employ an actuarial staff that regularly reviews their reserves for incurred but not reported claims. The management and staff of the claims departments resolve policy coverage issues, manage and process reinsurance recoveries and handle salvage and subrogation matters. The litigation and personal injury sections of our insurance subsidiaries manage all claims litigation. Branch office claims above certain thresholds require home office review and settlement authorization. Our insurance subsidiaries provide their claims adjusters reserving and settlement authority based upon their experience and demonstrated abilities. Larger or more complicated claims require consultation and approval of senior claims department management.

Liabilities for Losses and Loss Expenses

Liabilities for losses and loss expenses are estimates at a given point in time of the amounts an insurer expects to pay with respect to incurred policyholder claims based on facts and circumstances the insurer knows at that point in time. At the time of establishing its estimates, an insurer recognizes that its ultimate liability for losses and loss expenses will exceed or be less than such estimates. Our insurance subsidiaries base their estimates of liabilities for losses and loss expenses on assumptions as to future loss trends, expected claims severity, judicial theories of liability and other factors. However, during the loss adjustment period, our insurance subsidiaries may learn additional facts regarding individual claims, and, consequently, it often becomes necessary for our insurance subsidiaries to refine and adjust their estimates for these liabilities. We reflect any adjustments to the liabilities for losses and loss expenses of our insurance subsidiaries in our consolidated results of operations in the period in which our insurance subsidiaries make adjustments to their estimates.

Our insurance subsidiaries maintain liabilities for the payment of losses and loss expenses with respect to both reported and unreported claims. Our insurance subsidiaries establish these liabilities for the purpose of covering the ultimate costs of settling all losses, including investigation and litigation costs. Our insurance subsidiaries base the amount of their liability for reported losses primarily upon a case-by-case evaluation of the type of risk involved, knowledge of the circumstances surrounding each claim and the insurance policy provisions relating to the type of loss the policyholder incurred. Our insurance subsidiaries determine the amount of their liability for unreported claims and loss expenses on the basis of historical information by line of insurance. Our insurance subsidiaries account for inflation in the reserving function through analysis of costs and trends and reviews of historical reserving results. Our insurance subsidiaries monitor their liabilities closely and recompute them periodically using new information on reported claims and a variety of statistical techniques. Our insurance subsidiaries do not discount their liabilities for losses and loss expenses.

Reserve estimates can change over time because of unexpected changes in assumptions related to our insurance subsidiaries' external environment and, to a lesser extent, assumptions related to our insurance subsidiaries' internal operations. For example, our insurance subsidiaries have experienced a decrease in claims frequency on workers' compensation claims during the past several years while the severity of these claims has gradually increased. These trend changes give rise to greater uncertainty as to the pattern of future loss settlements on workers' compensation claims. Related uncertainties regarding future trends include the cost of medical technologies and procedures and changes in the utilization of medical procedures. Assumptions related to our insurance subsidiaries' external environment include the absence of significant changes in tort law and the legal environment that increase liability exposure, consistency in judicial interpretations of insurance coverage and policy provisions and the rate of loss cost inflation. Internal assumptions include consistency in the recording of premium and loss statistics, consistency in the recording of claims, payment and case reserving methodology, accurate measurement of the impact of rate changes and changes in policy provisions, consistency in the quality and characteristics of business written within a given line of business and consistency in reinsurance coverage and collectability of reinsured losses, among other items. To the extent our insurance subsidiaries determine that underlying factors impacting their assumptions have changed, our insurance subsidiaries make adjustments in their reserves that they consider appropriate for such changes. Accordingly, our insurance subsidiaries' ultimate liability for unpaid losses and loss expenses will likely differ from the amount recorded at December 31, 2017. For every 1% change in our insurance subsidiaries' loss and loss expense reserves, net of reinsurance recoverable, the effect on our pre-tax results of operations would be approximately $3.8 million.

The establishment of appropriate liabilities is an inherently uncertain process and we can provide no assurance that our insurance subsidiaries' ultimate liability will not exceed our insurance subsidiaries' loss and loss expense reserves and have an adverse effect on our results of operations and financial condition. Furthermore, we cannot predict the timing, frequency and extent of adjustments to our insurance subsidiaries' estimated future liabilities, because the historical conditions and events that serve as a basis for our insurance subsidiaries' estimates of ultimate claim costs may change. As is the case for substantially all property and casualty insurance companies, our insurance subsidiaries have found it necessary in the past to increase their estimated future liabilities for losses and loss expenses in certain periods and, in other periods, their estimated future liabilities for losses and loss expenses have exceeded their actual liabilities for losses and loss expenses. Changes in our insurance subsidiaries' estimates of their liability for losses and loss expenses generally reflect actual payments and their evaluation of information received subsequent to the prior reporting period. Our insurance subsidiaries recognized an increase in their liability for losses and loss expenses of prior years of $6.6 million, $3.0 million and $7.2 million in 2017, 2016 and 2015, respectively. Our insurance subsidiaries made no significant changes in their reserving philosophy, key reserving assumptions or claims management personnel, and they have made no significant offsetting changes in estimates that increased or decreased their loss and loss expense reserves in these years. The 2017 development represented 1.9% of the December 31, 2016 net carried reserves and resulted primarily from higher-than-expected severity in the commercial multiple peril, personal automobile and commercial automobile lines of business, offset by lower-than-expected severity in the workers' compensation line of business, in accident years prior to 2017. The majority of the 2017 development related to increases in the liability for losses and loss expenses of prior years for Atlantic States and Peninsula. The 2016 development represented 0.9% of the December 31, 2015 net carried reserves and resulted primarily from higher-than-expected severity in the commercial multiple peril and commercial automobile liability lines of business, offset by lower-than-expected severity in the workers' compensation line of business, in accident years prior to 2016. The majority of the 2016 development related to increases in the liability for losses and loss expenses of prior years for Atlantic States and Southern. The 2015 development represented 2.5% of the December 31, 2014 net carried reserves and resulted primarily from higher-than-expected severity in the private passenger automobile liability, commercial multiple peril and commercial automobile lines of business in accident years prior to 2015. The majority of the 2015 development related to increases in the liability for losses and loss expenses of prior years for Atlantic States and Southern.

Excluding the impact of severe weather events, our insurance subsidiaries have noted stable amounts in the number of claims incurred and a slight downward trend in the number of claims outstanding at period ends relative to their premium base in recent years across most of their lines of business. However, the amount of the average claim outstanding has increased gradually over the past several years due to various factors such as rising medical loss costs and increased litigation trends. We have also experienced a general slowing of settlement rates in litigated claims. Our insurance subsidiaries could have to make further adjustments to their estimates in the future. However, on the basis of our insurance subsidiaries' internal procedures, which analyze, among other things, their prior assumptions, their experience with similar cases and historical trends such as reserving patterns, loss payments, pending levels of unpaid claims and product mix, as well as court decisions, economic conditions and public attitudes, we believe that our insurance subsidiaries have made adequate provision for their liability for losses and loss expenses.

Atlantic States' participation in the pool with Donegal Mutual exposes Atlantic States to adverse loss development on the business of Donegal Mutual that the pool includes. However, pooled business represents the predominant percentage of the net underwriting activity of both companies, and Donegal Mutual and Atlantic States share proportionately any adverse risk development relating to the pooled business. The business in the pool is homogeneous and each company has a pro-rata share of the entire pool. Since the predominant percentage of the business of Atlantic States and Donegal Mutual is pooled and the results shared by each company according to its participation level under the terms of the pooling agreement, the intent of the underwriting pool is to produce a more uniform and stable underwriting result from year to year for each company than either would experience individually and to spread the risk of loss between the companies.

Donegal Mutual and our insurance subsidiaries operate together as the Donegal Insurance Group and share a combined business plan designed to achieve market penetration and underwriting profitability objectives. The products our insurance subsidiaries and Donegal Mutual offer are generally complementary, thereby allowing Donegal Insurance Group to offer a broader range of products to a given market and to expand Donegal Insurance Group's ability to service an entire personal lines or commercial lines account. Distinctions within the products of Donegal Mutual and our insurance subsidiaries generally relate to specific risk profiles targeted within similar classes of business, such as preferred tier products compared to standard tier products, but we do not allocate all of the standard risk gradients to one company. Therefore, the underwriting profitability of the business the individual companies write directly will vary. However, because the pool homogenizes the risk characteristics of the predominant percentage of the business Donegal Mutual and Atlantic States write directly and each company shares the underwriting results according to each company's participation percentage, each company realizes its percentage share of the underwriting results of the pool.

Differences between liabilities reported in our financial statements prepared on a GAAP basis and our insurance subsidiaries' financial statements prepared on a SAP basis result from anticipating salvage and subrogation recoveries for GAAP but not for SAP. These differences amounted to $18.0 million, $16.8 million and $15.3 million at December 31, 2017, 2016 and 2015, respectively.

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The following table sets forth a reconciliation of the beginning and ending GAAP net liability of our insurance subsidiaries for unpaid losses and loss expenses for the periods indicated:

(in thousands)	Year Ended December 31, 2017	2016	2015
Gross liability for unpaid losses and loss expenses at beginning of year	$606,665	$578,205	$538,258
Less reinsurance recoverable	259,147	256,151	245,957
Net liability for unpaid losses and loss expenses at beginning of year	347,518	322,054	292,301
Provision for net losses and loss expenses for claims incurred in the current year	480,647	420,327	391,167
Change in provision for estimated net losses and loss expenses for claims incurred in prior years	6,621	2,989	7,200
Total incurred	487,268	423,316	398,367
Net losses and loss expense payments for claims incurred during:			
The current year	288,380	248,106	236,835
Prior years	163,005	149,746	131,779
Total paid	451,385	397,852	368,614
Net liability for unpaid losses and loss expenses at end of year	383,401	347,518	322,054
Plus reinsurance recoverable	293,271	259,147	256,151
Gross liability for unpaid losses and loss expenses at end of year	$676,672	$606,665	$578,205

The following table sets forth the development of the liability for net unpaid losses and loss expenses of our insurance subsidiaries from 2007 to 2017. Loss data in the table includes business Atlantic States received from the underwriting pool.

"Net liability at end of year for unpaid losses and loss expenses" sets forth the estimated liability for net unpaid losses and loss expenses recorded at the balance sheet date for each of the indicated years. This liability represents the estimated amount of net losses and loss expenses for claims arising in the current and all prior years that are unpaid at the balance sheet date, including losses incurred but not reported.

The "Net liability re-estimated as of" portion of the table shows the re-estimated amount of the previously recorded liability based on experience for each succeeding year. The estimate increases or decreases as payments are made and more information becomes known about the severity of the remaining unpaid claims. For example, the 2007 liability has developed a deficiency after ten years because we expect the re-estimated net losses and loss expenses to be $2.5 million more than the estimated liability we initially established in 2007 of $150.2 million.

The "Cumulative deficiency (excess)" shows the cumulative deficiency or excess at December 31, 2017 of the liability estimate shown on the top line of the corresponding column. A deficiency in liability means that the liability established in prior years was less than the amount of actual payments and currently re-estimated remaining unpaid liability. An excess in liability means that the liability established in prior years exceeded the amount of actual payments and currently re-estimated unpaid liability remaining.

The "Cumulative amount of liability paid through" portion of the table shows the cumulative net losses and loss expense payments made in succeeding years for net losses incurred prior to the balance sheet date. For example, the 2007 column indicates that at December 31, 2017 payments equal to $149.3 million of the currently re-estimated ultimate liability for net losses and loss expenses of $152.7 million had been made.

Amounts shown in the 2008 column of the table include information for Sheboygan for all accident years prior to 2008. Amounts shown in the 2010 column of the table include information for MICO for all accident years prior to 2010.

(in thousands)	Year Ended December 31, 2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Net liability at end of year for unpaid losses and loss expenses	$150,152	$161,307	$180,262	$217,896	$243,015	$250,936	$265,605	$292,301	$322,054	$347,518	$383,401
Net liability re-estimated as of:											
One year later	152,836	171,130	177,377	217,728	250,611	261,294	280,074	299,501	325,043	354,139	
Two years later	154,435	167,446	177,741	217,355	255,612	268,877	281,782	299,919	329,115		
Three years later	152,315	166,756	178,403	218,449	257,349	270,473	281,666	304,855			
Four years later	151,120	166,852	179,909	218,514	256,460	270,794	284,429				
Five years later	151,287	166,788	179,961	218,202	255,660	271,954					
Six years later	151,739	166,964	179,858	217,430	256,388						
Seven years later	151,790	167,425	179,996	217,703							
Eight years later	152,240	167,732	180,130								
Nine years later	152,760	167,508									
Ten years later	152,680										
Cumulative deficiency (excess)	2,528	6,201	(132)	(193)	13,373	21,018	18,824	12,554	7,061	6,621	
Cumulative amount of liability paid through:											
One year later	$ 71,950	$ 79,592	$ 84,565	$ 96,202	$119,074	$126,677	$131,766	$131,779	$149,746	$163,005	
Two years later	105,576	116,035	123,204	148,140	181,288	191,208	194,169	206,637	228,506		
Three years later	124,659	136,837	147,165	178,073	217,138	225,956	233,371	251,654			
Four years later	135,392	148,243	161,363	195,948	234,392	245,094	255,451				
Five years later	140,280	155,331	169,452	203,633	241,538	254,502					
Six years later	143,778	160,324	173,153	206,731	245,774						
Seven years later	146,491	162,531	174,376	209,527							
Eight years later	148,235	163,432	175,662								
Nine years later	149,013	163,870									
Ten years later	149,341										

(in thousands)	Year Ended December 31, 2009	2010	2011	2012	2013	2014	2015	2016	2017
Gross liability at end of year	$263,599	$383,317	$442,408	$458,827	$495,619	$538,258	$578,205	$606,665	$676,672
Reinsurance recoverable	83,337	165,421	199,393	207,891	230,014	245,957	256,151	259,147	293,271
Net liability at end of year	180,262	217,896	243,015	250,936	265,605	292,301	322,054	347,518	383,401
Gross re-estimated liability	270,771	341,095	470,727	497,106	525,946	564,997	591,748	616,465	
Re-estimated recoverable	90,641	123,392	214,339	225,152	241,517	260,142	262,633	262,326	
Net re-estimated liability	180,130	217,703	256,388	271,954	284,429	304,855	329,115	354,139	
Gross cumulative deficiency (excess)	7,172	(42,222)	28,319	38,279	30,327	26,739	13,543	9,800	

Third-Party Reinsurance

Our insurance subsidiaries and Donegal Mutual purchase certain third-party reinsurance on a combined basis. Le Mars, Peninsula, Sheboygan and MICO also have separate reinsurance programs that provide certain coverage that is commensurate with their relative size and exposures. Our insurance subsidiaries use several different reinsurers, all of which, consistent with the requirements of our insurance subsidiaries and Donegal Mutual, have an A.M. Best rating of A- (Excellent) or better or, with respect to foreign reinsurers, have a financial condition that, in the opinion of our management, is equivalent to a company with at least an A- (Excellent) rating from A.M. Best.

The external reinsurance our insurance subsidiaries and Donegal Mutual purchase includes:

- excess of loss reinsurance, under which the losses of Donegal Mutual and our insurance subsidiaries are automatically reinsured, through a series of contracts, over a set retention (generally $1.0 million); and
- catastrophe reinsurance, under which Donegal Mutual and our insurance subsidiaries recover, through a series of reinsurance agreements, 100% of an accumulation of many losses resulting from a single event, including natural disasters, over a set retention (generally $5.0 million) and after exceeding an annual aggregate deductible ($1.0 million in 2017, $975,000 in 2016 and $1.5 million in 2015) up to aggregate losses of $170.0 million per occurrence.

The amount of coverage each of these types of reinsurance provides depends upon the amount, nature, size and location of the risk being reinsured.

For property insurance, our insurance subsidiaries have excess of loss treaties that provide for coverage of $4.0 million per loss over a set retention of $1.0 million. For liability insurance, our insurance subsidiaries have excess of loss treaties that provide for coverage of $49.0 million per occurrence over a set retention of $1.0 million. For workers' compensation insurance, our insurance subsidiaries have excess of loss treaties that provide for coverage of $9.0 million on any one life over a set retention of $1.0 million and after exceeding an annual aggregate deductible ($1.2 million in 2017 and 2016 and $1.0 million in 2015).

Our insurance subsidiaries and Donegal Mutual also purchase facultative reinsurance to cover exposures from property and casualty losses that exceed the limits provided by their respective treaty reinsurance.

For policies effective through December 31, 2014, MICO maintained a quota-share reinsurance agreement with third-party reinsurers to reduce its net exposures. Effective January 1, 2015, MICO no longer maintains a quota-share reinsurance agreement with third-party reinsurers.

Investments

At December 31, 2017, 99.8% of all debt securities our insurance subsidiaries held had an investment-grade rating. The investment portfolios of our insurance subsidiaries did not contain any mortgage loans or any non-performing assets at December 31, 2017.

The following table shows the composition of the debt securities (at carrying value) in the investment portfolios of our insurance subsidiaries, excluding short-term investments, by rating at December 31, 2017:

(dollars in thousands) Rating[1]	December 31, 2017 Amount	Percent
U.S. Treasury and U.S. agency securities[2]	$ 422,139	46.7%
Aaa or AAA	17,203	1.9
Aa or AA	212,031	23.4
A	155,844	17.2
BBB	96,379	10.6
B	2,005	0.2
Total	$ 905,601	100.0%

(1) Ratings assigned by Moody's Investors Services, Inc. or Standard & Poor's Corporation.
(2) Includes mortgage-backed securities of $306.4 million.

