

2016 Annual Report to Shareholders



THE PROGRESSIVE CORPORATION

**THE PROGRESSIVE CORPORATION
2016 ANNUAL REPORT TO SHAREHOLDERS**

The Progressive Corporation and Subsidiaries
Consolidated Statements of Comprehensive Income
For the years ended December 31,

(millions – except per share amounts)	2016	2015	2014
Revenues			
Net premiums earned	\$22,474.0	\$19,899.1	\$18,398.5
Investment income	478.9	454.6	408.4
Net realized gains (losses) on securities:			
Net impairment losses recognized in earnings	(86.8)	(23.8)	(7.9)
Net realized gains (losses) on securities	137.9	136.5	232.1
Total net realized gains (losses) on securities	51.1	112.7	224.2
Fees and other revenues	332.5	302.0	309.1
Service revenues	103.3	86.3	56.0
Gains (losses) on extinguishment of debt	1.6	(0.9)	(4.8)
Total revenues	23,441.4	20,853.8	19,391.4
Expenses			
Losses and loss adjustment expenses	16,879.6	14,342.0	13,306.2
Policy acquisition costs	1,863.8	1,651.8	1,524.0
Other underwriting expenses	2,972.0	2,712.1	2,467.1
Investment expenses	22.4	22.8	18.9
Service expenses	92.0	77.5	50.9
Interest expense	140.9	136.0	116.9
Total expenses	21,970.7	18,942.2	17,484.0
Net Income			
Income before income taxes	1,470.7	1,911.6	1,907.4
Provision for income taxes	413.5	611.1	626.4
Net income	1,057.2	1,300.5	1,281.0
Net (income) loss attributable to noncontrolling interest (NCI)	(26.2)	(32.9)	0
Net income attributable to Progressive	\$ 1,031.0	\$ 1,267.6	\$ 1,281.0
Other Comprehensive Income (Loss)			
Changes in:			
Total net unrealized gains (losses) on securities	\$ 130.6	\$ (212.9)	\$ 74.9
Net unrealized losses on forecasted transactions	(1.2)	(9.7)	(2.6)
Foreign currency translation adjustment	0.4	(1.2)	(0.9)
Other comprehensive income (loss)	129.8	(223.8)	71.4
Other comprehensive (income) loss attributable to NCI	3.2	1.1	0
Comprehensive income attributable to Progressive	\$ 1,164.0	\$ 1,044.9	\$ 1,352.4
Computation of Per Share Earnings Attributable to Progressive			
Average shares outstanding – Basic	581.7	585.5	590.6
Net effect of dilutive stock-based compensation	3.3	3.7	4.2
Total average equivalent shares – Diluted	585.0	589.2	594.8
Basic: Earnings per share	\$ 1.77	\$ 2.16	\$ 2.17
Diluted: Earnings per share	\$ 1.76	\$ 2.15	\$ 2.15

See notes to consolidated financial statements.

The Progressive Corporation and Subsidiaries

Consolidated Balance Sheets

December 31,

(millions)	2016	2015
Assets		
Investments – Available-for-sale, at fair value:		
Fixed maturities (amortized cost: \$16,287.1 and \$15,347.9)	\$16,243.8	\$15,332.2
Equity securities:		
Nonredeemable preferred stocks (cost: \$734.2 and \$674.2)	853.5	782.6
Common equities (cost: \$1,437.5 and \$1,494.3)	2,812.4	2,650.5
Short-term investments (amortized cost: \$3,572.9 and \$2,172.0)	3,572.9	2,172.0
Total investments	23,482.6	20,937.3
Cash	211.5	224.1
Restricted cash ¹	14.9	0.3
Accrued investment income	103.9	102.2
Premiums receivable, net of allowance for doubtful accounts of \$186.8 and \$164.8	4,509.2	3,987.7
Reinsurance recoverables, including \$83.8 and \$46.1 on paid losses and loss adjustment expenses	1,884.8	1,488.8
Prepaid reinsurance premiums	170.5	199.3
Deferred acquisition costs	651.2	564.1
Property and equipment, net of accumulated depreciation of \$845.8 and \$778.3	1,177.1	1,037.2
Goodwill	449.4	447.6
Intangible assets, net of accumulated amortization of \$109.5 and \$47.4	432.8	494.9
Other assets	339.6	335.8
Total assets	\$33,427.5	\$29,819.3
Liabilities		
Unearned premiums	\$ 7,468.3	\$ 6,621.8
Loss and loss adjustment expense reserves	11,368.0	10,039.0
Net deferred income taxes	111.3	109.3
Dividends payable	395.4	519.2
Accounts payable, accrued expenses, and other liabilities ²	2,495.5	2,067.8
Debt ³	3,148.2	2,707.9
Total liabilities	24,986.7	22,065.0
Redeemable noncontrolling interest (NCI)⁴	483.7	464.9
Shareholders' Equity		
Common shares, \$1.00 par value (authorized 900.0; issued 797.5 and 797.6 including treasury shares of 217.6 and 214.0)	579.9	583.6
Paid-in capital	1,303.4	1,218.8
Retained earnings	5,140.4	4,686.6
Accumulated other comprehensive income:		
Net unrealized gains (losses) on securities	939.6	809.0
Net unrealized losses on forecasted transactions	(9.4)	(8.2)
Foreign currency translation adjustment	(1.1)	(1.5)
Accumulated other comprehensive (income) loss attributable to NCI	4.3	1.1
Total accumulated other comprehensive income attributable to Progressive	933.4	800.4
Total shareholders' equity	7,957.1	7,289.4
Total liabilities, redeemable NCI, and shareholders' equity	\$33,427.5	\$29,819.3