Our insurance subsidiaries invest in both taxable and tax-exempt securities as part of their strategy to maximize after-tax income. Tax-exempt securities made up approximately 24.3%, 32.2% and 40.9% of the fixed-maturity securities in the combined investment portfolios of our insurance subsidiaries at December 31, 2017, 2016 and 2015, respectively.

The following table shows the classification of our investments and the investments of our insurance subsidiaries at December 31, 2017, 2016 and 2015 (at carrying value):

	December 31,					
	2017		2016		2015	
(dollars in thousands)	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total
Fixed maturities[(1)]:						
Held to maturity:						
U.S. Treasury securities and obligations of U.S. government corporations and agencies	$ 71,736	7.1%	$ 61,382	6.5%	$ 51,194	5.7%
Obligations of states and political subdivisions	137,581	13.7	122,793	13.0	119,115	13.2
Corporate securities	108,025	10.7	91,555	9.6	65,307	7.2
Mortgage-backed securities	49,313	4.9	60,371	6.4	74,643	8.3
Total held to maturity	366,655	36.4	336,101	35.5	310,259	34.4
Available for sale:						
U.S. Treasury securities and obligations of U.S. government corporations and agencies	44,049	4.4	38,588	4.1	37,189	4.1
Obligations of states and political subdivisions	132,117	13.1	186,083	19.7	236,556	26.3
Corporate securities	105,740	10.5	87,456	9.2	72,812	8.1
Mortgage-backed securities	257,040	25.6	202,948	21.5	154,836	17.2
Total available for sale	538,946	53.6	515,075	54.5	501,393	55.7
Total fixed maturities	905,601	90.0	851,176	90.0	811,652	90.1
Equity securities[(2)]	50,445	5.0	47,088	5.0	37,261	4.1
Investment in affiliate[(3)]	38,774	3.9	37,885	4.0	38,477	4.3
Short-term investments[(4)]	11,050	1.1	9,371	1.0	13,432	1.5
Total investments	$1,005,870	100.0%	$945,520	100.0%	$900,822	100.0%

(1) We refer to Notes 1 and 4 to our Consolidated Financial Statements. We value those fixed maturities we classify as held to maturity at amortized cost; we value those fixed maturities we classify as available for sale at fair value. The total fair value of fixed maturities we classified as held to maturity was $380.5 million at December 31, 2017, $344.6 million at December 31, 2016 and $322.8 million at December 31, 2015. The amortized cost of fixed maturities we classified as available for sale was $538.4 million at December 31, 2017, $511.6 million at December 31, 2016 and $489.0 million at December 31, 2015.

(2) We value equity securities at fair value. Total cost of equity securities was $44.2 million at December 31, 2017, $42.4 million at December 31, 2016 and $35.8 million at December 31, 2015.

(3) We value our investment in our affiliate at cost, adjusted for our share of earnings and losses of our affiliate as well as changes in equity of our affiliate due to unrealized gains and losses.

(4) We value short-term investments at cost, which approximates fair value.

The following table sets forth the maturities (at carrying value) in the fixed maturity portfolio of our insurance subsidiaries at December 31, 2017, 2016 and 2015:

	December 31,					
	2017		2016		2015	
(dollars in thousands)	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total
Due in[1]:						
One year or less	$ 53,826	6.0%	$ 44,120	5.2%	$ 20,990	2.6%
Over one year through three years	74,140	8.2	90,018	10.6	66,505	8.2
Over three years through five years	82,476	9.1	67,640	7.9	66,410	8.2
Over five years through ten years	221,904	24.5	197,967	23.3	202,122	24.9
Over ten years through fifteen years	131,531	14.5	148,959	17.5	172,429	21.2
Over fifteen years	35,371	3.9	39,153	4.6	53,717	6.6
Mortgage-backed securities	306,353	33.8	263,319	30.9	229,479	28.3
	$905,601	100.0%	$851,176	100.0%	$811,652	100.0%

(1) Based on stated maturity dates with no prepayment assumptions. Actual maturities will differ because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

As shown above, our insurance subsidiaries held investments in mortgage-backed securities having a carrying value of $306.4 million at December 31, 2017. The mortgage-backed securities consist primarily of investments in governmental agency balloon pools with stated maturities between one and 40 years. The stated maturities of these investments limit the exposure of our insurance subsidiaries to extension risk in the event that interest rates rise and prepayments decline. Our insurance subsidiaries perform an analysis of the underlying loans when evaluating a mortgage-backed security for purchase, and they select those securities that they believe will provide a return that properly reflects the prepayment risk associated with the underlying loans.

The following table sets forth the investment results of our insurance subsidiaries for the years ended December 31, 2017, 2016 and 2015:

	Year Ended December 31,		
(dollars in thousands)	2017	2016	2015
Invested assets[1]	$975,695	$923,171	$866,882
Investment income[2]	23,527	22,633	20,950
Average yield	2.4%	2.5%	2.4%
Average tax-equivalent yield	2.8	3.0	3.1

(1) Average of the aggregate invested amounts at the beginning and end of the period.
(2) Investment income is net of investment expenses and does not include realized investment gains or losses or provision for income taxes.

A.M. Best Rating

Donegal Mutual and our insurance subsidiaries have an A.M. Best rating of A (Excellent), based upon the respective current financial condition and historical statutory results of operations of Donegal Mutual and our insurance subsidiaries. We believe that the A.M. Best rating of Donegal Mutual and our insurance subsidiaries is an important factor in their marketing of their products to their agents and customers. A.M. Best’s ratings are industry ratings based on a comparative analysis of the financial condition and operating performance of insurance companies. A.M. Best’s classifications are A++ and A+ (Superior), A and A- (Excellent), B++ and B+ (Good), B and B- (Fair), C++ and C+ (Marginal), C and C- (Weak), D (Poor) and E (Under Regulatory Supervision), F (Liquidation) and S (Suspended). A.M. Best bases its ratings upon factors relevant to the payment of claims of policyholders and are not directed toward the protection of investors in insurance companies. According to A.M. Best, the “Excellent” rating that the Donegal Insurance Group maintains is assigned to those companies that, in A.M. Best’s opinion, have an excellent ability to meet their ongoing obligations to policyholders.

Regulation

The supervision and regulation of insurance companies consists primarily of the laws and regulations of the various states in which the insurance companies transact business, with the primary regulatory authority being the insurance regulatory authorities in the state of domicile of the insurance company. Such supervision and regulation relate to numerous aspects of an insurance company's business and financial condition. The primary purpose of such supervision and regulation is the protection of policyholders. The authority of the state insurance departments includes the establishment of standards of solvency that insurers must meet and maintain, the licensing of insurers and insurance agents to do business, the nature of, and limitations on, investments, premium rates for property and casualty insurance, the provisions that insurers must make for current losses and future liabilities, the deposit of securities for the benefit of policyholders, the approval of policy forms, notice requirements for the cancellation of policies and the approval of certain changes in control. State insurance departments also conduct periodic examinations of the affairs of insurance companies and require the filing of annual and other reports relating to the financial condition of insurance companies.

In addition to state-imposed insurance laws and regulations, the National Association of Insurance Commissioners, or the NAIC, maintains a risk-based capital system, or RBC, for assessing the adequacy of the statutory capital and surplus of insurance companies that augments the states' current fixed dollar minimum capital requirements for insurance companies. At December 31, 2017, our insurance subsidiaries and Donegal Mutual each exceeded by a substantial margin the minimum levels of statutory capital the RBC rules require.

Generally, every state has guaranty fund laws under which insurers licensed to do business in that state can be assessed on the basis of premiums written by the insurer in that state in order to fund policyholder liabilities of insolvent insurance companies. Under these laws in general, an insurer is subject to assessment, depending upon its market share of a given line of business, to assist in the payment of policyholder claims against insolvent insurers. Our insurance subsidiaries and Donegal Mutual have made accruals for their portion of assessments related to such insolvencies based upon the most current information furnished by the guaranty associations.

We are part of an insurance holding company system of which Donegal Mutual is the ultimate controlling person. All of the states in which our insurance companies and Donegal Mutual maintain a domicile have legislation that regulates insurance holding company systems. Each insurance company in the insurance holding company system must register with the insurance supervisory agency of its state of domicile and furnish information concerning the operations of companies within the insurance holding company system that may materially affect the operations, management or financial condition of the insurers within the system. Pursuant to these laws, the respective insurance departments in which our subsidiaries and Donegal Mutual maintain a domicile may examine our insurance subsidiaries or Donegal Mutual at any time, require disclosure of material transactions by the holding company with another member of the insurance holding company system and require prior notice or prior approval of certain transactions, such as "extraordinary dividends" from the insurance subsidiaries to the holding company. We have insurance subsidiaries domiciled in Iowa, Maryland, Michigan, Pennsylvania, Virginia and Wisconsin.

The Pennsylvania Insurance Holding Companies Act, which generally applies to Donegal Mutual, us and our insurance subsidiaries, requires that all transactions within an insurance holding company system to which an insurer is a party must be fair and reasonable and that any charges or fees for services performed must be reasonable. Any management agreement, service agreement, cost sharing arrangement and material reinsurance agreement must be filed with the Pennsylvania Insurance Department, or the Department, and is subject to the Department's review. We have filed with the Department the pooling agreement between Donegal Mutual and Atlantic States that established the underwriting pool and all material agreements between Donegal Mutual and our insurance subsidiaries.

Approval of the applicable insurance commissioner is also required prior to consummation of transactions affecting the control of an insurer. In virtually all states, including the states where our insurance subsidiaries are domiciled, the acquisition of 10% or more of the outstanding capital stock of an insurer or its holding company or the intent to acquire such an interest creates a rebuttable presumption of a change in control. Pursuant to an order issued in April 2003, the Department approved Donegal Mutual's ownership of up to 70% of our outstanding Class A common stock and Donegal Mutual's ownership of up to 100% of our outstanding Class B common stock.

Our insurance subsidiaries have the legal obligation under state insurance laws to participate in involuntary insurance programs for automobile insurance, as well as other property and casualty insurance lines, in the states in which they conduct business. These programs include joint underwriting associations, assigned risk plans, fair access to insurance requirements plans, reinsurance facilities, windstorm plans and tornado plans. Legislation establishing these programs requires all companies that write lines covered by these programs to provide coverage, either directly or through reinsurance, for insureds who are unable to obtain insurance in the voluntary market. The legislation creating these programs usually allocates a pro rata portion of risks attributable to such insureds to each company on the basis of the direct premiums it has written in that state or the number of automobiles it insures in that state. Generally, state law requires participation in these programs as a condition to obtaining a certificate of authority. Our loss ratio on insurance we write under these involuntary programs has traditionally been significantly greater than our loss ratio on insurance we voluntarily write in those states.

Regulatory requirements, including RBC requirements, may impact our insurance subsidiaries' ability to pay dividends. The amount of statutory capital and surplus necessary for our insurance subsidiaries to satisfy regulatory requirements, including RBC requirements, was not significant in relation to our insurance subsidiaries' statutory capital and surplus at December 31, 2017. Generally, the maximum amount that one of our insurance subsidiaries may pay to us as ordinary dividends during any year after notice to, but without prior approval of, the insurance commissioner of its domiciliary state is limited to a stated percentage of that subsidiary's statutory capital and surplus at December 31 of the preceding fiscal year or the net income of that subsidiary for its preceding fiscal year. Our insurance subsidiaries paid dividends to us of $13.0 million, $13.0 million and $3.9 million in 2017, 2016 and 2015, respectively. At December 31, 2017, the amount of ordinary dividends our insurance subsidiaries could pay to us during 2018, without the prior approval of their respective domiciliary insurance commissioners, is shown in the following table.

Name of Insurance Subsidiary	Ordinary Dividend Amount
Atlantic States	$22,317,084
Le Mars	2,343,480
MICO	5,279,638
Peninsula	1,653,263
Sheboygan	—
Southern	5,450,358
Total	$37,043,823

Donegal Mutual Insurance Company

Donegal Mutual organized as a mutual fire insurance company in Pennsylvania in 1889. At December 31, 2017, Donegal Mutual had admitted assets of $614.0 million and policyholders' surplus of $298.1 million. At December 31, 2017, Donegal Mutual had total liabilities of $315.9 million, including reserves for net losses and loss expenses of $154.7 million and unearned premiums of $71.1 million. Donegal Mutual's investment portfolio of $383.2 million at December 31, 2017 consisted primarily of investment-grade bonds of $125.7 million, its investment in DFSC's common stock and its investment in our Class A common stock and our Class B common stock. At December 31, 2017, Donegal Mutual owned 9,851,025 shares, or approximately 44%, of our Class A common stock, which Donegal Mutual carried on its books at $134.2 million, and 4,647,338 shares, or approximately 83%, of our Class B common stock, which Donegal Mutual carried on its books at $63.3 million. We present Donegal Mutual's financial information in accordance with SAP as the NAIC Accounting Practices and Procedures Manual requires. Donegal Mutual does not, nor is it required to, prepare financial statements in accordance with GAAP.

Donegal Financial Services Corporation

We and Donegal Mutual own DFSC, a unitary thrift holding company that owns UCB. UCB is a state savings bank with 15 banking offices, substantially all of which are located in Lancaster County, Pennsylvania, and approximately $567.7 million in assets at December 31, 2017.

Because Donegal Mutual and we together own all of the outstanding capital stock of DFSC, the Board of Governors of the Federal Reserve System, or the FRB, regulates Donegal Mutual, DFSC and us as grandfathered savings and loan holding companies. As a result, Donegal Mutual, DFSC and we are subject to regulation by the FRB under the holding company provisions of the federal Home Owners' Loan Act, or HOLA. However, if any of Donegal Mutual, DFSC or we were to lose this grandfathered status, they or we would become a bank holding company regulated by the FRB under the Bank Holding Company Act. UCB, as a state-chartered stock savings bank, is subject to regulation and supervision by the Pennsylvania Department of Banking and by the Federal Deposit Insurance Corporation. The primary purpose of the statutory and regulatory supervision of financial institutions is to protect depositors, the financial institutions and the financial system as a whole rather than the stockholders of financial institutions or their holding companies.

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Sections 23A and 23B of the Federal Reserve Act impose quantitative and qualitative restrictions on transactions between a savings association and its “affiliates.” Affiliates of a savings association include, among other entities, the savings association’s holding company and non-banking companies under common control with the savings association such as Donegal Mutual and us and our respective subsidiaries. These restrictions on transactions with affiliates apply to transactions between DFSC and UCB, on the one hand, and Donegal Mutual and us and our insurance subsidiaries, on the other hand. These restrictions also apply to transactions among DFSC, UCB and Donegal Mutual. Because DFSC directly controls UCB and Donegal Mutual and we indirectly control UCB, DFSC, Donegal Mutual and we are subject to the Change in Bank Control Act.

Cautionary Statement Regarding Forward-Looking Statements

This Form 10-K Report and the documents we incorporate by reference in this Form 10-K Report contain “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include certain discussions relating to underwriting, premium and investment income volumes, business strategies, reserves, profitability and business relationships and our other business activities during 2017 and beyond. In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “could,” “would,” “expect,” “plan,” “intend,” “anticipate,” “believe,” “estimate,” “objective,” “project,” “predict,” “potential,” “goal” and similar expressions. These forward-looking statements reflect our current views about future events and our current assumptions, and are subject to known and unknown risks and uncertainties that may cause our results, performance or achievements to differ materially from those we anticipate or imply by our forward-looking statements. We cannot control or predict many of the factors that could determine our future financial condition or results of operations. Such factors may include those we describe under “Risk Factors.” The forward-looking statements contained in this Form 10-K Report reflect our views and assumptions only as of the date of this Form 10-K Report. Except as required by law, we do not intend to update, and we assume no responsibility for updating, any forward-looking statements we have made. We qualify all of our forward-looking statements by these cautionary statements.

Item 1A. Risk Factors.

Risk Factors

Risks Relating to Us and Our Business

Donegal Mutual is our controlling stockholder. Donegal Mutual and its directors and executive officers have potential conflicts of interest between the best interests of our stockholders and the best interests of the policyholders of Donegal Mutual.

Donegal Mutual controls the election of all of the members of our board of directors. Six of the eleven members of our board of directors are also directors of Donegal Mutual. Donegal Mutual and we share the same executive officers. These common directors and executive officers have a fiduciary duty to our stockholders and also have a fiduciary duty to the policyholders of Donegal Mutual. Among the potential conflicts of interest that could arise from these separate fiduciary duties are the following:

- We and Donegal Mutual periodically review the percentage participation of Atlantic States and Donegal Mutual in the underwriting pool that Donegal Mutual and Atlantic States have maintained since 1986;
- Our insurance subsidiaries and Donegal Mutual annually review and then establish the terms of certain reinsurance agreements between our insurance subsidiaries and Donegal Mutual. Our objective, over the long-term, is for these agreements to have approximately an equal balance between payments and recoveries;
- We and Donegal Mutual periodically allocate certain shared expenses among ourselves and our insurance subsidiaries in accordance with various inter-company expense-sharing agreements; and
- We and our insurance subsidiaries may enter into other transactions or contractual relationships with Donegal Mutual, including, for example, our purchases from time to time from Donegal Mutual of the surplus note of a mutual insurance company that will subsequently convert into a stock insurance company and ultimately become one of our wholly owned subsidiaries.

Donegal Mutual has sufficient voting power to determine the outcome of all matters submitted to our stockholders for approval.

Each share of our Class A common stock has one-tenth of a vote per share and generally votes as a single class with our Class B common stock. Each share of our Class B common stock has one vote per share and generally votes as a single class with our Class A common stock. Donegal Mutual has the right to vote approximately 72% of the combined voting power of our Class A common stock and our Class B common stock and has sufficient voting control to:

- elect all of the members of our board of directors, who determine our management and policies; and
- control the outcome of any corporate transaction or other matter submitted to a vote of our stockholders for approval, including mergers or other acquisition proposals and the sale of all or substantially all of our assets, in each case regardless of how all of our stockholders other than Donegal Mutual vote their shares.

The interests of Donegal Mutual in maintaining this greater-than-majority voting control of us may have an adverse effect on the price of our Class A common stock and the price of our Class B common stock because of the absence of any potential “takeover” premium and may, therefore, be inconsistent with the interests of our stockholders other than Donegal Mutual.

Donegal Mutual’s majority voting control of us, certain provisions of our certificate of incorporation and by-laws and certain provisions of Delaware law make it remote that anyone could acquire actual control of us unless Donegal Mutual were in favor of another person’s acquisition of control of us.

Donegal Mutual’s majority voting control of us, certain anti-takeover provisions in our certificate of incorporation and by-laws and certain provisions of the Delaware General Corporation Law, or the DGCL, could delay or prevent the removal of members of our board of directors and could make a merger, tender offer or proxy contest involving us more expensive as well as unlikely to succeed, even if such events were in the best interests of our stockholders other than Donegal Mutual. These factors could also discourage a third party from attempting to acquire control of us. In particular, our certificate of incorporation and by-laws include the following anti-takeover provisions:

- our board of directors is classified into three classes, so that our stockholders elect only one-third of the members of our board of directors each year;
- our stockholders may remove our directors only for cause;
- our stockholders may not take stockholder action except at an annual or special meeting of our stockholders;
- the request of stockholders holding at least 20% of the combined voting power of our Class A common stock and our Class B common stock is required for a stockholder to call a special meeting of our stockholders;
- our by-laws require that stockholders provide advance notice to us to nominate candidates for election to our board of directors or to propose any other item of stockholder business at a stockholders’ meeting;
- we do not permit cumulative voting rights in the election of our directors;
- our certificate of incorporation does not provide for preemptive rights in connection with any issuance of securities by us; and
- our board of directors may issue, without stockholder approval unless otherwise required by law, preferred stock with such terms as our board of directors may determine.

We have authorized preferred stock that we could issue without stockholder approval to make it more difficult for a third party to acquire us.

We have 2.0 million authorized shares of preferred stock that we could issue in one or more series without further stockholder approval, unless the DGCL or the rules of the NASDAQ Global Select Market otherwise require, and upon such terms and conditions, and having such rights, privileges and preferences, as our board of directors may determine. Our potential issuance of preferred stock may make it more difficult for a third party to acquire control of us.

Because we are an insurance holding company, no person can acquire or seek to acquire a 10% or greater interest in us without first obtaining approval of the insurance commissioners of the states of domicile of each of our insurance subsidiaries.

We own insurance subsidiaries domiciled in the states of Iowa, Maryland, Michigan, Pennsylvania, Virginia and Wisconsin, and Donegal Mutual owns or controls insurance companies domiciled in Georgia and New Mexico. The insurance laws of each of these states provide that no person can acquire or seek to acquire a 10% or greater interest in us without first filing specified information with the insurance commissioners of those states and obtaining the prior approval of the proposed acquisition of a 10% or greater interest in us by each of the state insurance commissioners based on statutory standards designed to protect the safety and soundness of us and our insurance subsidiaries.

Because we are a grandfathered unitary savings and loan holding company, no person can acquire or seek to acquire more than a 10% interest in either class of our common stock without first obtaining approval of, or an exemption from, the FRB.

We own 48.2% of the outstanding stock of DFSC, which owns all of the outstanding stock of UCB. As a result of our ownership interest in DFSC, we are a grandfathered unitary savings and loan holding company regulated by the FRB under HOLA. No person may lawfully acquire more than 10% of any class of voting security of a unitary savings and loan holding company registered under the Exchange Act, as we are, without first filing specified information with the FRB and obtaining the FRB’s prior approval of the proposed acquisition or an exemption from the FRB for such acquisition.

Our insurance subsidiaries currently conduct business in a limited number of states, with a concentration of business in Pennsylvania, Michigan, Maryland and Virginia. Any single catastrophe occurrence or other condition affecting losses in these states could adversely affect the results of operations of our insurance subsidiaries.

Our insurance subsidiaries conduct business in 22 states located primarily in the Mid-Atlantic, Midwestern, New England and Southern states. A substantial portion of their business consists of private passenger and commercial automobile, homeowners and workers’ compensation insurance in Pennsylvania, Michigan, Maryland and Virginia. While our insurance subsidiaries and Donegal Mutual actively manage their respective exposure to catastrophes through their underwriting processes and the purchase of reinsurance, a single catastrophic occurrence, destructive weather pattern, general economic trend, terrorist attack, regulatory development or other condition affecting one or more of the states in which our insurance subsidiaries conduct substantial business could materially adversely affect their business, financial condition and results of operations. Common catastrophic events include hurricanes, earthquakes, tornadoes, wind and hail storms, fires, explosions and severe winter storms.

If the independent agents who market the products of our insurance subsidiaries do not maintain their current levels of premium writing with us, fail to comply with established underwriting guidelines of our insurance subsidiaries or otherwise inappropriately market the products of our insurance subsidiaries, the business, financial condition and results of operations of our insurance subsidiaries could be adversely affected.

Our insurance subsidiaries market their insurance products solely through a network of approximately 2,400 independent insurance agencies. This agency distribution system is one of the most important components of the competitive profile of our insurance subsidiaries. As a result, our insurance subsidiaries depend to a material extent upon their independent agents, each of whom has the authority to bind one or more of our insurance subsidiaries to insurance coverage. To the extent that such independent agents’ marketing efforts fail to result in the maintenance of their current levels of volume and quality or they bind our insurance subsidiaries to unacceptable insurance risks, fail to comply with the established underwriting guidelines of our insurance subsidiaries or otherwise inappropriately market the products of our insurance subsidiaries, the business, financial condition and results of operations of our insurance subsidiaries could suffer.

The business of our insurance subsidiaries may not continue to grow and may be materially adversely affected if our insurance subsidiaries cannot retain existing, and attract new, independent agents or if insurance consumers increase their use of insurance marketing systems other than independent agents.

Our insurance subsidiaries’ ability to retain existing, and to attract new, independent agents is essential to the continued growth of the business of our insurance subsidiaries. If independent agents find it easier to do business with the competitors of our insurance subsidiaries, our insurance subsidiaries could find it difficult to retain their existing business or to attract new business. While our insurance subsidiaries believe they maintain good relationships with the independent agents they have appointed, our insurance subsidiaries cannot be certain that these independent agents will continue to sell the products of our insurance subsidiaries to the consumers these independent agents represent. Some of the factors that could adversely affect the ability of our insurance subsidiaries to retain existing, and attract new, independent agents include:

- the significant competition among insurance companies to attract independent agents;
- the labor-intensive and time-consuming process of selecting new independent agents;
- the insistence of our insurance subsidiaries that independent agents adhere to consistent underwriting standards; and
- the ability of our insurance subsidiaries to pay competitive and attractive commissions, bonuses and other incentives to independent agents.

While our insurance subsidiaries sell insurance to policyholders solely through their network of independent agencies, many competitors of our insurance subsidiaries sell insurance through a variety of delivery methods, including independent agencies, captive agencies, the Internet and direct sales. To the extent that current and potential policyholders change their marketing system preference, the business, financial condition and results of operations of our insurance subsidiaries may be adversely affected.

We are dependent on dividends from our insurance subsidiaries for the payment of our operating expenses, our debt service and dividends to our stockholders; however, there are regulatory restrictions and business considerations that may limit the amount of dividends our insurance subsidiaries may pay to us.

As a holding company, we rely primarily on dividends from our insurance subsidiaries as a source of funds to meet our corporate obligations and to pay dividends to our stockholders. The amount of dividends our insurance subsidiaries can pay to us is subject to regulatory restrictions and depends on the amount of surplus our insurance subsidiaries maintain. From time to time, the NAIC and various state insurance regulators consider modifying the method of determining the amount of dividends that an insurance company may pay without prior regulatory approval. The maximum amount of ordinary dividends that our insurance subsidiaries can pay to us in 2018 without prior regulatory approval is approximately $37.0 million. Other business and regulatory considerations, such as the impact of dividends on surplus that could affect the ratings of our insurance subsidiaries, competitive conditions, RBC requirements, the investment results of our insurance subsidiaries and the amount of premiums that our insurance subsidiaries write could also adversely impact the ability of our insurance subsidiaries to pay dividends to us.

If A.M. Best downgrades the rating it has assigned to Donegal Mutual or any of our insurance subsidiaries, it would adversely affect their competitive position.

Industry ratings are a factor in establishing and maintaining the competitive position of insurance companies. A.M. Best, an industry-accepted source of insurance company financial strength ratings, rates Donegal Mutual and our insurance subsidiaries. A.M. Best ratings provide an independent opinion of an insurance company's financial health and its ability to meet its obligations to its policyholders. We believe that the financial strength rating of A.M. Best is material to the operations of Donegal Mutual and our insurance subsidiaries. Currently, Donegal Mutual and our insurance subsidiaries each have an A (Excellent) rating from A.M. Best. If A.M. Best were to downgrade the rating of Donegal Mutual or any of our insurance subsidiaries, it would adversely affect the competitive position of Donegal Mutual or that insurance subsidiary and make it more difficult for it to market its products and retain its existing policyholders.

Our strategy to grow in part through acquisitions of smaller insurance companies exposes us to risks that could adversely affect our results of operations and financial condition.

The affiliation with, and acquisition of, smaller, and often undercapitalized, insurance companies involves risks that could adversely affect our results of operations and financial condition. The risks associated with these affiliations and acquisitions include:

- the potential inadequacy of reserves for losses and loss expenses of the other insurer;
- the need to supplement management of the other insurer with additional experienced personnel;
- conditions imposed by regulatory agencies that make the realization of cost-savings through integration of the operations of the other insurer with our operations more difficult;

- the need of the other insurer for additional capital that we did not anticipate at the time of the acquisition or affiliation; and
- the use of more of our management's time in improving the operations of the other insurer than we originally anticipated.

If we cannot obtain sufficient capital to fund the organic growth of our insurance subsidiaries and to make acquisitions, we may not be able to expand our business.

Our strategy is to expand our business through the organic growth of our insurance subsidiaries and through our strategic acquisitions of regional insurance companies. Our insurance subsidiaries will require additional capital in the future to support this strategy. If we cannot obtain sufficient capital on satisfactory terms and conditions, we may not be able to expand the business of our insurance subsidiaries or to make future acquisitions. Our ability to obtain additional financing will depend on a number of factors, many of which are beyond our control. For example, we may not be able to obtain additional debt or equity financing because we or our insurance subsidiaries may already have substantial debt at the time, because we or our insurance subsidiaries do not have sufficient cash flow to service or repay our existing or additional debt or because financial institutions are not making financing available. In addition, any equity capital we obtain in the future could be dilutive to our existing stockholders.

A number of the competitors of our insurance subsidiaries have greater financial strength than our insurance subsidiaries, and these competitors may be able to offer their products at lower prices than our insurance subsidiaries can afford to offer their products.

The property and casualty insurance industry is intensely competitive. Competition can be based on many factors, including:

- the perceived financial strength of the insurer;
- premium rates;
- policy terms and conditions;
- policyholder service;
- reputation; and
- experience.

Our insurance subsidiaries compete with many regional and national property and casualty insurance companies, including direct sellers of insurance products, insurers having their own agency organizations and other insurers represented by independent agents. Many of these insurers have greater capital than our insurance subsidiaries, have substantially greater financial, technical and operating resources and have equal or higher ratings from A.M. Best than our insurance subsidiaries. In addition, our competitors may become increasingly better capitalized in the future as the property and casualty insurance industry continues to consolidate.

The greater capitalization of many of the competitors of our insurance subsidiaries enables them to operate with lower profit margins and, therefore, allows them to market their products more aggressively, to take advantage more quickly of new marketing opportunities and to offer lower premium rates. Our insurance subsidiaries may not be able to maintain their current competitive position in the markets in which they operate if their competitors offer prices for their products that are lower than the prices our insurance subsidiaries are prepared to offer. Moreover, if these competitors lower the price of their products and our insurance subsidiaries meet their pricing, the profit margins and revenues of our insurance subsidiaries may decrease and their ratios of claims and expenses to premiums may increase. All of these factors could materially adversely affect the financial condition and results of operations of our insurance subsidiaries and their A.M. Best ratings.

Because the investment portfolios of our insurance subsidiaries consist primarily of fixed-income securities, their investment income and the fair value of their investment portfolios could decrease as a result of a number of factors.

Our insurance subsidiaries invest the premiums they receive from their policyholders and maintain investment portfolios that consist primarily of fixed-income securities. The management of these investment portfolios is an important component of the profitability of our insurance subsidiaries. Our insurance subsidiaries derive a significant portion of their operating income from the income they receive on their invested assets. A number of factors may affect the quality and/or yield of their investment portfolios, including the general economic and business environment, government monetary policy, changes in the credit quality of the issuers of the fixed-income securities our insurance subsidiaries own, changes in market conditions and regulatory changes. The fixed-income securities our insurance subsidiaries own consist primarily of securities issued by domestic entities that are backed either by the credit or collateral of the underlying issuer. Factors such as an economic downturn, disruption in the credit market or the availability of credit, a regulatory change pertaining to a particular issuer's industry, a significant deterioration in the cash flows of the issuer or a change in the issuer's marketplace may adversely affect the ability of our insurance subsidiaries to collect principal and interest from the issuer in which they invest.

The investments of our insurance subsidiaries are also subject to risk resulting from interest rate fluctuations. Increasing interest rates or a widening in the spread between interest rates available on U.S. Treasury securities and corporate debt or asset-backed securities, for example, will typically have an adverse impact on the market values of fixed-rate securities. If interest rates remain at historically low levels, our insurance subsidiaries will generally have a lower overall rate of return on investments of cash their operations generate. In addition, in the event of the call or maturity of investments in a low interest rate environment, our insurance subsidiaries may not be able to reinvest the proceeds in securities with comparable interest rates. Changes in interest rates may reduce both the profitability and the return on the invested capital of our insurance subsidiaries.

We and our insurance subsidiaries depend on key personnel. The loss of any member of our executive management or the senior management of our insurance subsidiaries could negatively affect the continuation of our business strategies and achievement of our growth objectives.

The loss of, or failure to attract, key personnel could significantly impede our financial plans, growth, marketing and other objectives and those of our insurance subsidiaries. The continued success of our insurance subsidiaries depends to a substantial extent on the ability and experience of their senior management. Our insurance subsidiaries and we believe that our future success is dependent on our ability to attract and retain additional skilled and qualified personnel and to expand, train and manage our employees. We and Donegal Mutual have two to five-year automatically-renewing employment agreements with our senior officers, including all of our named executive officers.

The reinsurance agreements on which our insurance subsidiaries rely do not relieve our insurance subsidiaries from their primary liability to their policyholders, and our insurance subsidiaries face a risk of non-payment from their reinsurers as well as the non-availability of reinsurance in the future.

Our insurance subsidiaries rely on reinsurance agreements to limit their maximum net loss from large single catastrophic risks or excess of loss risks in areas where our insurance subsidiaries may have a concentration of policyholders. Reinsurance also enables our insurance subsidiaries to increase their capacity to write insurance because it has the effect of leveraging the surplus of our insurance subsidiaries. Although the reinsurance our insurance subsidiaries maintain provides that the reinsurer is liable to them for any reinsured losses, the reinsurance agreements do not generally relieve our insurance subsidiaries from their primary liability to their policyholders if the reinsurer fails to pay the reinsurance claims of our insurance subsidiaries. To the extent that a reinsurer is unable to pay losses for which it is liable to our insurance subsidiaries, our insurance subsidiaries remain liable for such losses. At December 31, 2017, our insurance subsidiaries had approximately $119.4 million of reinsurance receivables from third-party reinsurers relating to paid and unpaid losses. Any insolvency or inability of these reinsurers to make timely payments to our insurance subsidiaries under the terms of their reinsurance agreements would adversely affect the results of operations of our insurance subsidiaries.

Michigan law requires MICO to provide unlimited lifetime medical benefits under the personal injury protection, or PIP, coverage of the personal automobile and commercial automobile policies it writes in the State of Michigan. Michigan law also requires MICO to be a member of the Michigan Catastrophic Claims Association, or MCCA, in order to write automobile insurance. The MCCA receives funding through assessments that its members collect from policyholders in the state and provides reinsurance for PIP claims that exceed a set retention. At December 31, 2017, MICO had approximately $54.0 million of reinsurance receivables from MCCA relating to paid and unpaid losses. The MCCA has generated significant operating deficits in recent years. Although we currently consider the risk to be remote, should the MCCA be unable to fulfill its payment obligations to MICO in the future, MICO's financial condition and results of operations could be adversely affected.

In addition, our insurance subsidiaries face a risk of the non-availability of reinsurance or an increase in reinsurance costs that could adversely affect their ability to write business or their results of operations. Market conditions beyond the control of our insurance subsidiaries, such as the amount of surplus in the reinsurance market and the frequency and severity of natural and man-made catastrophes, affect both the availability and the cost of the reinsurance our insurance subsidiaries purchase. If our insurance subsidiaries cannot maintain their current level of reinsurance or purchase new reinsurance protection in amounts that our insurance subsidiaries consider sufficient, our insurance subsidiaries would either have to accept an increase in their net risk retention or reduce their insurance writings, either of which could adversely affect them.

Our equity investment in DFSC subjects us to certain risks inherent to community banking organizations.