¹See Note 1 – Reporting and Accounting Policies – Supplemental Cash Flow information for further discussion.

²See Note 12 – Litigation and Note 13 – Commitments and Contingencies for further discussion.

³Consists of both short-term and long-term debt. See Note 4 – Debt for further discussion.

⁴See Note 15 – Redeemable Noncontrolling Interest for further discussion.

See notes to consolidated financial statements.

The Progressive Corporation and Subsidiaries
Consolidated Statements of Changes in Shareholders' Equity
For the years ended December 31,

(millions – except per share amounts)	2016	2015	2014
Common Shares, \$1.00 Par Value			
Balance, Beginning of year	\$ 583.6	\$ 587.8	\$ 595.8
Treasury shares purchased	(6.1)	(7.3)	(11.1)
Net restricted equity awards issued/vested/(forfeited)	2.4	3.1	3.1
Balance, End of year	\$ 579.9	\$ 583.6	\$ 587.8
Paid-In Capital			
Balance, Beginning of year	\$1,218.8	\$1,184.3	\$1,142.0
Tax benefit from vesting of equity-based compensation	9.2	16.8	12.8
Treasury shares purchased	(13.4)	(15.2)	(21.6)
Net restricted equity awards (issued)/(vested)/forfeited	(2.4)	(3.1)	(3.1)
Amortization of equity-based compensation	80.9	64.5	51.4
Reinvested dividends on restricted stock units	6.1	5.7	2.8
Adjustment to carrying amount of redeemable noncontrolling interest	4.2	(34.2)	0
Balance, End of year	\$1,303.4	\$1,218.8	\$1,184.3
Retained Earnings			
Balance, Beginning of year	\$4,686.6	\$4,133.4	\$3,500.0
Net income attributable to Progressive	1,031.0	1,267.6	1,281.0
Treasury shares purchased	(173.0)	(186.0)	(238.7)
Cash dividends declared on common shares (\$0.6808, \$0.8882, and \$0.6862 per share)	(394.7)	(520.5)	(402.6)
Reinvested dividends on restricted stock units	(6.1)	(5.7)	(2.8)
Other, net	(3.4)	(2.2)	(3.5)
Balance, End of year	\$5,140.4	\$4,686.6	\$4,133.4
Accumulated Other Comprehensive Income Attributable to Progressive			
Balance, Beginning of year	\$ 800.4	\$1,023.1	\$ 951.7
Attributable to noncontrolling interest	3.2	1.1	0
Other comprehensive income (loss)	129.8	(223.8)	71.4
Balance, End of year	\$ 933.4	\$ 800.4	\$1,023.1
Total Shareholders' Equity	\$7,957.1	\$7,289.4	\$6,928.6

There are 20.0 million Serial Preferred Shares authorized; no such shares are issued or outstanding.
There are 5.0 million Voting Preference Shares authorized; no such shares have been issued.

See notes to consolidated financial statements.

The Progressive Corporation and Subsidiaries
Consolidated Statements of Cash Flows
For the years ended December 31,