Our equity in the earnings of DFSC primarily reflects the underlying results of operations of UCB. UCB is subject to a number of risks, which include, but are not limited to, the following:

- variations in interest rates that may negatively affect UCB's financial performance;
- inherent risks associated with UCB's lending activities;
- a significant decline in general economic conditions in the specific markets in which UCB operates;
- the potential adverse impact of extensive federal and state regulation and supervision of banking organizations;
- potential declines in the value of UCB's investments that are considered other than temporary;
- competition for loans and deposits with numerous regional and national banks and other financial institutions; and
- UCB's ability to attract and retain qualified key personnel.

The growth and profitability of our insurance subsidiaries depend, in part, on the effective maintenance and ongoing development of Donegal Mutual's information technology systems.

Our insurance subsidiaries utilize Donegal Mutual's information technology systems to conduct their insurance business, including policy quoting and issuance, claims processing, processing of incoming premium payments and other important functions. As a result, the ability of our insurance subsidiaries to grow their business and conduct profitable operations depends on Donegal Mutual's ability to maintain its existing information technology systems and to develop new technology systems that will support the business of Donegal Mutual and our insurance subsidiaries in a cost-efficient manner and provide information technology capabilities equivalent to those of our competitors. The allocation among our insurance subsidiaries and Donegal Mutual of the costs of developing and maintaining Donegal Mutual's information technology systems may impact adversely our insurance subsidiaries' expense ratio and underwriting profitability, and such costs may exceed Donegal Mutual's and our expectations. In addition, while Donegal Mutual is committed to developing and maintaining information technology systems that will allow Donegal Mutual and our insurance subsidiaries to compete effectively, Donegal Mutual may encounter difficulties integrating new systems with legacy systems, including plans to modernize certain key infrastructure systems over the next several years. Donegal Mutual's information technology systems may not deliver the benefits Donegal Mutual and we expect and may fail to keep pace with our competitors' information technology systems. As a result, Donegal Mutual and our insurance subsidiaries may not have the ability to grow their business and meet their profitability objectives.

Our insurance subsidiaries rely on Donegal Mutual's information technology systems, and the disruption or failure of these systems or the compromise of the security of those systems that results in the theft or misuse of confidential information could materially impact adversely the business of Donegal Mutual and our insurance subsidiaries.

Our insurance subsidiaries' business operations depend significantly upon the availability and successful operation of Donegal Mutual's information technology systems in order to process new and renewal business, service their policies, process and settle claims and facilitate processing of premium payments. In addition, in the normal course of their operations, Donegal Mutual and our insurance subsidiaries collect, utilize and maintain confidential information regarding individuals and businesses. While Donegal Mutual has established various security measures to protect its information technology systems and confidential data, unanticipated computer viruses, malware, power outages, unauthorized access or other cyberattacks could disrupt those systems or result in the misappropriation or loss of confidential data. Donegal Mutual could experience technology system failures or other outages that would impact the availability of its information technology systems. Disruption in the availability of Donegal Mutual's information technology systems could impact the ability of Donegal Mutual and our insurance subsidiaries to underwrite and process their policies timely, process and settle claims promptly and provide expected levels of customer service to agents and policyholders.

While Donegal Mutual has identified threats to the security of its information technology systems, Donegal Mutual and we are unaware of any significant breach of the security measures Donegal Mutual maintains. A significant breach of the security of Donegal Mutual's information technology systems that results in the misappropriation or misuse of confidential information could damage the business reputation of Donegal Mutual and our insurance subsidiaries and could expose Donegal Mutual and our insurance subsidiaries to litigation. The financial impact to Donegal Mutual, us and our insurance subsidiaries of a significant breach could be material.

Risks Relating to the Property and Casualty Insurance Industry

Industry trends, such as increased litigation against the insurance industry and individual insurers, the willingness of courts to expand covered causes of loss, rising jury awards, escalating medical costs, increasing loss frequency due to distracted driving and other factors, increasing loss severity and adverse weather conditions may contribute to increased costs and result in the deterioration of the reserves of our insurance subsidiaries.

Loss severity in the property and casualty insurance industry has increased in recent years, principally driven by larger court judgments and increasing medical and automobile repair costs. The industry has also experienced increases in the frequency of automobile losses due to distracted driving, increases in miles driven due to lower fuel costs and other factors. In addition, many classes of complainants have brought legal actions and proceedings that tend to increase the size of judgments. The propensity of policyholders and third-party claimants to litigate and the willingness of courts to expand causes of loss and the size of awards to eliminate exclusions and to increase coverage limits may make the loss reserves of our insurance subsidiaries inadequate for current and future losses.

Loss or significant restriction of the use of credit scoring in the pricing and underwriting of the personal lines insurance products by our insurance subsidiaries could adversely affect their future profitability.

Our insurance subsidiaries use credit scoring as a factor in making risk selection and pricing decisions for personal lines insurance products where allowed by state law. Recently, some consumer groups and regulators have questioned whether the use of credit scoring unfairly discriminates against people with low incomes, minority groups and the elderly. These consumer groups and regulators often call for the prohibition or restriction on the use of credit scoring in underwriting and pricing. Laws or regulations enacted in a number of states that significantly curtail the use of credit scoring in the underwriting process could reduce the future profitability of our insurance subsidiaries.

Changes in applicable insurance laws or regulations or changes in the way insurance regulators administer those laws or regulations could adversely affect the operating environment of our insurance subsidiaries and increase their exposure to loss or put them at a competitive disadvantage.

Property and casualty insurers are subject to extensive supervision in their domiciliary states and in the states in which they do business. This regulatory oversight includes matters relating to:

- licensing and examination;
- approval of premium rates;
- market conduct;
- policy forms;
- limitations on the nature and amount of certain investments;
- claims practices;
- mandated participation in involuntary markets and guaranty funds;
- reserve adequacy;
- insurer solvency;

- transactions between affiliates;
- the amount of dividends that insurers may pay; and
- restrictions on underwriting standards.

Such regulation and supervision are primarily for the benefit and protection of policyholders rather than stockholders. For instance, our insurance subsidiaries are subject to involuntary participation in specified markets in various states in which they operate and the premium rates our insurance subsidiaries may charge do not always correspond with the underlying costs of providing that coverage.

The NAIC and state insurance regulators are re-examining existing laws and regulations, specifically focusing on:

- insurance company investments;
- issues relating to the solvency of insurance companies;
- risk-based capital guidelines;
- restrictions on the terms and conditions included in insurance policies;
- certain methods of accounting;
- reserves for unearned premiums, losses and other purposes;
- the values at which insurance companies may carry investment securities and the definition of other-than-temporary impairment of investment securities; and
- interpretations of existing laws and the development of new laws.

Changes in state laws and regulations, as well as changes in the way state regulators view related-party transactions in particular, could change the operating environment of our insurance subsidiaries and have an adverse effect on their business. The state insurance regulatory framework has recently come under increased federal scrutiny. Congress is considering proposals that it should create an optional federal charter for insurers. Federal chartering has the potential to create an uneven playing field for insurers by subjecting federally-chartered and state-chartered insurers to different regulatory requirements. Federal chartering also raises the possibility of duplicative or conflicting federal and state requirements. In addition, if federal legislation repeals the partial exemption for the insurance industry from federal antitrust laws, our ability to collect and share loss cost data with the industry could adversely affect the results of operations of our insurance subsidiaries.

Insurance companies are subject to assessments, based on their market share in a given line of business, to assist in the payment of unpaid claims and related costs of insolvent insurance companies. Such assessments could adversely affect the financial condition of our insurance subsidiaries.

Our insurance subsidiaries are subject to assessments pursuant to the guaranty fund laws of the various states in which they conduct business. Generally, under these laws, our insurance subsidiaries can be assessed, depending upon the market share of our insurance subsidiaries in a given line of insurance business, to assist in the payment of unpaid claims and related costs of insolvent insurance companies in those states. We cannot predict the number and magnitude of future insurance company failures in the states in which our insurance subsidiaries conduct business, but future assessments could adversely affect the business, financial condition and results of operations of our insurance subsidiaries.

Our insurance subsidiaries must establish premium rates and loss and loss expense reserves from forecasts of the ultimate costs they expect will arise from risks underwritten during the policy period, and the profitability of our insurance subsidiaries could be adversely affected if their premium rates or reserves are insufficient to satisfy their ultimate costs.

One of the distinguishing features of the property and casualty insurance industry is that it prices its products before it knows its costs, since insurers generally establish their premium rates before they know the amount of losses they will incur. Accordingly, our insurance subsidiaries establish premium rates from forecasts of the ultimate costs they expect to arise from risks they have underwritten during the policy period. These premium rates may not be sufficient to cover the ultimate losses our insurance subsidiaries incur. Further, our insurance subsidiaries must establish reserves for losses and loss expenses as balance sheet liabilities based upon estimates involving actuarial and statistical projections at a given time of what our insurance subsidiaries expect their ultimate liability to be. Significant periods of time often elapse between the occurrence of an insured loss and the reporting of the loss and the payment of that loss. It is possible that our insurance subsidiaries' ultimate liability could exceed these estimates because of the future development of known losses, the existence of losses that have occurred but are currently unreported and larger than historical settlements of pending and unreported claims. The process of estimating reserves is inherently judgmental and can be influenced by a number of factors, including the following:

- trends in claim frequency and severity;
- changes in operations;
- emerging economic and social trends;
- inflation; and
- changes in the regulatory and litigation environments.

If our insurance subsidiaries have insufficient premium rates or reserves, insurance regulatory authorities may require increases to these reserves. An increase in reserves results in an increase in losses and a reduction in net income for the period in which our insurance subsidiaries recognize a deficiency in reserves. Accordingly, an increase in reserves may adversely impact the business, liquidity, financial condition and results of operations of our insurance subsidiaries.

The financial results of our insurance subsidiaries depend primarily on their ability to underwrite risks effectively and to charge adequate rates to policyholders.

The financial condition, cash flows and results of operations of our insurance subsidiaries depend on their ability to underwrite and set rates accurately for a full spectrum of risks across a number of lines of insurance. Rate adequacy is necessary to generate sufficient premium to pay losses, loss adjustment expenses and underwriting expenses and to realize a profit.

The ability to underwrite and set rates effectively is subject to a number of risks and uncertainties, including:

- the availability of sufficient, reliable data;
- the ability to conduct a complete and accurate analysis of available data;
- the ability to recognize in a timely manner changes in trends and to project both the severity and frequency of losses with reasonable accuracy;
- uncertainties generally inherent in estimates and assumptions;
- the ability to project changes in certain operating expense levels with reasonable certainty;
- the development, selection and application of appropriate rating formulae or other pricing methodologies;
- the use of modeling tools to assist with correctly and consistently achieving the intended results in underwriting and pricing;
- the ability to innovate with new pricing strategies and the success of those innovations on implementation;
- the ability to secure regulatory approval of premium rates on an adequate and timely basis;
- the ability to predict policyholder retention accurately;
- unanticipated court decisions, legislation or regulatory action;
- unanticipated changes in our claim settlement practices;

- changes in driving patterns for auto exposures;
- changes in weather patterns for property exposures;
- changes in the medical sector of the economy;
- unanticipated changes in auto repair costs, auto parts prices and used car prices;
- the impact of emerging technologies, including the advent of autonomous vehicles, on pricing, insurance coverages and loss costs;
- the impact of inflation and other factors on the cost of construction materials and labor;
- the ability to monitor property concentration in catastrophe-prone areas, such as hurricane, earthquake and wind/hail regions; and
- the general state of the economy in the states in which our insurance subsidiaries operate.

Such risks may result in the premium rates of our insurance subsidiaries being based on inadequate or inaccurate data or inappropriate assumptions or methodologies and may cause our estimates of future changes in the frequency or severity of claims to be incorrect. As a result, our insurance subsidiaries could underprice risks, which would negatively affect our margins, or our insurance subsidiaries could overprice risks, which could reduce their volume and competitiveness. In either event, underpricing or overpricing risks could adversely impact our operating results, financial condition and cash flows.

The cyclical nature of the property and casualty insurance industry may reduce the revenues and profit margins of our insurance subsidiaries.

The property and casualty insurance industry is highly cyclical with respect to both individual lines of business and the overall insurance industry. Premium rate levels relate to the availability of insurance coverage, which varies according to the level of surplus available in the insurance industry. The level of surplus in the industry varies with returns on invested capital and regulatory barriers to withdrawal of surplus. Increases in surplus may result in increased price competition among property and casualty insurers. If our insurance subsidiaries find it necessary to reduce premiums or limit premium increases due to these competitive pressures on pricing, our insurance subsidiaries may experience a reduction in their profit margins and revenues, an increase in their ratios of losses and expenses to premiums and, therefore, lower profitability.

Risks Relating to Our Common Stock

The price of our common stock may be adversely affected by its low trading volume.

Our Class A common stock and our Class B common stock have limited liquidity. Reported average daily trading volume for our Class A common stock and our Class B common stock for the year ended December 31, 2017 was approximately 32,196 shares and approximately 177 shares, respectively. This limited liquidity could subject our shares of Class A common stock and our shares of Class B common stock to greater price volatility.

Donegal Mutual's majority voting control of our stock, anti-takeover provisions of our certificate of incorporation and by-laws and certain state laws make it unlikely anyone could acquire control of us unless Donegal Mutual were in favor of the acquisition of control.

Donegal Mutual's ownership of our Class A common stock and Class B common stock, certain anti-takeover provisions of our certificate of incorporation and by-laws, certain provisions of Delaware law and the insurance laws and regulations of Iowa, Georgia, Maryland, Michigan, New Mexico, Pennsylvania, Virginia and Wisconsin could delay or prevent the removal of members of our board of directors and could make it more difficult for a merger, tender offer or proxy contest involving us to succeed, even if our stockholders other than Donegal Mutual believed any of such events would be beneficial to them. These factors could also discourage a third party from attempting to acquire control of us. The classification of our board of directors could also have the effect of delaying or preventing a change in our control.

In addition, we have 2,000,000 authorized shares of preferred stock that we could issue in one or more series without stockholder approval, to the extent applicable law permits, and upon such terms and conditions, and having such rights, privileges and preferences, as our board of directors may determine. Our ability to issue preferred stock could make it difficult for a third party to acquire us. We have no current plans to issue any preferred stock.

Moreover, the DGCL contains provisions that prohibit certain business combination transactions under certain circumstances. In addition, state insurance laws and regulations generally prohibit any person from acquiring, or seeking to acquire, a 10% or greater interest in an insurance company without the prior approval of the state insurance commissioner of the state of domicile of the insurer. Because of our indirect control of UCB, HOLA also prohibits the acquisition of a 10% or greater interest in either our Class A common stock or our Class B common stock without the prior approval of the FRB or the granting of an exemption by the FRB.

Item 1B. Unresolved Staff Comments.

We have no unresolved written comments from the Securities and Exchange Commission ("SEC") staff regarding our filings under the Exchange Act.

Item 2. Properties.

We and our insurance subsidiaries share administrative headquarters with Donegal Mutual in a building in Marietta, Pennsylvania that Donegal Mutual owns. Donegal Mutual charges us and our insurance subsidiaries for an appropriate portion of the building expenses under an inter-company allocation agreement. The Marietta headquarters has approximately 270,000 square feet of office space. Southern owns a facility of approximately 10,000 square feet in Glen Allen, Virginia. Le Mars owns a facility of approximately 25,500 square feet in Le Mars, Iowa, Peninsula owns a facility of approximately 14,600 square feet in Salisbury, Maryland and Sheboygan owns a facility of approximately 8,800 square feet in Sheboygan Falls, Wisconsin.

Item 3. Legal Proceedings.

Our insurance subsidiaries are parties to routine litigation that arises in the ordinary course of their insurance business. We believe that the resolution of these lawsuits will not have a material adverse effect on the financial condition or results of operations of our insurance subsidiaries.

Item 4. Mine Safety Disclosures.

Not applicable.

Executive Officers of the Registrant

The following table sets forth information regarding the executive officers of Donegal Mutual and the Registrant as of December 31, 2017, each of whom has served with us for more than 10 years:

Name	Age	Position
Kevin G. Burke	52	President and Chief Executive Officer of us since 2015; Executive Vice President and Chief Operating Officer of Donegal Mutual since 2014; Senior Vice President of Human Resources of Donegal Mutual and us from 2005 to 2014; Vice President of Human Resources of Donegal Mutual and us from 2001 to 2005; other positions from 2000 to 2001.
Cyril J. Greenya	73	Senior Vice President and Chief Underwriting Officer of Donegal Mutual and us since 2005; Senior Vice President, Underwriting, of Donegal Mutual from 1997 to 2005; other positions from 1986 to 1997.
Jeffrey D. Miller	53	Executive Vice President and Chief Financial Officer of Donegal Mutual and us since 2014; Senior Vice President and Chief Financial Officer of Donegal Mutual and us from 2005 to 2014; Vice President and Controller of Donegal Mutual and us from 2000 to 2005; other positions from 1995 to 2000.
Donald H. Nikolaus	75	President and Chief Executive Officer of Donegal Mutual since 1981 (currently on medical leave of absence); President and Chief Executive Officer of us from 1986 to 2015. Chairman of our board of directors since April 2012.
Sanjay Pandey	51	Senior Vice President and Chief Information Officer of Donegal Mutual and us since 2013; Vice President and Chief Information Officer of Donegal Mutual and us from 2009 to 2013; other positions from 2000 to 2009.
Robert G. Shenk	64	Senior Vice President, Claims, of Donegal Mutual and us since 1997; other positions from 1986 to 1997.
Daniel J. Wagner	57	Senior Vice President and Treasurer of Donegal Mutual and us since 2005; Vice President and Treasurer of Donegal Mutual and us from 2000 to 2005; other positions from 1993 to 2000.

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PART II

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

Our Class A common stock and Class B common stock trade on the NASDAQ Global Select Market under the symbols "DGICA" and "DGICB," respectively. The following table shows the dividends declared per share and the stock price range for both classes of stock for each quarter during 2017 and 2016:

Quarter	High	Low	Cash Dividend Declared Per Share
2017 - Class A			
1st	$18.20	$16.24	$ —
2nd	17.72	15.36	0.1400
3rd	16.68	14.51	0.1400
4th	18.25	15.85	0.2800
2017 - Class B			
1st	$17.94	$15.30	$ —
2nd	16.65	14.30	0.1225
3rd	15.90	13.40	0.1225
4th	15.91	13.35	0.2450
2016 - Class A			
1st	$15.00	$12.69	$ —
2nd	16.50	13.30	0.1375
3rd	16.85	15.48	0.1375
4th	18.55	14.49	0.2750
2016 - Class B			
1st	$16.15	$13.51	$ —
2nd	15.99	12.56	0.1200
3rd	22.88	14.88	0.1200
4th	20.55	15.30	0.2400

At the close of business on March 1, 2018, we had approximately 1,869 holders of record of our Class A common stock and approximately 286 holders of record of our Class B common stock.

We declared dividends of $0.56 per share on our Class A common stock and $0.49 per share on our Class B common stock in 2017, compared to $0.55 per share on our Class A common stock and $0.48 per share on our Class B common stock in 2016.

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Stock Performance Chart.

The following graph provides an indicator of cumulative total stockholder returns on our Class A common stock and our Class B common stock for the period beginning on December 31, 2012 and ending on December 31, 2017, compared to the Russell 2000 Index and a peer group comprised of seven property and casualty insurance companies over the same period. The peer group consists of Cincinnati Financial Corp., EMC Insurance Group Inc., Hanover Insurance, Horace Mann Educators, Selective Insurance Group Inc., State Auto Financial Corp. and United Fire and Casualty Co. The graph shows the change in value of an initial $100 investment on December 31, 2012, assuming reinvestment of all dividends.

	2012	2013	2014	2015	2016	2017
Donegal Group Inc. Class A	$100.00	$117.27	$122.00	$111.36	$143.31	$146.74
Donegal Group Inc. Class B	100.00	134.16	124.35	97.80	97.05	95.91
Russell 2000 Index	100.00	137.00	141.84	133.74	159.78	180.79
Peer Group	100.00	142.99	153.25	178.46	228.46	249.12

Value Line Publishing LLC prepared the foregoing performance graph and data. The performance graph and accompanying data shall not be deemed “filed” as part of this Form 10-K Report for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section and should not be deemed incorporated by reference into any other filing we make under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent we specifically incorporate the performance graph and accompanying data by reference into such filing.

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Item 6. Selected Financial Data.

Year Ended December 31,	2017	2016	2015	2014	2013
Income Statement Data					
Premiums earned	$ 702,514,755	$ 656,204,797	$ 605,640,728	$ 556,497,535	$ 515,291,944
Investment income, net	23,527,304	22,632,730	20,949,698	18,344,382	18,795,239
Realized investment gains	5,705,255	2,525,575	1,934,424	3,134,081	2,423,442
Total revenues	739,026,537	688,423,020	636,387,263	586,547,742	547,110,065
Income before income taxes	12,114,462	41,328,407	27,592,268	16,282,817	32,710,265
Income taxes	4,998,362	10,527,270	6,602,235	1,743,799	6,388,273
Net income	7,116,100	30,801,137	20,990,033	14,539,018	26,321,992
Basic earnings per share - Class A	0.27	1.19	0.78	0.56	1.04
Diluted earnings per share - Class A	0.26	1.16	0.77	0.55	1.02
Cash dividends per share - Class A	0.56	0.55	0.54	0.53	0.51
Basic earnings per share - Class B	0.22	1.06	0.69	0.49	0.94
Diluted earnings per share - Class B	0.22	1.06	0.69	0.49	0.94
Cash dividends per share - Class B	0.49	0.48	0.47	0.46	0.46
Balance Sheet Data at Year End					
Total investments	$1,005,869,705	$ 945,519,655	$ 900,822,274	$ 832,941,077	$ 791,808,307
Total assets	1,737,919,778	1,623,131,037	1,537,834,415	1,458,654,644	1,385,410,502
Debt obligations	64,000,000	74,000,000	86,000,000	58,500,000	63,000,000
Stockholders’ equity	448,696,104	438,615,320	408,388,568	416,134,643	396,877,111
Book value per share	15.95	16.21	15.66	15.40	15.02

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

Overview

Donegal Mutual Insurance Company ("Donegal Mutual") organized us as an insurance holding company on August 26, 1986. See "Business - History and Organizational Structure" for more information. Our insurance subsidiaries, Atlantic States Insurance Company ("Atlantic States"), Southern Insurance Company of Virginia ("Southern"), Le Mars Insurance Company ("Le Mars"), The Peninsula Insurance Company and Peninsula Indemnity Company (collectively, "Peninsula"), Sheboygan Falls Insurance Company ("Sheboygan Falls") and Michigan Insurance Company ("MICO") write personal and commercial lines of property and casualty coverages exclusively through a network of independent insurance agents in certain Mid-Atlantic, Midwest, New England and Southern states. The personal lines products of our insurance subsidiaries consist primarily of homeowners and private passenger automobile policies. The commercial lines products of our insurance subsidiaries consist primarily of commercial automobile, commercial multi-peril and workers' compensation policies. We also own 48.2% of the outstanding stock of Donegal Financial Services Corporation ("DFSC"), a grandfathered unitary savings and loan holding company. Donegal Mutual owns the remaining 51.8% of the outstanding stock of DFSC.

At December 31, 2017, Donegal Mutual held approximately 44% of our outstanding Class A common stock and approximately 83% of our outstanding Class B common stock. This ownership provides Donegal Mutual with approximately 72% of the combined voting power of our outstanding shares of Class A common stock and our outstanding shares of Class B common stock.

Donegal Mutual and Atlantic States entered into a proportional reinsurance agreement, or pooling agreement, effective October 1, 1986. Under this pooling agreement, Donegal Mutual and Atlantic States pool and then share proportionately substantially all of their respective premiums, losses and expenses. Atlantic States' participation in the pool has been 80% since March 1, 2008. The operations of our insurance subsidiaries and Donegal Mutual are interrelated due to the pooling agreement and other factors. While maintaining the separate corporate existence of each company, our insurance subsidiaries and Donegal Mutual conduct business together as the Donegal Insurance Group. As such, Donegal Mutual and our insurance subsidiaries share the same business philosophy, the same management, the same employees and the same facilities and offer the same types of insurance products. See "Business - History and Organizational Structure" for more information regarding the pooling agreement and other transactions with our affiliates.

On July 18, 2013, our board of directors authorized a share repurchase program pursuant to which we have the authority to purchase up to 500,000 additional shares of our Class A common stock at prices prevailing from time to time in the open market subject to the provisions of the SEC Rule 10b-18 and in privately negotiated transactions. We did not purchase any shares of our Class A common stock under this program during 2017 or 2016. We have purchased a total of 57,658 shares of our Class A common stock under this program from its inception through December 31, 2017.

On December 18, 2015, we and Donegal Mutual entered into a Stock Purchase and Standstill Agreement (the "Purchase Agreement") with Gregory M. Shepard ("Mr. Shepard"). Under the terms of the Purchase Agreement, we purchased 2,000,000 shares of our Class A common stock from Mr. Shepard on December 22, 2015 for a price of $33.0 million, or $16.50 per share, representing a premium of approximately $5.8 million from the market price of our Class A common stock on the date of the Purchase Agreement. We reported this premium in excess of the market price as an expense in our consolidated statements of income and comprehensive income for 2015 that we include in this Form 10-K Report. We borrowed $33.0 million under our existing line of credit with M&T Bank to fund the purchase. The Purchase Agreement contains a number of typical "standstill" provisions pursuant to which Mr. Shepard and any affiliate of Mr. Shepard shall not take a number of "control-seeking" actions with respect to us for a period of 25 years from the date of the Purchase Agreement.

Critical Accounting Policies and Estimates

We combine our financial statements with those of our insurance subsidiaries and present them on a consolidated basis in accordance with GAAP.

Our insurance subsidiaries make estimates and assumptions that can have a significant effect on amounts and disclosures we report in our financial statements. The most significant estimates relate to the reserves of our insurance subsidiaries for property and casualty insurance unpaid losses and loss expenses, valuation of investments and determination of other-than-temporary investment impairments and the policy acquisition costs of our insurance subsidiaries. While we believe our estimates and the estimates of our insurance subsidiaries are appropriate, the ultimate amounts may differ from the estimates we provided. We regularly review our methods for making these estimates, and we reflect any adjustment we consider necessary in our results of operations for the period in which we make an adjustment.

Liability for Losses and Loss Expenses

Liabilities for losses and loss expenses are estimates at a given point in time of the amounts an insurer expects to pay with respect to incurred policyholder claims based on facts and circumstances the insurer knows at that point in time. At the time of establishing its estimates, an insurer recognizes that its ultimate liability for losses and loss expenses will exceed or be less than such estimates. Our insurance subsidiaries base their estimates of liabilities for losses and loss expenses on assumptions as to future loss trends, expected claims severity, judicial theories of liability and other factors. However, during the loss adjustment period, our insurance subsidiaries may learn additional facts regarding individual claims, and, consequently, it often becomes necessary for our insurance subsidiaries to refine and adjust their estimates for these liabilities. We reflect any adjustments to the liabilities for losses and loss expenses of our insurance subsidiaries in our consolidated results of operations in the period in which our insurance subsidiaries make adjustments to their estimates.

Our insurance subsidiaries maintain liabilities for the payment of losses and loss expenses with respect to both reported and unreported claims. Our insurance subsidiaries establish these liabilities for the purpose of covering the ultimate costs of settling all losses, including investigation and litigation costs. Our insurance subsidiaries base the amount of their liability for reported losses primarily upon a case-by-case evaluation of the type of risk involved, knowledge of the circumstances surrounding each claim and the insurance policy provisions relating to the type of loss the policyholder incurred. Our insurance subsidiaries determine the amount of their liability for unreported claims and loss expenses on the basis of historical information by line of insurance. Our insurance subsidiaries account for inflation in the reserving function through analysis of costs and trends and reviews of historical reserving results. Our insurance subsidiaries monitor their liabilities closely and recompute them periodically using new information on reported claims and a variety of statistical techniques. Our insurance subsidiaries do not discount their liabilities for losses and loss expenses.

Reserve estimates can change over time because of unexpected changes in assumptions related to our insurance subsidiaries' external environment and, to a lesser extent, assumptions related to our insurance subsidiaries' internal operations. For example, our insurance subsidiaries have experienced a decrease in claims frequency on workers' compensation claims during the past several years while the severity of these claims has gradually increased. These trend changes give rise to greater uncertainty as to the pattern of future loss settlements on workers' compensation claims. Related uncertainties regarding future trends include the cost of medical technologies and procedures and changes in the utilization of medical procedures. Assumptions related to our insurance subsidiaries' external environment include the absence of significant changes in tort law and the legal environment that increase liability exposure, consistency in judicial interpretations of insurance coverage and policy provisions and the rate of loss cost inflation. Internal assumptions include consistency in the recording of premium and loss statistics, consistency in the recording of claims, payment and case reserving methodology, accurate measurement of the impact of rate changes and changes in policy provisions, consistency in the quality and characteristics of business written within a given line of business and consistency in reinsurance coverage and collectability of reinsured losses, among other items. To the extent our insurance subsidiaries determine that underlying factors impacting their assumptions have changed, our insurance subsidiaries make adjustments in their reserves that they consider appropriate for such changes. Accordingly, our insurance subsidiaries' ultimate liability for unpaid losses and loss expenses will likely differ from the amount recorded at December 31, 2017. For every 1% change in our insurance subsidiaries' loss and loss expense reserves, net of reinsurance recoverable, the effect on our pre-tax results of operations would be approximately $3.8 million.

The establishment of appropriate liabilities is an inherently uncertain process and we can provide no assurance that our insurance subsidiaries' ultimate liability will not exceed our insurance subsidiaries' loss and loss expense reserves and have an adverse effect on our results of operations and financial condition. Furthermore, we cannot predict the timing, frequency and extent of adjustments to our insurance subsidiaries' estimated future liabilities, because the historical conditions and events that serve as a basis for our insurance subsidiaries' estimates of ultimate claim costs may change. As is the case for substantially all property and casualty insurance companies, our insurance subsidiaries have found it necessary in the past to increase their estimated future liabilities for losses and loss expenses in certain periods and, in other periods, their estimated future liabilities for losses and loss expenses have exceeded their actual liabilities for losses and loss expenses. Changes in our insurance subsidiaries' estimates of their liability for losses and loss expenses generally reflect actual payments and their evaluation of information received subsequent to the prior reporting period. Our insurance subsidiaries recognized an increase in their liability for losses and loss expenses of prior years of $6.6 million, $3.0 million and $7.2 million in 2017, 2016 and 2015, respectively. Our insurance subsidiaries made no significant changes in their reserving philosophy, key reserving assumptions or claims management personnel, and they have made no significant offsetting changes in estimates that increased or decreased their loss and loss expense reserves in these years. The 2017 development represented 1.9% of the December 31, 2016 net carried reserves and resulted primarily from higher-than-expected severity in the commercial multiple peril, personal automobile and commercial automobile lines of business, offset by lower-than-expected severity in the workers' compensation line of business, in accident years prior to 2017. The majority of the 2017 development related to increases in the liability for losses and loss expenses of prior years for Atlantic States and Peninsula. The 2016 development represented 0.9% of the December 31, 2015 net carried reserves and resulted primarily from higher-than-expected severity in the commercial multiple peril and commercial automobile liability lines of business, offset by lower-than-expected severity in the workers' compensation line of business, in accident years prior to 2016. The majority of the 2016 development related to increases in the liability for losses and loss expenses of prior years for Atlantic States and Southern. The 2015 development represented 2.5% of the December 31, 2014 net carried reserves and resulted primarily from higher-than-expected severity in the private passenger automobile liability, commercial multiple peril and commercial automobile lines of business in accident years prior to 2015. The majority of the 2015 development related to increases in the liability for losses and loss expenses of prior years for Atlantic States and Southern.

Excluding the impact of severe weather events, our insurance subsidiaries have noted stable amounts in the number of claims incurred and a slight downward trend in the number of claims outstanding at period ends relative to their premium base in recent years across most of their lines of business. However, the amount of the average claim outstanding has increased gradually over the past several years due to various factors such as rising medical loss costs and increased litigation trends. We have also experienced a general slowing of settlement rates in litigated claims. Our insurance subsidiaries could have to make further adjustments to their estimates in the future. However, on the basis of our insurance subsidiaries' internal procedures, which analyze, among other things, their prior assumptions, their experience with similar cases and historical trends such as reserving patterns, loss payments, pending levels of unpaid claims and product mix, as well as court decisions, economic conditions and public attitudes, we believe that our insurance subsidiaries have made adequate provision for their liability for losses and loss expenses.

Atlantic States' participation in the pool with Donegal Mutual exposes Atlantic States to adverse loss development on the business of Donegal Mutual that the pool includes. However, pooled business represents the predominant percentage of the net underwriting activity of both companies, and Donegal Mutual and Atlantic States share proportionately any adverse risk development relating to the pooled business. The business in the pool is homogeneous and each company has a pro-rata share of the entire pool. Since the predominant percentage of the business of Atlantic States and Donegal Mutual is pooled and the results shared by each company according to its participation level under the terms of the pooling agreement, the intent of the underwriting pool is to produce a more uniform and stable underwriting result from year to year for each company than either would experience individually and to spread the risk of loss between the companies.

Donegal Mutual and our insurance subsidiaries operate together as the Donegal Insurance Group and share a combined business plan designed to achieve market penetration and underwriting profitability objectives. The products our insurance subsidiaries and Donegal Mutual offer are generally complementary, thereby allowing Donegal Insurance Group to offer a broader range of products to a given market and to expand Donegal Insurance Group's ability to service an entire personal lines or commercial lines account. Distinctions within the products of Donegal Mutual and our insurance subsidiaries generally relate to specific risk profiles targeted within similar classes of business, such as preferred tier products compared to standard tier products, but we do not allocate all of the standard risk gradients to one company. Therefore, the underwriting profitability of the business the individual companies write directly will vary. However, because the pool homogenizes the risk characteristics of the predominant percentage of the business Donegal Mutual and Atlantic States write directly and each company shares the underwriting results according to each company's participation percentage, each company realizes its percentage share of the underwriting results of the pool.

Our insurance subsidiaries' liability for losses and loss expenses by major line of business at December 31, 2017 and 2016 consisted of the following:

	2017	2016
	(in thousands)	
Commercial lines:		
Automobile	$ 74,299	$ 58,615
Workers' compensation	103,318	104,446
Commercial multi-peril	71,011	60,887
Other	4,119	3,868
Total commercial lines	252,747	227,816
Personal lines:		
Automobile	110,512	100,498
Homeowners	18,508	17,286
Other	1,634	1,918
Total personal lines	130,654	119,702
Total commercial and personal lines	383,401	347,518
Plus reinsurance recoverable	293,271	259,147
Total liability for losses and loss expenses	$676,672	$606,665

We have evaluated the effect on our insurance subsidiaries' loss and loss expense reserves and our stockholders' equity in the event of reasonably likely changes in the variables we consider in establishing loss and loss expense reserves. We established the range of reasonably likely changes based on a review of changes in accident year development by line of business and applied it to our insurance subsidiaries' loss reserves as a whole. The selected range does not necessarily indicate what could be the potential best or worst case or the most-likely scenario. The following table sets forth the effect on our insurance subsidiaries' loss and loss expense reserves and our stockholders' equity in the event of reasonably likely changes in the variables considered in establishing loss and loss expense reserves:

Change in Loss and Loss Expense Reserves Net of Reinsurance	Adjusted Loss and Loss Expense Reserves Net of Reinsurance at December 31, 2017	Percentage Change in Equity at December 31, 2017(1)	Adjusted Loss and Loss Expense Reserves Net of Reinsurance at December 31, 2016	Percentage Change in Equity at December 31, 2016(1)
		(dollars in thousands)		
-10.0%	$ 345,061	6.8%	$ 312,766	5.1%
-7.5	354,646	5.1	321,454	3.9
-5.0	364,231	3.4	330,142	2.6
-2.5	373,816	1.7	338,830	1.3
Base	383,401	—	347,518	—
2.5	392,986	-1.7	356,206	-1.3
5.0	402,571	-3.4	364,894	-2.6
7.5	412,156	-5.1	373,582	-3.9
10.0	421,741	-6.8	382,270	-5.1

(1) Net of income tax effect (21% at December 31, 2017 and 35% at December 31, 2016).