(millions)	2016	2015	2014
Cash Flows From Operating Activities			
Net income	\$ 1,057.2	\$ 1,300.5	\$ 1,281.0
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation	137.4	103.7	97.1
Net amortization of intangible assets	62.1	46.8	0
Net amortization of fixed-income securities	77.2	98.4	78.2
Amortization of equity-based compensation	85.2	66.2	51.4
Net realized (gains) losses on securities	(51.1)	(112.7)	(224.2)
Net (gains) losses on disposition of property and equipment	6.6	2.0	5.4
(Gains) losses on extinguishment of debt	(1.6)	0.9	4.8
Net loss on exchange transaction	4.5	0	0
Changes in:			
Premiums receivable	(518.5)	(421.1)	(227.1)
Reinsurance recoverables	(388.2)	(202.6)	(141.7)
Prepaid reinsurance premiums	48.8	32.5	(10.4)
Deferred acquisition costs	(103.8)	(42.3)	(9.6)
Income taxes	(55.7)	(107.2)	97.5
Unearned premiums	830.7	632.4	266.4
Loss and loss adjustment expense reserves	1,323.2	917.7	378.0
Accounts payable, accrued expenses, and other liabilities	308.9	37.9	92.0
Restricted cash	(14.6)	(0.3)	0
Other, net	(106.4)	(60.2)	(13.2)
Net cash provided by operating activities	2,701.9	2,292.6	1,725.6
Cash Flows From Investing Activities			
Purchases:			
Fixed maturities	(11,610.6)	(9,311.1)	(7,967.5)
Equity securities	(434.2)	(647.1)	(369.7)
Sales:			
Fixed maturities	5,694.9	4,913.5	5,637.5
Equity securities	484.6	402.4	560.1
Maturities, paydowns, calls, and other:			
Fixed maturities	4,907.4	3,579.5	2,296.6
Equity securities	0	12.0	14.3
Net sales (purchases) of short-term investments	(1,357.2)	20.5	(876.0)
Net unsettled security transactions	50.9	(8.2)	(30.0)
Purchases of property and equipment	(215.0)	(130.7)	(108.1)
Sales of property and equipment	6.2	10.6	5.9
Net cash acquired in exchange transaction	8.5	0	0
Acquisition of ARX Holding Corp., net of cash acquired	0	(752.7)	0
Acquisition of additional shares of ARX Holding Corp.	0	(12.6)	0
Net cash used in investing activities	(2,464.5)	(1,923.9)	(836.9)
Cash Flows From Financing Activities			
Proceeds from exercise of equity options	0	0.2	0
Tax benefit from vesting of equity-based compensation	9.2	16.8	12.8
Net proceeds from debt issuance	495.6	382.0	344.7
Payments of debt	(25.5)	(20.4)	0
Reacquisitions of debt	(18.2)	(19.3)	(48.9)
Dividends paid to shareholders	(519.0)	(403.6)	(892.6)
Acquisition of treasury shares	(192.5)	(208.5)	(271.4)
Net cash used in financing activities	(250.4)	(252.8)	(855.4)
Effect of exchange rate changes on cash	0.4	(0.2)	0
Increase (decrease) in cash	(12.6)	115.7	33.3
Cash, Beginning of year	224.1	108.4	75.1
Cash, End of year	\$ 211.5	\$ 224.1	\$ 108.4

See notes to consolidated financial statements.

1. REPORTING AND ACCOUNTING POLICIES

Nature of Operations The Progressive insurance organization began business in 1937. The Progressive Corporation, an insurance holding company, was formed in 1965. The financial results of The Progressive Corporation include its subsidiaries and affiliates (references to “subsidiaries” in these notes include affiliates as well). Our insurance subsidiaries (collectively the Progressive Group of Insurance Companies) provide personal and commercial auto insurance, residential property insurance, and other specialty property-casualty insurance and related services. Our Personal Lines segment writes insurance for personal autos and recreational vehicles, which we refer to as our special lines products, through both an independent insurance agency channel and a direct channel. Our Commercial Lines segment writes primary liability and physical damage insurance for automobiles and trucks owned and/or operated predominantly by small businesses through both the independent agency and direct channels. Our Property segment writes residential property insurance for homeowners, other property owners, and renters, primarily through the independent insurance agency channel. We operate our businesses throughout the United States; we also sell personal auto physical damage and auto property damage liability insurance in Australia.

Basis of Consolidation and Reporting The accompanying consolidated financial statements include the accounts of The Progressive Corporation and ARX Holding Corp. (ARX), and their respective wholly owned insurance and non-insurance subsidiaries and affiliates, in which Progressive or ARX has a controlling financial interest. The Progressive Corporation owned 69.2% of the outstanding capital stock of ARX at December 31, 2016 and 2015. All intercompany accounts and transactions are eliminated in consolidation.

Estimates We are required to make estimates and assumptions when preparing our financial statements and accompanying notes in conformity with accounting principles generally accepted in the United States of America (GAAP). As estimates develop into fact (e.g., losses are paid), results may, and will likely, differ from those estimates.

Investments Our fixed-maturity securities, equity securities, and short-term investments are accounted for on an available-for-sale basis. See *Note 2 – Investments* for details regarding the composition of our investment portfolio.

Fixed-maturity securities include debt securities and redeemable preferred stocks, which may have fixed or variable principal payment schedules, may be held for indefinite periods of time, and may be used as a part of our asset/liability strategy or sold in response to changes in interest rates, anticipated prepayments, risk/reward characteristics, liquidity needs, or other economic factors. These securities are carried at fair value with the corresponding unrealized gains (losses), net of deferred income taxes, reported in accumulated other comprehensive income. Fair values are obtained from recognized pricing services or are quoted by market makers and dealers, with limited exceptions discussed in *Note 3 – Fair Value*.