Our insurance subsidiaries base their reserves for unpaid losses and loss expenses on current trends in loss and loss expense development and reflect their best estimates for future amounts needed to pay losses and loss expenses with respect to incurred events currently known to them plus incurred but not reported ("IBNR") claims. Our insurance subsidiaries develop their reserve estimates based on an assessment of known facts and circumstances, review of historical loss settlement patterns, estimates of trends in claims severity, frequency, legal and regulatory changes and other assumptions. Our insurance subsidiaries consistently apply actuarial loss reserving techniques and assumptions, which rely on historical information as adjusted to reflect current conditions, including consideration of recent case reserve activity. Our insurance subsidiaries use the most-likely number their actuaries determine. For the year ended December 31, 2017, the actuaries developed a range from a low of $353.0 million to a high of $416.5 million and with a most-likely number of $383.4 million. The actuaries' range of estimates for commercial lines in 2017 was $232.8 million to $274.5 million, and the actuaries selected the most-likely number of $252.7 million. The actuaries' range of estimates for personal lines in 2017 was $120.2 million to $142.0 million, and the actuaries selected the most-likely number of $130.7 million. For the year ended December 31, 2016, the actuaries developed a range from a low of $318.6 million to a high of $379.0 million and with a most-likely number of $347.5 million. The actuaries' range of estimates for commercial lines in 2016 was $208.9 million to $248.4 million, and the actuaries selected the most-likely number of $227.8 million. The actuaries' range of estimates for personal lines in 2016 was $109.7 million to $130.6 million, and the actuaries selected the most-likely number of $119.7 million.

Our insurance subsidiaries seek to enhance their underwriting results by carefully selecting the product lines they underwrite. For personal lines products, our insurance subsidiaries insure standard and preferred risks in private passenger automobile and homeowners lines. For commercial lines products, the commercial risks that our insurance subsidiaries primarily insure are business offices, wholesalers, service providers, contractors, artisans and light manufacturing operations. Our insurance subsidiaries have limited exposure to asbestos and other environmental liabilities. Our insurance subsidiaries write no medical malpractice liability risks. Through the consistent application of this disciplined underwriting philosophy, our insurance subsidiaries have avoided many of the "long-tail" issues other insurance companies have faced. We consider workers' compensation to be a "long-tail" line of business, in that workers' compensation claims tend to be settled over a longer time frame than those in the other lines of business of our insurance subsidiaries.

The following table presents 2017 and 2016 claim count and payment amount information for workers' compensation. Workers' compensation losses primarily consist of indemnity and medical costs for injured workers.

	For the Year Ended December 31,	
(dollars in thousands)	2017	2016
Number of claims pending, beginning of period	2,710	2,694
Number of claims reported	6,348	6,343
Number of claims settled or dismissed	6,152	6,327
Number of claims pending, end of period	2,906	2,710
Losses paid	$ 41,970	$ 39,718
Loss expenses paid	9,474	9,326

Investments

We make estimates concerning the valuation of our investments and the recognition of other-than-temporary declines in the value of our investments. For equity securities, when we consider a decline in the value of an individual investment to be other than temporary, we write down the investment to its fair value and reflect the amount of the write-down as a realized loss in our results of operations. We individually monitor all investments for other-than-temporary declines in value. Generally, we assume there has been an other-than-temporary decline in value if an individual equity security has depreciated in value by more than 20% of original cost and has been in such an unrealized loss position for more than six months. We held five equity securities that were in an unrealized loss position at December 31, 2017. Based upon our analysis of general market conditions and underlying factors impacting these equity securities, we considered these declines in value to be temporary. With respect to a debt security that is in an unrealized loss position, we first assess if we intend to sell the debt security. If we determine we intend to sell the debt security, we recognize the impairment loss in our results of operations. If we do not intend to sell the debt security, we determine whether it is more likely than not that we will be required to sell the security prior to recovery. If we determine it is more likely than not that we will be required to sell the debt security prior to recovery, we recognize an impairment loss in our results of operations. If we determine it is more likely than not that we will not be required to sell the debt security prior to recovery, we then evaluate whether a credit loss has occurred. We determine whether a credit loss has occurred by comparing the amortized cost of the debt security to the present value of the cash flows we expect to collect. If we expect a cash flow shortfall, we consider that a credit loss has occurred. If we determine that a credit loss has occurred, we consider the impairment to be other than temporary. We then recognize the amount of the impairment loss related to the credit loss in our results of operations, and we recognize the remaining portion of the impairment loss in our other comprehensive income, net of applicable taxes. In addition, we may write down securities in an unrealized loss position based on a number of other factors, including when the fair value of an investment is significantly below its cost, when the financial condition of the issuer of a security has deteriorated, the occurrence of industry, company or geographic events that have negatively impacted the value of a security and rating agency downgrades. We held 280 debt securities that were in an unrealized loss position at December 31, 2017. Based upon our analysis of general market conditions and underlying factors impacting these debt securities, we considered these declines in value to be temporary. We did not recognize any impairment losses in 2017, 2016 or 2015.

We held fixed maturities and equity securities with unrealized losses representing declines that we considered temporary at December 31, 2017 as follows:

	Less than 12 months		12 months or longer	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Treasury securities and obligations of U.S. government corporations and agencies	$ 24,024,445	$ 286,518	$ 33,987,229	$ 990,759
Obligations of states and political subdivisions	10,223,383	120,076	14,127,415	294,557
Corporate securities	35,203,959	253,241	31,560,591	1,003,047
Mortgage-backed securities	100,533,516	817,315	124,061,502	2,666,650
Equity securities	4,291,875	279,141	—	—
Totals	$174,277,178	$ 1,756,291	$203,736,737	$ 4,955,013

We held fixed maturities and equity securities with unrealized losses representing declines that we considered temporary at December 31, 2016 as follows:

	Less than 12 months		12 months or longer	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Treasury securities and obligations of U.S. government corporations and agencies	$ 37,729,947	$ 1,279,510	$ —	$ —
Obligations of states and political subdivisions	40,739,099	802,311	710,280	8,936
Corporate securities	80,181,238	2,127,451	4,706,945	472,044
Mortgage-backed securities	168,771,543	2,727,720	416,828	2,602
Equity securities	5,420,875	132,071	—	—
Totals	$332,842,702	$ 7,069,063	$5,834,053	$ 483,582

We present our investments in available-for-sale fixed maturity and equity securities at estimated fair value. The estimated fair value of a security may differ from the amount that we could realize if we sold the security in a forced transaction. In addition, the valuation of fixed maturity investments is more subjective when markets are less liquid, increasing the potential that the estimated fair value does not reflect the price at which an actual transaction would occur. We utilize nationally recognized independent pricing services to estimate fair values or obtain market quotations for substantially all of our fixed maturity and equity investments. We generally obtain two prices per security. The pricing services utilize market quotations for fixed maturity and equity securities that have quoted prices in active markets. For fixed maturity securities that generally do not trade on a daily basis, the pricing services prepare estimates of fair value measurements based predominantly on observable market inputs. The pricing services do not use broker quotes in determining the fair values of our investments. Our investment personnel review the estimates of fair value the pricing services provide to determine if the estimates we obtain are representative of fair values based upon their general knowledge of the market, their research findings related to unusual fluctuations in value and their comparison of such values to execution prices for similar securities. Our investment personnel monitor the market and are familiar with current trading ranges for similar securities and pricing of specific investments. Our investment personnel review all pricing estimates that we receive from the pricing services against the expectations of our investment personnel with respect to pricing based on fair market curves, security ratings, coupon rates, security type and recent trading activity. Our investment personnel review documentation with respect to the pricing services' pricing methodology that they obtain periodically to determine if the primary pricing sources, market inputs and pricing frequency for various security types are reasonable. At December 31, 2017, we received two estimates per security from the pricing services, and we priced substantially all of our Level 1 (quoted prices in active markets for identical assets and liabilities) and Level 2 (directly or indirectly observable inputs other than Level 1 quoted prices) investments using those prices. In our review of the estimates the pricing services provided at December 31, 2017, we did not identify any material discrepancies, and we did not make any adjustments to the estimates the pricing services provided.

We had no sales or transfers from the held to maturity portfolio in 2017, 2016 or 2015.

Policy Acquisition Costs

We defer our insurance subsidiaries' policy acquisition costs, consisting primarily of commissions, premium taxes and certain other underwriting costs, reduced by ceded commissions, that vary with and relate directly to the production of business. We amortize these costs over the period in which our insurance subsidiaries earn the premiums on that business. The method our insurance subsidiaries follow in computing deferred policy acquisition costs limits the amount of such deferred costs to their estimated realizable value, which gives effect to the premium to be earned, related investment income, losses and loss expenses and certain other costs we expect to incur as our insurance subsidiaries earn the premium.

Management Evaluation of Operating Results

Despite economic uncertainty, challenging insurance market conditions and unusually adverse weather conditions that affected our results in recent years, we believe that our focused business strategy, including our insurance subsidiaries' disciplined underwriting practices, have positioned us well for 2018 and beyond.

The property and casualty insurance industry is highly cyclical, and individual lines of business experience their own cycles within the overall property and casualty insurance industry cycle. Premium rate levels relate to the availability of insurance coverage, which varies according to the level of surplus in the insurance industry and other factors. The level of surplus in the industry varies with returns on capital and regulatory barriers to the withdrawal of surplus. Increases in surplus have generally been accompanied by increased price competition among property and casualty insurers. If our insurance subsidiaries were to find it necessary to reduce premiums or limit premium increases due to competitive pressures on pricing, our insurance subsidiaries could experience a reduction in profit margins and revenues, an increase in ratios of losses and expenses to premiums and, therefore, lower profitability. The cyclicality of the insurance market and its potential impact on our results is difficult to predict with any significant reliability. Because our insurance subsidiaries do not prepare GAAP financial statements, we evaluate the performance of our personal lines and commercial lines segments utilizing statutory accounting practices ("SAP"), which include financial measures that reflect the growth trends and underwriting results of our insurance subsidiaries.

We use the following financial data to monitor and evaluate our operating results:

(in thousands)	Year Ended December 31, 2017	2016	2015
Net premiums written:			
Personal lines:			
Automobile	$255,297	$229,789	$214,610
Homeowners	125,054	122,811	119,541
Other	19,672	19,057	18,176
Total personal lines	400,023	371,657	352,327
Commercial lines:			
Automobile	99,333	87,849	76,729
Workers' compensation	109,884	108,349	98,079
Commercial multi-peril	110,313	104,728	94,219
Other	9,586	9,451	7,483
Total commercial lines	329,116	310,377	276,510
Total net premiums written	$729,139	$682,034	$628,837
Components of GAAP combined ratio:			
Loss ratio	69.4%	64.5%	65.8%
Expense ratio	32.9	33.0	32.6
Dividend ratio	0.7	0.6	0.6
GAAP combined ratio	103.0%	98.1%	99.0%
Revenues:			
Premiums earned:			
Personal lines	$384,124	$361,128	$344,355
Commercial lines	318,391	295,077	261,286
GAAP premiums earned	702,515	656,205	605,641
Net investment income	23,527	22,633	20,950
Realized investment gains	5,705	2,526	1,934
Equity in earnings of DFSC	1,622	1,086	1,277
Other	5,658	5,973	6,585
Total revenues	$739,027	$688,423	$636,387

(in thousands)	Year Ended December 31, 2017	2016	2015
Components of net income:			
Underwriting (loss) income:			
Personal lines	$(39,042)	$(10,745)	$ (6,414)
Commercial lines	13,263	18,284	9,259
SAP underwriting (loss) income	(25,779)	7,539	2,845
GAAP adjustments	4,408	4,642	3,344
GAAP underwriting (loss) income	(21,371)	12,181	6,189
Net investment income	23,527	22,633	20,950
Realized investment gains	5,705	2,526	1,934
Equity in earnings of DFSC	1,622	1,086	1,277
Premium paid on purchase of treasury stock	—	—	(5,780)
Other	2,631	2,902	3,022
Income before income tax	12,114	41,328	27,592
Income tax	(4,998)	(10,527)	(6,602)
Net income	$ 7,116	$ 30,801	$20,990

Non-GAAP Information

We prepare our consolidated financial statements on the basis of GAAP. Our insurance subsidiaries also prepare financial statements based on SAP. SAP financial measures are considered non-GAAP financial measures under applicable SEC rules because the SAP financial measures include or exclude certain items that the most comparable GAAP financial measures do not ordinarily include or exclude. Our calculation of non-GAAP financial measures may differ from similar measures other companies use, so investors should exercise caution when comparing our non-GAAP financial measures to the non-GAAP financial measures other companies use. The SAP financial measures we utilize are net premiums written and statutory combined ratio.

Net Premiums Written

We define net premiums written as the amount of full-term premiums our insurance subsidiaries record for policies effective within a given period less premiums our insurance subsidiaries cede to reinsurers. Net premiums earned is the most comparable GAAP financial measure to net premiums written. Net premiums earned represent the sum of the amount of net premiums written and the change in net unearned premiums during a given period. Our insurance subsidiaries earn premiums and recognize them as revenue over the terms of their policies, which are one year or less in duration. Therefore, increases or decreases in net premiums earned generally reflect increases or decreases in net premiums written in the preceding 12-month period compared to the comparable period one year earlier.

The following table provides a reconciliation of our net premiums earned to our net premiums written for 2017, 2016 and 2015:

	Year Ended December 31, 2017	2016	2015
Net premiums earned	$702,514,755	$656,204,797	$605,640,728
Change in net unearned premiums	26,624,163	25,829,042	23,196,122
Net premiums written	$729,138,918	$682,033,839	$628,836,850

Statutory Combined Ratio

The combined ratio is a standard measurement of underwriting profitability for an insurance company. The combined ratio does not reflect investment income, net realized investment gains or losses, federal income taxes or other non-operating income or expense. A combined ratio of less than 100% generally indicates underwriting profitability.

The statutory combined ratio is a non-GAAP financial measure that is based upon amounts determined under SAP. We calculate our statutory combined ratio as the sum of:

- the statutory loss ratio, which is the ratio of calendar-year net incurred losses and loss expenses to net premiums earned;
- the statutory expense ratio, which is the ratio of expenses incurred for net commissions, premium taxes and underwriting expenses to net premiums written; and
- the statutory dividend ratio, which is the ratio of dividends to holders of workers' compensation policies to net premiums earned.

The calculation of our statutory combined ratio differs from the calculation of our GAAP combined ratio. In calculating our GAAP combined ratio, we do not deduct installment payment fees from incurred expenses, and we base the expense ratio on net premiums earned instead of net premiums written. Differences between our GAAP loss ratio and our statutory loss ratio result from anticipating salvage and subrogation recoveries for our GAAP loss ratio but not for our statutory loss ratio.

The following table presents comparative details with respect to our GAAP and statutory combined ratios for the years ended December 31, 2017, 2016 and 2015:

	Year Ended December 31,		
	2017	**2016**	**2015**
GAAP Combined Ratios (Total Lines)			
Loss ratio (non-weather)	61.1%	58.8%	59.7%
Loss ratio (weather-related)	8.3	5.7	6.1
Expense ratio	32.9	33.0	32.6
Dividend ratio	0.7	0.6	0.6
Combined ratio	103.0%	98.1%	99.0%
Statutory Combined Ratios			
Commercial lines:			
Automobile	115.0%	110.8%	109.5%
Workers' compensation	79.0	83.8	87.6
Commercial multi-peril	96.7	87.7	90.8
Total commercial lines	93.6	90.7	92.8
Personal lines:			
Automobile	109.3	106.7	104.3
Homeowners	109.9	95.5	97.6
Total personal lines	108.5	101.8	100.9
Total commercial and personal lines	101.7	96.8	97.4

Results of Operations

YEAR ENDED DECEMBER 31, 2017 COMPARED TO YEAR ENDED DECEMBER 31, 2016

Net Premiums Earned

Our insurance subsidiaries' net premiums earned increased to $702.5 million for 2017, an increase of $46.3 million, or 7.1%, over 2016, reflecting increases in net premiums written during 2016 and 2017. Our insurance subsidiaries earn premiums and recognize them as income over the terms of the policies they issue. Such terms are generally one year or less in duration. Therefore, increases or decreases in net premiums earned generally reflect increases or decreases in net premiums written in the preceding twelve-month period compared to the same period one year earlier.

Net Premiums Written

Our insurance subsidiaries' 2017 net premiums written increased 6.9% to $729.1 million, compared to $682.0 million for 2016. We attribute the increase primarily to the impact of premium rate increases and an increase in the writing of new accounts in both personal and commercial lines of insurance. Commercial lines net premiums written increased $18.7 million, or 6.0%, for 2017 compared to 2016. The increase was primarily attributable to premium rate increases and increased writings of new accounts in the commercial automobile, commercial multi-peril and workers' compensation lines of business. Personal lines net premiums written increased $28.4 million, or 7.6%, for 2017 compared to 2016. We attribute the increase in personal lines primarily to an increase in new business and premium rate increases our insurance subsidiaries implemented throughout 2016 and 2017.

Investment Income

For 2017, our net investment income increased to $23.5 million, an increase of $894,574, or 4.0%, over 2016. We attribute the increase primarily to an increase in average invested assets.

Installment Payment Fees

Our insurance subsidiaries' installment fees decreased primarily as a result of their customers' increased usage of payment plans that have lower installment payment fees during 2017.

Net Realized Investment Gains

Our net realized investment gains in 2017 and 2016 were $5.7 million and $2.5 million, respectively. The net realized investment gains for 2017 resulted primarily from strategic sales of equity securities within our investment portfolio and unrealized gains within a limited partnership that invests in equity securities. The net realized investment gains in 2016 resulted from normal turnover within our investment portfolio. We did not recognize any impairment losses during 2017 or 2016.

Equity in Earnings of DFSC

Our equity in the earnings of DFSC in 2017 and 2016 was $1.6 million and $1.1 million, respectively. We attribute the increase in DFSC's earnings primarily to higher net interest income related to loan portfolio growth that DFSC achieved during 2017.

Losses and Loss Expenses

Our insurance subsidiaries' loss ratio, which is the ratio of incurred losses and loss expenses to premiums earned, was 69.4% in 2017, compared to 64.5% in 2016. Our insurance subsidiaries' commercial lines loss ratio increased to 62.0% in 2017, compared to 59.6% in 2016. This increase resulted primarily from the commercial automobile loss ratio increasing to 80.3% in 2017, compared to 78.7% in 2016, and the commercial multi-peril loss ratio increasing to 64.6% in 2017, compared to 54.4% in 2016. The personal lines loss ratio was 75.5% in 2017 compared to 68.5% in 2016. Our insurance subsidiaries experienced unfavorable loss reserve development of approximately $6.6 million during 2017 in their reserves for prior accident years, compared to approximately $3.0 million during 2016. The unfavorable loss reserve development resulted primarily from higher-than-expected severity in the commercial multiple peril, personal automobile liability and commercial automobile lines of business, offset by lower-than-expected severity in the workers' compensation line of business.

Underwriting Expenses

Our insurance subsidiaries' expense ratio, which is the ratio of policy acquisition and other underwriting expenses to premiums earned, was 32.9% in 2017, compared to 33.0% in 2016. We attribute the decrease to lower underwriting-based incentive compensation in 2017.

Combined Ratio

Our insurance subsidiaries' combined ratio was 103.0% and 98.1% in 2017 and 2016, respectively. The combined ratio represents the sum of the loss ratio, the expense ratio and the dividend ratio, which is the ratio of workers' compensation policy dividends incurred to premiums earned. We attribute the increase in our combined ratio primarily to the increase in our loss ratio.

Interest Expense

Our interest expense in 2017 decreased to $1.6 million, compared to $1.7 million in 2016. We attribute the decrease to lower average borrowings during 2017 compared to 2016.

Income Taxes

Our income tax expense was $5.0 million in 2017, compared to $10.5 million in 2016. Our effective tax rate for 2017 was 41.3%, compared to 25.5% for 2016. The increase in our 2017 effective tax rate was primarily due to additional tax expense of $4.8 million related to the revaluation of our net deferred tax assets pursuant to the Tax Cuts and Jobs Act (the "TCJA"). Excluding the impact of the TCJA, our effective tax rate for 2017 was 2.0% due to tax-exempt interest income representing a greater proportion of income before income tax expense in 2017 compared to 2016.

Net Income and Earnings Per Share

Our net income in 2017 was $7.1 million, or $.26 per share of Class A common stock on a diluted basis and $.22 per share of Class B common stock, compared to $30.8 million, or $1.16 per share of Class A common stock on a diluted basis and $1.06 per share of Class B common stock, in 2016. We had 22.6 million and 21.5 million Class A shares outstanding at December 31, 2017 and 2016, respectively. We had 5.6 million Class B shares outstanding for both periods. There are no outstanding securities that dilute our shares of Class B common stock.

Book Value Per Share and Return on Equity

Our stockholders' equity increased by $10.1 million in 2017. Our book value per share decreased to $15.95 at December 31, 2017, compared to $16.21 a year earlier. Our return on average equity was 1.6% for 2017, compared to 7.3% for 2016.

YEAR ENDED DECEMBER 31, 2016 COMPARED TO YEAR ENDED DECEMBER 31, 2015

Net Premiums Earned

Our insurance subsidiaries' net premiums earned increased to $656.2 million for 2016, an increase of $50.6 million, or 8.3%, over 2015, reflecting increases in net premiums written during 2015 and 2016. Our insurance subsidiaries earn premiums and recognize them as income over the terms of the policies they issue. Such terms are generally one year or less in duration. Therefore, increases or decreases in net premiums earned generally reflect increases or decreases in net premiums written in the preceding twelve-month period compared to the same period one year earlier.

Net Premiums Written

Our insurance subsidiaries' 2016 net premiums written increased 8.5% to $682.0 million, compared to $628.8 million for 2015. We primarily attribute the increase to the impact of premium rate increases and an increase in the writing of commercial lines of insurance. Commercial lines net premiums written increased $33.9 million, or 12.2%, for 2016 compared to 2015. The increase was primarily attributable to premium rate increases and increased writings of new accounts in the commercial automobile, commercial multi-peril and workers' compensation lines of business. Personal lines net premiums written increased $19.3 million, or 5.5%, for 2016 compared to 2015. The increase was primarily attributable to premium rate increases.

Investment Income

For 2016, our net investment income increased to $22.6 million, an increase of $1.7 million, or 8.0%, over 2015. We attribute the increase primarily to an increase in average invested assets.

Installment Payment Fees

Our insurance subsidiaries' installment fees decreased primarily as a result of their customers' increased usage of payment plans that have lower installment payment fees during 2016.

Net Realized Investment Gains

Our net realized investment gains in 2016 and 2015 were $2.5 million and $1.9 million, respectively. The net realized investment gains in 2016 and 2015 resulted from normal turnover within our investment portfolio. We did not recognize any impairment losses during 2016 or 2015.

Equity in Earnings of DFSC

Our equity in the earnings of DFSC in 2016 and 2015 was $1.1 million and $1.3 million, respectively.

Losses and Loss Expenses

Our insurance subsidiaries' loss ratio, which is the ratio of incurred losses and loss expenses to premiums earned, was 64.5% in 2016, compared to 65.8% in 2015. Our insurance subsidiaries' commercial lines loss ratio decreased to 59.6% in 2016, compared to 62.3% in 2015. This decrease resulted primarily from the workers' compensation loss ratio decreasing to 52.1% in 2016, compared to 56.7% in 2015, and the commercial multi-peril loss ratio decreasing to 54.4% in 2016, compared to 58.2% in 2015. The personal lines loss ratio was 68.5% in 2016 and 2015. Our insurance subsidiaries experienced unfavorable loss reserve development of approximately $3.0 million during 2016 in their reserves for prior accident years, improved from unfavorable loss reserve development of approximately $7.2 million during 2015. The change in loss reserve development patterns occurred primarily within our insurance subsidiaries' private passenger automobile liability, workers' compensation and homeowners lines of business.

Underwriting Expenses

Our insurance subsidiaries' expense ratio, which is the ratio of policy acquisition and other underwriting expenses to premiums earned, was 33.0% in 2016, compared to 32.6% in 2015. We attribute the increase to higher underwriting-based incentives in 2016.

Combined Ratio

Our insurance subsidiaries' combined ratio was 98.1% and 99.0% in 2016 and 2015, respectively. The combined ratio represents the sum of the loss ratio, the expense ratio and the dividend ratio, which is the ratio of workers' compensation policy dividends incurred to premiums earned. We attribute the decrease in our combined ratio primarily to the decrease in our loss ratio.

Interest Expense

Our interest expense in 2016 increased to $1.7 million, compared to $1.1 million in 2015. We attribute the increase to higher average borrowings during 2016 compared to 2015.

Income Taxes

Our income tax expense was $10.5 million in 2016, compared to $6.6 million in 2015. Our effective tax rate for 2016 was 25.5%, compared to 23.9% for 2015. The increase in our 2016 effective tax rate was primarily due to tax-exempt interest income representing a smaller proportion of income before income tax expense in 2016 compared to 2015.

Net Income and Earnings Per Share

Our net income in 2016 was $30.8 million, or $1.16 per share of Class A common stock on a diluted basis and $1.06 per share of Class B common stock, compared to $21.0 million, or $.77 per share of Class A common stock on a diluted basis and $.69 per share of Class B common stock, in 2015. We had 21.5 million and 20.5 million Class A shares outstanding at December 31, 2016 and 2015, respectively. We had 5.6 million Class B shares outstanding for both periods. There are no outstanding securities that dilute our shares of Class B common stock.

Book Value Per Share and Return on Equity

Our stockholders' equity increased by $30.2 million in 2016. Our book value per share increased to $16.21 at December 31, 2016, compared to $15.66 a year earlier. Our return on average equity was 7.3% for 2016, compared to 5.1% for 2015.

Financial Condition

Liquidity and Capital Resources

Liquidity is a measure of an entity's ability to secure enough cash to meet its contractual obligations and operating needs as they arise. Our major sources of funds from operations are the net cash flows generated from our insurance subsidiaries' underwriting results, investment income and maturing investments.

We have historically generated sufficient net positive cash flow from our operations to fund our commitments and build our investment portfolio, thereby increasing future investment returns. The pooling agreement with Donegal Mutual historically has been cash flow positive because of the profitability of the underwriting pool. Because we settle the pool monthly, our cash flows are substantially similar to the cash flows that would result from the underwriting of direct business. We maintain a high degree of liquidity in our investment portfolio in the form of marketable fixed maturities, equity securities and short-term investments. We structure our fixed-maturity investment portfolio following a "laddering" approach so that projected cash flows from investment income and principal maturities are evenly distributed from a timing perspective. This laddering approach provides an additional measure of liquidity to meet our obligations and the obligations of our insurance subsidiaries should an unexpected variation occur in the future. Net cash flows provided by operating activities in 2017, 2016 and 2015 were $81.0 million, $60.0 million and $68.2 million, respectively.

In July 2017, we renewed our existing credit agreement with Manufacturers and Traders Trust Company ("M&T") relating to a $60.0 million unsecured, revolving line of credit. The line of credit now expires in July 2020. We have the right to extend the term of the credit agreement for one year as of each anniversary date of the agreement. At December 31, 2017, we had $24.0 million in outstanding borrowings and had the ability to borrow an additional $36.0 million at interest rates equal to M&T's current prime rate or the then-current LIBOR rate plus 2.25%. The interest rate on our outstanding borrowings is adjustable quarterly. At December 31, 2017, the interest rate on our outstanding borrowings was 3.82%. We pay a fee of 0.25% per annum on the loan commitment amount regardless of usage. The credit agreement requires our compliance with certain covenants. These covenants include minimum levels of our net worth, leverage ratio, statutory surplus and the A.M. Best ratings of our insurance subsidiaries. We complied with all requirements of the credit agreement during 2017.

MICO has an agreement with the FHLB of Indianapolis. Through its membership, MICO has the ability to issue debt to the FHLB of Indianapolis in exchange for cash advances. There were no outstanding borrowings at December 31, 2017 or 2016.

Atlantic States is a member of the FHLB of Pittsburgh. Through its membership, Atlantic States has the ability to issue debt to the FHLB of Pittsburgh in exchange for cash advances. Atlantic States had $35.0 million in outstanding advances at December 31, 2017. The interest rate on the advances was 1.25% at December 31, 2017.

The following table shows expected payments for our significant contractual obligations at December 31, 2017:

(in thousands)	Total	Less than 1 year	1-3 years	4-5 years	After 5 years
Net liability for unpaid losses and loss expenses of our insurance subsidiaries	$383,401	$ 178,369	$ 176,980	$ 13,642	$14,410
Subordinated debentures	5,000	—	—	—	5,000
Borrowings under lines of credit	59,000	35,000	24,000	—	—
Total contractual obligations	$447,401	$ 213,369	$ 200,980	$ 13,642	$19,410

We estimated the timing of the amounts for the net liability for unpaid losses and loss expenses of our insurance subsidiaries based on historical experience and expectations of future payment patterns. We have shown the liability net of reinsurance recoverable on unpaid losses and loss expenses to reflect expected future cash flows related to such liability.

Assumed amounts from the underwriting pool with Donegal Mutual represent a substantial portion of our insurance subsidiaries' gross liability for unpaid losses and loss expenses, and ceded amounts to the underwriting pool represent a substantial portion of our insurance subsidiaries' reinsurance recoverable on unpaid losses and loss expenses. We include cash settlements of Atlantic States' assumed liability from the pool in our monthly settlements of pooled activity. In these monthly settlements, we net amounts ceded to and assumed from the pool. Donegal Mutual and Atlantic States do not anticipate any further changes in the pool participation levels in the foreseeable future. However, any such change would be prospective in nature and therefore would not impact the timing of expected payments for Atlantic States' proportionate liability for pooled losses occurring in periods prior to the effective date of such change.

We estimated the timing of the amounts for the borrowings under our lines of credit based on their contractual maturities that we discuss in Note 9 - Borrowings. Our borrowings under our lines of credit carry interest rates that vary as discussed in Note 9 - Borrowings. Based upon the interest rates in effect at December 31, 2017, our annual interest cost associated with our borrowings under our lines of credit is approximately $1.5 million. For every 1% change in the interest rate associated with our borrowings under our lines of credit, the effect on our annual interest cost would be approximately $590,000.

The cash dividends we declared to our stockholders totaled $15.0 million, $14.2 million and $14.5 million in 2017, 2016 and 2015, respectively. There are no regulatory restrictions on our payment of dividends to our stockholders, although there are restrictions under applicable state laws on the payment of dividends from our insurance subsidiaries to us. Our insurance subsidiaries are required by law to maintain certain minimum surplus on a statutory basis and are subject to regulations under which their payment of dividends from statutory surplus is restricted and may require prior approval of their domiciliary insurance regulatory authorities. Our insurance subsidiaries are also subject to risk-based capital ("RBC") requirements. The amount of statutory capital and surplus necessary for our insurance subsidiaries to satisfy regulatory requirements, including the RBC requirements, was not significant in relation to our insurance subsidiaries' statutory capital and surplus at December 31, 2017. Amounts available for distribution to us as ordinary dividends from our insurance subsidiaries without prior approval of insurance regulatory authorities in 2018 are $22.3 million from Atlantic States, $5.5 million from Southern, $2.3 million from Le Mars, $1.6 million from Peninsula, $0 from Sheboygan and $5.3 million from MICO, or a total of approximately $37.0 million.

Investments

At December 31, 2017 and 2016, our investment portfolio of primarily investment-grade bonds, common stock, short-term investments and cash totaled $1.0 billion and $970.1 million, respectively, representing 60.1% and 59.8%, respectively, of our total assets. See "Business - Investments" for more information.

	December 31,			
	2017		2016	
(dollars in thousands)	Amount	Percent of Total	Amount	Percent of Total
Fixed maturities:				
Total held to maturity	$ 366,655	36.4%	$336,101	35.5%
Total available for sale	538,946	53.6	515,075	54.5
Total fixed maturities	905,601	90.0	851,176	90.0
Equity securities	50,445	5.0	47,088	5.0
Investment in affiliate	38,774	3.9	37,885	4.0
Short-term investments	11,050	1.1	9,371	1.0
Total investments	$1,005,870	100.0%	$945,520	100.0%

The carrying value of our fixed maturity investments represented 90.0% of our total invested assets at December 31, 2017 and 2016.

Our fixed maturity investments consisted of high-quality marketable bonds, of which 99.8% were rated at investment-grade levels at December 31, 2017 and 2016.

At December 31, 2017, the net unrealized gain on our available-for-sale fixed maturity investments, net of deferred taxes, amounted to $420,053, compared to $2.2 million at December 31, 2016.

At December 31, 2017, the net unrealized gain on our equity securities, net of deferred taxes, amounted to $4.9 million, compared to $3.0 million at December 31, 2016.

Impact of Inflation

Our insurance subsidiaries establish their property and casualty insurance premium rates before they know the amount of losses and loss settlement expenses or the extent to which inflation may impact such expenses. Consequently, our insurance subsidiaries attempt, in establishing rates, to anticipate the potential future impact of inflation. Our insurance subsidiaries account for inflation in the reserving function through analysis of costs and trends and reviews of historical reserving results.

Impact of New Accounting Standards

In May 2014, the Financial Accounting Standards Board (the "FASB") issued guidance that requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. While this guidance will replace most existing GAAP revenue recognition guidance, the scope of the guidance excludes insurance contracts. The new standard is effective on January 1, 2018. The standard permits the use of either the retrospective or the cumulative effect transition method. Because the accounting for insurance contracts is outside of the scope of the standard, the adoption of this guidance did not have a significant impact on our financial position, results of operations or cash flows.

In January 2016, the FASB issued guidance that generally requires entities to measure equity investments at fair value and recognize changes in fair value in their results of operations. This guidance also simplifies the impairment assessment of equity investments without readily determinable fair values by requiring entities to perform a qualitative assessment to identify impairment. The FASB issued other disclosure and presentation improvements related to financial instruments within the guidance. The guidance is effective for annual and interim reporting periods beginning after December 15, 2017. As a result of this guidance, we will reflect changes in the fair value of our equity investments in our results of operations beginning January 1, 2018.