Included in the fixed-maturity portfolio are asset-backed securities. The asset-backed securities are generally accounted for under the retrospective method. The retrospective method recalculates yield assumptions (based on changes in interest rates or cash flow expectations) historically to the inception of the investment holding period, and applies the required adjustment, if any, to the cost basis, with the offset recorded to investment income. The prospective method is used primarily for interest-only securities, non-investment-grade asset-backed securities, and certain asset-backed securities with sub-prime loan exposure or where there is a greater risk of non-performance and where it is possible the initial investment may not be substantially recovered. The prospective method requires a calculation of expected future repayments and resets the yield to allow for future period adjustments; no current period impact to investment income or the security’s cost is made based on the cash flow update. Prepayment assumptions are based on market expectations and are updated quarterly.

Equity securities include common stocks, nonredeemable preferred stocks, and other risk investments, and are reported at fair values. Changes in fair value of these securities, net of deferred income taxes, are reflected as unrealized gains (losses) in accumulated other comprehensive income. To the extent we hold any foreign equities or foreign currency hedges, any change in value due to exchange rate fluctuations would be limited by foreign currency hedges, if any, and would be recognized in income in the current period.

Short-term investments may include Eurodollar deposits, commercial paper, repurchase transactions, and other securities expected to mature within one year. In addition, short-term investments can include auction rate securities (i.e., certain municipal bonds and preferred stocks). Due to the nature of auction rate securities, these securities are classified as short-term based upon their expected auction date (generally 7-49 days) rather than on their contractual maturity date (which is greater than one year at original issuance). In the event that an auction fails, the security may need to be reclassified from short-term. Changes in fair value of these securities, net of deferred income taxes, are reflected as unrealized gains (losses) in accumulated other comprehensive income.

Trading securities are securities bought principally for the purpose of sale in the near term. To the extent we have trading securities, changes in fair value would be recognized in income in the current period. Derivative instruments, which may be used for trading purposes or classified as trading derivatives due to the characteristics of the transaction, are discussed below.

Derivative instruments may include futures, options, forward positions, foreign currency forwards, interest rate swap agreements, and credit default swaps and may be used in the portfolio for general investment purposes or to hedge the exposure to:

- Changes in fair value of an asset or liability (fair value hedge),
- Foreign currency of an investment in a foreign operation (foreign currency hedge), or
- Variable cash flows of a forecasted transaction (cash flow hedge).

To the extent we have derivatives held for general investment purposes, these derivative instruments are recognized as either assets or liabilities and measured at fair value, with changes in fair value recognized in income as a component of net realized gains (losses) on securities during the period of change.

Derivatives designated as hedges are required to be evaluated on established criteria to determine the effectiveness of their correlation to, and ability to reduce the designated risk of, specific securities or transactions. Effectiveness is required to be reassessed regularly. Hedges that are deemed to be effective would be accounted for as follows:

- *Fair value hedge*: changes in fair value of the hedge, as well as the hedged item, would be recognized in income in the period of change while the hedge is in effect.
- *Foreign currency hedge*: changes in fair value of the hedge, as well as the hedged item, would be reflected as a change in translation adjustment as part of accumulated other comprehensive income. Gains and losses on the foreign currency hedge would offset the foreign exchange gains and losses on the foreign investment as they are recognized into income.
- *Cash flow hedge*: changes in fair value of the hedge would be reported as a component of accumulated other comprehensive income and subsequently amortized into earnings over the life of the hedged transaction.

If a hedge is deemed to become ineffective or discontinued, the following accounting treatment would be applied:

- *Fair value hedge*: the derivative instrument would continue to be adjusted through income, while the adjustment in the change in value of the hedged item would be reflected as a change in unrealized gains (losses) as part of accumulated other comprehensive income.
- *Foreign currency hedge*: changes in the value of the hedged item would continue to be reflected as a change in translation adjustment as part of accumulated other comprehensive income, but the derivative instrument would be adjusted through income for the current period.
- *Cash flow hedge*: changes in fair value of the derivative instrument would be reported in income for the current period.

For all derivative positions, net cash requirements are limited to changes in fair values, which may vary as a result of changes in interest rates, currency exchange rates, and other factors. Exposure to credit risk is limited to the carrying value; collateral may be required to limit credit risk. We have elected not to offset fair value amounts that arise from derivative positions with the same counterparty under a master netting arrangement.