In February 2016, the FASB issued guidance that requires lessees to recognize leases, including operating leases, on the lessee's balance sheet, unless a lease is considered a short-term lease. This guidance also requires entities to make new judgments to identify leases. The guidance is effective for annual and interim reporting periods beginning after December 15, 2018 and permits early adoption. We do not expect the adoption of this guidance to have a significant impact on our financial position, results of operations or cash flows.

In March 2016, the FASB issued guidance that simplifies and improves several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities and classification on the statement of cash flows. The guidance was effective for annual and interim reporting periods beginning after December 15, 2016. The adoption of this guidance did not have a significant impact on our financial position, results of operations or cash flows.

In June 2016, the FASB issued guidance that amends previous guidance on the impairment of financial instruments by adding an impairment model that requires an entity to recognize expected credit losses as an allowance rather than impairments as credit losses are incurred. The intent of this guidance is to reduce complexity and result in a more timely recognition of expected credit losses. The guidance is effective for annual and interim reporting periods beginning after December 15, 2019. We do not expect the adoption of this guidance to have a significant impact on our financial position, results of operations or cash flows.

In March 2017, the FASB issued guidance that amends previous guidance on the amortization period for certain purchased callable debt securities held at a premium. This new guidance shortens the amortization period to the earliest call date. The intent of the new guidance is to align interest income recognition with the expectations incorporated in the market pricing on the underlying securities. The new standard is effective for annual and interim reporting periods beginning after December 15, 2018, with early adoption permitted. We adopted this guidance effective January 1, 2017. The adoption of this guidance did not have a significant impact on our financial position, results of operations or cash flows.

In February 2018, the FASB issued updated guidance that allows entities to reclassify the stranded tax effects in accumulated other comprehensive income ("AOCI") resulting from the TCJA from AOCI to retained earnings. Current guidance requires entities to report the effect of a change in tax laws or tax rates on deferred tax balances in income from continuing operations in the accounting period that includes the period of enactment, even if the entities originally charged or credited related income tax effects directly to AOCI. If an entity elects to reclassify the stranded tax effects, the guidance requires the reclassification to include the effect of the change in the U.S. federal corporate income tax rate on the gross deferred tax amounts and related valuation allowances, if any, related to items in AOCI at the date of the enactment of TCJA. The guidance is effective for annual and interim reporting periods beginning after December 15, 2018 and permits early adoption. We adopted this guidance effective on the December 22, 2017 date of the enactment of the TCJA. The adoption of this guidance did not have a significant impact on our financial position, results of operations or cash flows.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to the impact of interest rate changes, to changes in fair values of investments and to credit risk.

In the normal course of business, we employ established policies and procedures to manage our exposure to changes in interest rates, fluctuations in the fair market value of our debt and equity securities and credit risk. We seek to mitigate these risks by various actions we describe below.

Interest Rate Risk

Our exposure to market risk for a change in interest rates is concentrated in our investment portfolio. We monitor this exposure through periodic reviews of our asset and liability positions. We regularly monitor estimates of cash flows and the impact of interest rate fluctuations relating to our investment portfolio. Generally, we do not hedge our exposure to interest rate risk because we have the capacity to, and do, hold fixed-maturity investments to maturity.

Principal cash flows and related weighted-average interest rates by stated maturity dates for the financial instruments we held at December 31, 2017 that are sensitive to interest rates are as follows:

(in thousands)	Principal Cash Flows	Weighted-Average Interest Rate
Fixed-maturity and short-term investments:		
2018	$ 64,824	3.97%
2019	40,113	3.28
2020	35,311	2.62
2021	44,350	3.36
2022	44,046	3.00
Thereafter	679,066	3.36
Total	$ 907,710	
Fair value	$ 930,446	
Debt:		
2018	$ 35,000	1.25%
2019	24,000	3.82
Thereafter	5,000	5.00
Total	$ 64,000	
Fair value	$ 64,000	

Actual cash flows from investments may differ from those depicted above as a result of calls and prepayments.

Equity Price Risk

Our portfolio of equity securities, which we carry on our consolidated balance sheets at estimated fair value, has exposure to price risk, which is the risk of potential loss in estimated fair value resulting from an adverse change in prices. Our objective is to mitigate this risk and to earn competitive relative returns by investing in a diverse portfolio of high-quality, liquid securities.

Credit Risk

Our objective is to earn competitive returns by investing in a diversified portfolio of securities. Our portfolio of fixed maturity securities and, to a lesser extent, short-term investments is subject to credit risk. We define this risk as the potential loss in fair value resulting from adverse changes in the borrower's ability to repay the debt. We manage this risk by performing an analysis of prospective investments and through regular reviews of our portfolio by our investment personnel. We also limit the amount of our total investment portfolio that we invest in any one security.

Our insurance subsidiaries provide property and liability insurance coverages through independent insurance agencies located throughout their operating areas. Our insurance subsidiaries bill the majority of this business directly to the insured, although our insurance subsidiaries bill a portion of their commercial business through their agents, to whom they extend credit in the normal course of business.

Because the pooling agreement does not relieve Atlantic States of primary liability as the originating insurer, Atlantic States is subject to a concentration of credit risk arising from the business Atlantic States cedes to Donegal Mutual. Our insurance subsidiaries maintain reinsurance agreements with Donegal Mutual and with a number of other major unaffiliated authorized reinsurers.

Through November 30, 2010, MICO and West Bend Mutual Insurance Company ("West Bend") were parties to quota-share reinsurance agreements whereby MICO ceded 75% of its business to West Bend. MICO and West Bend terminated the reinsurance agreement in effect at November 30, 2010 on a run-off basis. West Bend's obligations related to all past reinsurance agreements with MICO remain in effect for all policies with effective dates prior to December 1, 2010. West Bend and MICO entered into a trust agreement on December 1, 2010. Under the terms of the trust agreement, West Bend placed into trust, for the sole benefit of MICO, assets with a fair value equal to the amount of unearned premiums and unpaid losses and loss expenses, reduced by any net premium balances not yet paid by MICO, that West Bend had assumed pursuant to such reinsurance agreements at November 30, 2010. The amount of assets required to be held in trust adjusts monthly based upon the remaining net obligations of West Bend. West Bend may terminate the trust agreement on the earlier of December 1, 2020 or the date on which the obligations of West Bend are equal to or less than $5.0 million. As of December 31, 2017, West Bend's net obligations under the reinsurance agreements were approximately $6.1 million, and the fair value of assets held in trust was approximately $6.6 million.

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Item 8. Financial Statements and Supplementry Data.
Index to Consolidated Financial Statements and Schedule.

Donegal Group Inc.
Consolidated Balance Sheets

	December 31, 2017	December 31, 2016
Assets		
Investments		
Fixed maturities		
Held to maturity, at amortized cost (fair value $380,450,428 and $344,647,138)	$ 366,655,077	$ 336,100,948
Available for sale, at fair value (amortized cost $538,414,337 and $511,629,644)	538,946,050	515,074,940
Equity securities, available for sale, at fair value (cost $44,219,097 and $42,431,695)	50,445,243	47,087,842
Investment in Donegal Financial Services Corporation	38,773,420	37,884,918
Short-term investments, at cost, which approximates fair value	11,049,915	9,371,007
Total investments	1,005,869,705	945,519,655
Cash	37,833,435	24,587,214
Accrued investment income	6,553,121	6,295,513
Premiums receivable	160,406,432	159,389,667
Reinsurance receivable	298,342,563	263,028,008
Deferred policy acquisition costs	60,289,860	56,309,196
Deferred tax asset, net	7,128,843	19,043,413
Prepaid reinsurance premiums	135,032,641	124,255,495
Property and equipment, net	7,280,415	6,668,489
Accounts receivable - securities	180,525	—
Federal income taxes recoverable	10,935,105	1,108,250
Due from affiliate	—	9,204,910
Goodwill	5,625,354	5,625,354
Other intangible assets	958,010	958,010
Other	1,483,769	1,137,863
Total assets	$ 1,737,919,778	$ 1,623,131,037
Liabilities and Stockholders' Equity		
Liabilities		
Losses and loss expenses	$ 676,671,727	$ 606,664,590
Unearned premiums	503,456,541	466,055,228
Accrued expenses	28,033,776	28,246,691
Reinsurance balances payable	4,116,159	4,369,528
Borrowings under lines of credit	59,000,000	69,000,000
Cash dividends declared to stockholders	3,841,820	3,622,821
Subordinated debentures	5,000,000	5,000,000
Due to affiliate	7,314,368	—
Other	1,789,283	1,556,859
Total liabilities	1,289,223,674	1,184,515,717
Stockholders' Equity		
Preferred stock, $.01 par value, authorized 2,000,000 shares; none issued	—	—
Class A common stock, $.01 par value, authorized 40,000,000 shares, issued 25,564,481 and 24,483,377 shares and outstanding 22,561,893 and 21,480,789 shares	255,645	244,834
Class B common stock, $.01 par value, authorized 10,000,000 shares, issued 5,649,240 shares and outstanding 5,576,775 shares	56,492	56,492
Additional paid-in capital	255,401,558	236,851,709
Accumulated other comprehensive loss	(2,684,275)	(2,254,271)
Retained earnings	236,893,041	244,942,913
Treasury stock, at cost	(41,226,357)	(41,226,357)
Total stockholders' equity	448,696,104	438,615,320
Total liabilities and stockholders' equity	$ 1,737,919,778	$ 1,623,131,037

See accompanying notes to consolidated financial statements.

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Donegal Group Inc.
Consolidated Statements of Income and Comprehensive Income

	Years Ended December 31,		
	2017	2016	2015
Statements of Income			
Revenues			
Net premiums earned (includes affiliated reinsurance of $190,924,704, $184,656,732 and $175,024,905 - see note 3)	$702,514,755	$656,204,797	$605,640,728
Investment income, net of investment expenses	23,527,304	22,632,730	20,949,698
Installment payment fees	5,157,163	5,302,896	5,834,897
Lease income	500,455	670,865	750,287
Net realized investment gains (includes $5,705,255, $2,525,575 and $1,934,424 accumulated other comprehensive income reclassification)	5,705,255	2,525,575	1,934,424
Equity in earnings of Donegal Financial Services Corporation	1,621,605	1,086,157	1,277,229
Total revenues	739,026,537	688,423,020	636,387,263
Expenses			
Net losses and loss expenses (includes affiliated reinsurance of $114,865,113, $102,124,332 and $100,110,773 - see note 3)	487,268,054	423,315,903	398,366,874
Amortization of deferred policy acquisition costs	115,065,000	107,876,000	99,513,000
Other underwriting expenses	116,538,431	108,458,742	97,709,656
Policyholder dividends	5,014,624	4,373,377	3,862,606
Interest	1,593,437	1,657,647	1,111,441
Premium paid on purchase of treasury stock	—	—	5,780,000
Other	1,432,529	1,412,944	2,451,418
Total expenses	726,912,075	647,094,613	608,794,995
Income before income tax expense	12,114,462	41,328,407	27,592,268
Income tax expense (includes $1,939,787, $883,951 and $677,048 income tax expense from reclassification items)	4,998,362	10,527,270	6,602,235
Net income	$ 7,116,100	$ 30,801,137	$ 20,990,033
Basic earnings per common share:			
Class A common stock	$ 0.27	$ 1.19	$ 0.78
Class B common stock	$ 0.22	$ 1.06	$ 0.69
Diluted earnings per common share:			
Class A common stock	$ 0.26	$ 1.16	$ 0.77
Class B common stock	$ 0.22	$ 1.06	$ 0.69
Statements of Comprehensive Income			
Net income	$ 7,116,100	$ 30,801,137	$ 20,990,033
Other comprehensive income (loss), net of tax			
Unrealized gain (loss) on securities:			
Unrealized holding gain (loss) arising during the period, net of income tax expense (benefit) of $1,964,385, ($746,518) and ($1,788,852)	3,811,151	(1,386,391)	(3,322,149)
Reclassification adjustment for gains included in net income, net of income tax of $1,939,787, $883,951 and $677,048	(3,765,468)	(1,641,624)	(1,257,376)
Other comprehensive income (loss)	45,683	(3,028,015)	(4,579,525)
Comprehensive income	$ 7,161,783	$ 27,773,122	$ 16,410,508

See accompanying notes to consolidated financial statements.

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Donegal Group Inc.
Consolidated Statements of Stockholders' Equity

	Common Stock								
	Class A Shares	Class B Shares	Class A Amount	Class B Amount	Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Treasury Stock	Total Stockholders' Equity
Balance, January 1, 2015	22,389,369	5,649,240	$223,894	$ 56,492	$200,348,783	$ 5,353,269	$223,253,887	$(13,101,682)	$ 416,134,643
Issuance of common stock (stock compensation plans)	129,066		1,290		1,836,067				1,837,357
Stock-based compensation	983,370		9,834		16,620,676				16,630,510
Net income							20,990,033		20,990,033
Cash dividends							(14,499,775)		(14,499,775)
Grant of stock options					719,775		(719,775)		—
Purchase of treasury stock								(28,124,675)	(28,124,675)
Other comprehensive loss						(4,579,525)			(4,579,525)
Balance, December 31, 2015	23,501,805	5,649,240	$235,018	$ 56,492	$219,525,301	$ 773,744	$229,024,370	$(41,226,357)	$ 408,388,568
Issuance of common stock (stock compensation plans)	149,105		1,491		2,118,471				2,119,962
Stock-based compensation	832,467		8,325		14,522,217				14,530,542
Net income							30,801,137		30,801,137
Cash dividends							(14,196,874)		(14,196,874)
Grant of stock options					685,720		(685,720)		—
Other comprehensive loss						(3,028,015)			(3,028,015)
Balance, December 31, 2016	24,483,377	5,649,240	$244,834	$ 56,492	$236,851,709	$ (2,254,271)	$244,942,913	$(41,226,357)	$ 438,615,320
Issuance of common stock (stock compensation plans)	157,085		1,571		2,486,762				2,488,333
Stock-based compensation	924,019		9,240		15,462,479				15,471,719
Net income							7,116,100		7,116,100
Cash dividends							(15,041,051)		(15,041,051)
Grant of stock options					600,608		(600,608)		—
Reclassification of tax effects						(475,687)	475,687		—
Other comprehensive income						45,683			45,683
Balance, December 31, 2017	25,564,481	5,649,240	$255,645	$ 56,492	$255,401,558	$ (2,684,275)	$236,893,041	$(41,226,357)	$ 448,696,104

See accompanying notes to consolidated financial statements.

Donegal Group Inc.
Consolidated Statements of Cash Flows

	Years Ended December 31,		
	2017	2016	2015
Cash Flows from Operating Activities:			
Net income	$ 7,116,100	$ 30,801,137	$ 20,990,033
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization and other non-cash items	6,109,869	6,587,282	6,740,346
Net realized investment gains	(5,705,255)	(2,525,575)	(1,934,424)
Equity in earnings of Donegal Financial Services Corporation	(1,621,605)	(1,086,157)	(1,277,229)
Changes in Assets and Liabilities:			
Losses and loss expenses	70,007,137	28,459,481	39,946,703
Unearned premiums	37,401,313	36,562,025	20,846,840
Accrued expenses	(212,915)	5,786,216	3,030,848
Premiums receivable	(1,016,765)	(18,122,256)	(7,960,450)
Deferred policy acquisition costs	(3,980,664)	(4,200,808)	(3,809,780)
Deferred income taxes	11,889,970	2,030,865	168,395
Reinsurance receivable	(35,314,555)	(3,299,895)	(6,092,223)
Accrued investment income	(257,608)	(304,316)	(239,821)
Amounts due from affiliate	16,519,278	(12,762,087)	1,147,830
Reinsurance balances payable	(253,369)	889,122	(4,360,766)
Prepaid reinsurance premiums	(10,777,146)	(10,732,990)	2,349,278
Current income taxes	(9,826,855)	379,406	(906,179)
Other, net	(113,482)	(22,628)	(2,235,228)
Dividends received from Donegal Financial Services Corporation	1,036,750	1,591,300	1,783,700
Net adjustments	73,884,098	29,228,985	47,197,840
Net cash provided by operating activities	81,000,198	60,030,122	68,187,873
Cash Flows from Investing Activities:			
Purchases of fixed maturities:			
Held to maturity	(51,049,152)	(44,907,210)	(31,310,026)
Available for sale	(138,675,907)	(161,873,868)	(181,106,519)
Purchases of equity securities	(17,033,093)	(15,222,724)	(14,759,861)
Sales of fixed maturities:			
Available for sale	10,081,785	55,731,299	40,321,838
Maturity of fixed maturities:			
Held to maturity	20,577,326	19,488,644	28,575,153
Available for sale	99,544,479	82,586,588	66,744,045
Sales of equity securities	20,880,814	9,201,657	8,761,474
Net purchases of property and equipment	(1,090,726)	(384,207)	(151,536)
Net (purchases) sales of short-term investments	(1,678,908)	4,061,475	6,861,166
Net cash used in investing activities	(58,443,382)	(51,318,346)	(76,064,266)
Cash Flows from Financing Activities:			
Issuance of common stock	15,511,457	13,822,228	15,516,870
Cash dividends paid	(14,822,052)	(14,085,934)	(14,455,167)
Purchases of treasury stock	—	—	(28,124,675)
Payments on lines of credit	(10,000,000)	(12,000,000)	(9,500,000)
Borrowings under lines of credit	—	—	37,000,000
Net cash (used in) provided by financing activities	(9,310,595)	(12,263,706)	437,028
Net increase (decrease) in cash	13,246,221	(3,551,930)	(7,439,365)
Cash at beginning of year	24,587,214	28,139,144	35,578,509
Cash at end of year	$ 37,833,435	$ 24,587,214	$ 28,139,144

See accompanying notes to consolidated financial statements.

Donegal Group Inc.
Notes to Consolidated Financial Statements

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