Investment securities are exposed to various risks such as interest rate, market, credit, and liquidity risk. Fair values of securities fluctuate based on the nature and magnitude of changing market conditions; significant changes in market conditions could materially affect the portfolio's value in the near term. We regularly monitor our portfolio for price changes, which might indicate potential impairments, and perform detailed reviews of securities with unrealized losses. In such cases,

changes in fair value are evaluated to determine the extent to which such changes are attributable to: (i) fundamental factors specific to the issuer, such as financial condition, business prospects, or other factors, (ii) market-related factors, such as interest rates or equity market declines, or (iii) credit-related losses, where the present value of cash flows expected to be collected are lower than the amortized cost basis of the security.

We analyze our debt securities that are in a loss position to determine if we intend to sell, or if it is more likely than not that we will be required to sell, the security prior to recovery and, if so, we write down the security to its current fair value, with the entire amount of the write-down recorded to earnings. To the extent that it is more likely than not that we will hold the debt security until recovery (which could be maturity), we determine if any of the decline in value is due to a credit loss (i.e., where the present value of future cash flows expected to be collected is lower than the amortized cost basis of the security) and, if so, we recognize that portion of the impairment as a component of net realized gains (losses) in the comprehensive income statement, with the difference (i.e., non-credit related impairment) recognized as part of our net unrealized gains (losses) in accumulated other comprehensive income. When an equity security (common equity and nonredeemable preferred stock) in our investment portfolio has an unrealized loss in fair value that is deemed to be other-than-temporary, we reduce the book value of such security to its current fair value, recognizing the decline as a realized loss in the comprehensive income statement. Any future changes in fair value, either increases or decreases, are reflected as changes in unrealized gains (losses) as part of accumulated other comprehensive income.

Investment income consists of interest, dividends, and amortization. In addition to the discussion above for asset-backed securities, interest is recognized on an accrual basis using the effective yield method. Depending on the nature of the equity instruments, dividends are recorded at either the ex-dividend date or on an accrual basis.

Realized gains (losses) on securities are computed based on the first-in first-out method and include write-downs on available-for-sale securities considered to have other-than-temporary declines in fair value (excluding non-credit related impairments), as well as holding period valuation changes on derivatives, trading securities, and hybrid instruments (e.g., securities with embedded options, where the option is a feature of the overall change in the value of the instrument).

Insurance Premiums and Receivables Insurance premiums written are earned into income on a pro rata basis over the period of risk, based on a daily earnings convention. Accordingly, unearned premiums represent the portion of premiums written that are applicable to the unexpired risk. We provide insurance and related services to individuals and small commercial accounts and offer a variety of payment plans. Generally, premiums are collected prior to providing risk coverage, minimizing our exposure to credit risk.

For our vehicle businesses, we perform a policy level evaluation to determine the extent to which the premiums receivable balance exceeds the unearned premiums balance. We then age this exposure to establish an allowance for doubtful accounts based on prior experience.

For our Property business, we do not establish an allowance for doubtful accounts since the risk of uncollectibility is relatively low. If premiums are unpaid by the policy due date, we provide advance notice of cancellation in accordance with each state's requirements and, if the premiums remain unpaid after receipt of notice, cancel the policy and write off any remaining balance.

Deferred Acquisition Costs Deferred acquisition costs include commissions, premium taxes, and other variable underwriting and direct sales costs incurred in connection with the successful acquisition or renewal of insurance contracts. These acquisition costs, net of ceding allowances, are deferred and amortized over the policy period in which the related premiums are earned. We consider anticipated investment income in determining the recoverability of these costs. Management believes that these costs will be fully recoverable in the near term.

We do not defer any advertising costs. Total advertising costs, which are expensed as incurred, for the years ended December 31, were:

(millions)	Advertising Costs
2016	\$756.2
2015	748.3
2014	681.8

Loss and Loss Adjustment Expense Reserves Loss reserves represent the estimated liability on claims reported to us, plus reserves for losses incurred but not recorded (IBNR). These estimates are reported net of amounts estimated to be recoverable from salvage and subrogation. Loss adjustment expense reserves represent the estimated expenses required to settle these claims and losses. The methods of making estimates and establishing these reserves are reviewed regularly, and resulting adjustments are reflected in income in the current period. Such loss and loss adjustment expense reserves are susceptible to change in the near term.

Reinsurance Our reinsurance transactions include premiums ceded to “Regulated” plans and “Non-Regulated” plans. The Regulated plans in which we participate are governed by insurance regulations and include state-provided reinsurance facilities (Michigan Catastrophic Claims Association, Florida Hurricane Catastrophe Fund, North Carolina Reinsurance Facility), as well as state-mandated involuntary plans for commercial vehicles (Commercial Automobile Insurance Procedures/Plans – “CAIP”) and federally regulated plans for flood (National Flood Insurance Program – “NFIP”); we act as a servicing agent for CAIP and as a participant in the “Write Your Own” program for the NFIP. The Non-Regulated plans are voluntary contractual arrangements and primarily relate to our Property business. Prepaid reinsurance premiums are earned on a pro rata basis over the period of risk, based on a daily earnings convention, which is consistent with premiums written. See *Note 7 – Reinsurance* for further discussion.

Income Taxes The income tax provision is calculated under the balance sheet approach. Deferred tax assets and liabilities are recorded based on the difference between the financial statement and tax bases of assets and liabilities at the enacted tax rates. The principal items giving rise to such differences are investment securities (e.g., net unrealized gains (losses), write-downs on securities determined to be other-than-temporarily impaired), loss and loss adjustment expense reserves, unearned premiums reserves, deferred acquisition costs, property and equipment, intangible assets, and non-deductible accruals. We review our deferred tax assets regularly for recoverability. See *Note 5 – Income Taxes* for further discussion.

Property and Equipment Property and equipment are recorded at cost, less accumulated depreciation, and include capitalized software developed or acquired for internal use. Depreciation is recognized over the estimated useful lives of the assets using accelerated methods for computer equipment and the straight-line method for all other fixed assets. We evaluate impairment whenever events or circumstances warrant such a review. Land and buildings comprised 65% and 75% of total property and equipment at December 31, 2016 and 2015, respectively.

The useful lives for property and equipment at December 31, 2016, were:

	Useful Lives
Computer equipment and laptops	3 years
Software licenses (internal use)	1-5 years
Capitalized software	3-10 years
Buildings, improvements, and integrated components	7-40 years
All other property and equipment	3-15 years

At December 31, 2016 and 2015, included in other assets in the consolidated balance sheets is \$8.7 million of “held for sale” property, which represents the fair value of this property less the estimated costs to sell.

Total capitalized interest, which primarily relates to capitalized software projects, for the years ended December 31, was:

(millions)	Capitalized Interest
2016	\$2.9
2015	2.4
2014	1.3

Goodwill and Intangible Assets Goodwill is the excess of the purchase price over the estimated fair value of the assets and liabilities acquired and represents the future economic benefits arising from other assets acquired that could not be individually identified and separately recognized. Substantially all of the goodwill recorded as of December 31, 2016 and 2015, relates to the April 1, 2015 acquisition of a controlling interest in ARX.

Intangible assets primarily arose through the acquisition of ARX and mainly represent the future premiums that will be recognized from the policies and agency relationships, the value of software acquired, and the value of its trade name, “American Strategic Insurance,” in the marketplace at the acquisition date. The majority of the intangible assets have finite lives ranging from 7 to 14 years. See *Note 16 – Goodwill and Intangible Assets* for further discussion.

We evaluate our goodwill for impairment at least annually. If events or changes in circumstances indicate that the carrying value of goodwill or intangible assets may not be recoverable, we will evaluate such items for impairment.

Guaranty Fund Assessments We are subject to state guaranty fund assessments, which provide for the payment of covered claims or other insurance obligations of insurance companies deemed insolvent. These assessments are accrued after a formal determination of insolvency has occurred, and we have written the premiums on which the assessments will be based. Assessments that are available for recoupment from policyholders are capitalized when incurred; all other assessments are expensed.

Fees and Other Revenues Fees and other revenues primarily represent fees collected from policyholders relating to installment charges in accordance with our bill plans, as well as late payment and insufficient funds fees. Other revenues may include revenue from the sale of tax credits, rental income, and other revenue transactions.

Service Revenues and Expenses Our service businesses provide insurance-related services. Service revenues and expenses from our commission-based businesses are recorded in the period in which they are earned or incurred. Service revenues generated from processing business for involuntary CAIP plans are earned on a pro rata basis over the term of the related policies. Service expenses related to these CAIP plans are expensed as incurred.

Equity-Based Compensation We issue time-based and performance-based restricted stock unit awards to key members of management (other than management of ARX and its subsidiaries) as our form of equity compensation, and time-based restricted stock awards to non-employee directors. Collectively, we refer to these awards as “restricted equity awards.” Compensation expense for time-based restricted equity awards with installment vesting is recognized over each respective vesting period. For performance-based restricted equity awards, compensation expense is recognized over the respective estimated vesting periods. Dividend equivalent units are credited to outstanding restricted unit awards, both time-based and performance-based, at the time a dividend is paid to shareholders.

We record an estimate for expected forfeitures of restricted equity awards based on our historical forfeiture rates. In addition, we shorten the vesting periods of certain time-based restricted equity awards based on the “qualified retirement” provisions in our equity compensation plans, under which (among other provisions) if the participant is 55 years of age or older and satisfies certain years-of-service requirements, the vesting and distribution of 50% of outstanding time-based restricted equity awards accelerates upon reaching eligibility for a qualified retirement and shortly after the grant date for each subsequent award.

ARX has nonqualified and incentive stock options outstanding that were issued prior to April 2015 as a form of equity compensation to certain of the officers and employees of ARX and its subsidiaries. These outstanding stock options are subject to the put/call features contained in the current stockholders’ agreement, pursuant to which The Progressive Corporation has the right, and can be required, to purchase a portion or all of the shares underlying these awards in 2018 and 2021. See *Note 15 – Redeemable Noncontrolling Interest*. These stock options, which are treated for accounting purposes as liability awards, are expensed over the respective vesting periods based on the Black-Scholes value determined at period end.

The total compensation expense recognized for equity-based compensation, both our equity and liability awards, for the years ended December 31, was:

(millions)	2016	2015	2014
Pretax expense	\$85.2	\$66.2	\$51.4
Tax benefit	29.8	23.2	18.0

Earnings Per Share Net income attributable to Progressive is used in our calculation of the per share amounts. Basic earnings per share is computed using the weighted average number of common shares outstanding during the reporting period, excluding unvested time-based and performance-based restricted equity awards that are subject to forfeiture.

Diluted earnings per share includes common stock equivalents assumed outstanding during the period. Our common stock equivalents include the incremental shares assumed to be issued for:

- earned but unvested time-based restricted equity awards, and
- certain unvested performance-based restricted equity awards that satisfied contingency conditions for common stock equivalents during the period.

Supplemental Cash Flow Information Cash includes only bank demand deposits. Non-cash activity includes declared but unpaid dividends. For the years ended December 31, we paid the following:

(millions)	2016	2015	2014
Income taxes	\$459.4	\$701.8	\$515.0
Interest	139.2	132.0	116.0

Restricted cash on our consolidated balance sheets at December 31, 2016 and 2015, represents cash received from the National Flood Insurance Program, which is restricted to pay flood claims under the “Write Your Own” program, for which American Strategic Insurance and other subsidiaries of ARX (ASI) is an administrator.

New Accounting Standards

Issued

In June 2016, Financial Accounting Standards Board (FASB) issued an accounting standard update (ASU) intended to improve the timing, and enhance the accounting and disclosure, of credit losses on financial assets. Additionally, this update will modify the existing accounting guidance related to the impairment evaluation for available-for-sale debt securities and will result in the creation of an allowance for credit losses as a contra asset account. The ASU will require cumulative-effect changes to retained earnings in the period of adoption, if any occur, and will also require prospective changes on previously recorded impairments. This ASU is effective for fiscal years (including interim periods within those fiscal years) beginning after December 15, 2019 (2020 for calendar-year companies), with early adoption permissible (including interim periods within that fiscal year) beginning after December 15, 2018 (2019 for calendar-year companies). While the ASU creates additional accounting complexities related to the recognition of the impairment losses, and subsequent recoveries, through an allowance for credit losses account, we do not expect that the ASU will have a material impact on our current method of evaluating securities for credit losses or the timing or recognition of the amounts of the impairment losses.

In March 2016, the FASB issued an ASU to simplify the accounting for employee share-based payment transactions. This ASU is effective for fiscal years beginning after December 15, 2016 (2017 for calendar-year companies), with early adoption permitted. Several aspects of the ASU include income tax consequences, classification of awards as either equity or liability, and classification on the statement of cash flows. Under provisions of the ASU:

- All excess tax benefits and tax deficiencies should be recognized as income tax benefit or expense in the comprehensive income statement (applied prospectively) and classified in the statement of cash flows as an operating activity (applied using either a prospective or retrospective transition method).
- Companies are allowed to decide whether or not to record forfeitures of share-based awards when the forfeiture occurs or to record compensation expense over the vesting period net of estimated forfeitures (applied using a modified retrospective transition method by means of a cumulative-effect adjustment to equity upon adoption).
- Companies are permitted to withhold up to the maximum statutory tax rate and still maintain equity classification of share-based awards (applied using a modified retrospective transition method by means of a cumulative-effect adjustment to equity upon adoption).
- Companies are required to classify as a financing activity in the statement of cash flows the payment of cash to a taxing authority when the company withholds shares for such purpose (applied retrospectively).

We expect the change in the accounting for the excess tax benefits/deficiencies to impact our results of operations. Over the last three years, the tax benefit, which was recorded in paid in capital through December 31, 2016, was \$9.2 million in 2016, \$16.8 million in 2015, and \$12.8 million in 2014. We currently record estimated forfeitures over the vesting period and withhold at the minimum statutory tax rate, and we do not anticipate making any changes with respect to these items, upon adoption of the ASU.

In February 2016, the FASB released an ASU intended to eliminate the off-balance-sheet accounting for leases. The new guidance will require lessees to report their operating leases as both an asset and liability on the statement of financial position and disclose key information about leasing arrangements; the expense recognition will be consistent with existing guidance. The ASU, which is required to be applied on a modified retrospective basis, will be effective for fiscal years (including interim periods within those fiscal years) beginning after December 15, 2018 (2019 for calendar-year companies). Based on our lease portfolio at December 31, 2016, and in accordance with the accounting elections available in the ASU, the increase to assets and liabilities would have been approximately \$150 million, and there would have been no impact on our results of operations or cash flows. Therefore, we do not expect this standard to have a material impact on our financial condition.

In January 2016, the FASB released an ASU intended to improve the recognition and measurement of financial instruments. The new guidance will require the changes in fair value of equity securities to be recognized as a component of net income. The ASU will be effective for fiscal years beginning after December 15, 2017 (2018 for calendar-year companies) and requires prospective method of adoption with a cumulative-effect adjustment recorded to beginning retained earnings upon adoption. Although we are unable to predict the impact that this ASU will have upon adoption, had this guidance been effective for calendar year 2016, we would have recorded a cumulative-effect adjustment (i.e., reclass from accumulated other comprehensive income to retained earnings) of approximately \$821 million and, on a quarterly basis during 2016, recognized after-tax net realized gains ranging from approximately \$12 million to \$69 million. This ASU will have no impact on comprehensive income.

In May 2014, the FASB issued an ASU related to the accounting for revenue from contracts with customers. This standard is intended to help reduce diversity in practice and enhance comparability between entities related to revenue recognition and is effective for fiscal years beginning after December 15, 2016 (2017 for calendar-year companies). Since the accounting for insurance contracts is outside of the scope of this ASU, we do not expect this standard to have a significant impact on our financial condition, cash flows, or results of operations. We are still evaluating the impact the standard might have on our service business operations, which represents less than 0.5% of our total revenues for 2016.

Adopted

In 2016, we adopted the following accounting standard updates that became effective for fiscal years beginning after December 15, 2015.

We adopted the ASU that clarified guidance regarding accounting for fees paid in a cloud computing arrangement and amended the accounting treatment for the acquisition of licenses from third-parties for internal use software. We adopted this ASU on a prospective basis and will apply the guidance for future cloud computing arrangements that we enter into. Upon adoption, we began including the costs of our fixed-term licenses as part of the total amount of capitalized software developed or acquired for internal use, rather than recording them as prepaid assets, when applicable, and established a liability for the unpaid portion of our licenses. At December 31, 2016, we have \$94 million of fixed-term licenses in our property and equipment, on a net basis, and have \$75 million in other liabilities. This standard did not have a material impact on our results of operations. A technical correction was issued in December 2016 that will not change our software accounting treatment.

Another ASU adopted is related to the accounting for share-based payments when the terms of an employee award can be achieved after the requisite service period. To the extent an equity award contains provisions that permit an employee who leaves the company before the performance targets are reached to receive some or all of the benefits of the award if and as the award later vests, this standard requires companies to recognize the compensation cost during the employee's remaining service period. Since we adopted this ASU prospectively, the requirements only apply to the performance-based restricted stock unit awards granted by Progressive to its executive officers and other select senior managers after January 1, 2016. The amount of expense that was accelerated pursuant to this ASU did not have a material impact on our financial condition, cash flows, or results of operations for 2016.

Lastly, we adopted the ASU that required additional disclosures about short-duration contracts. The additional disclosures are intended to provide users of financial statements with more transparent information about an insurance entity's initial claim estimates and subsequent adjustments to those estimates, the methodologies and judgments used to estimate claims, and the timing, frequency, and severity of claims. Other than the new disclosures added to *Note 6 – Loss and Loss Adjustment Expense Reserves*, there was no additional impact from this standard.

2. INVESTMENTS

Our securities are reported at fair value, with the changes in fair value of these securities (other than hybrid securities and derivative instruments) reported as a component of accumulated other comprehensive income, net of deferred income taxes. The changes in fair value of the hybrid securities and derivative instruments are recorded as a component of net realized gains (losses) on securities.

The following tables present the composition of our investment portfolio by major security type, consistent with our internal classification of how we manage, monitor, and measure the portfolio. The net holding period gains (losses) represent the amounts realized on our hybrid securities only.

(\$ in millions)	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Net Realized Gains (Losses)	Fair Value	% of Total Fair Value
December 31, 2016						
Fixed maturities:						
U.S. government obligations	\$ 2,899.2	\$ 0	\$ (29.1)	\$ 0	\$ 2,870.1	12.2%
State and local government obligations	2,509.5	13.8	(20.7)	0	2,502.6	10.7
Foreign government obligations	24.5	0	0	0	24.5	0.1
Corporate debt securities	4,557.8	17.3	(24.3)	0.1	4,550.9	19.4
Residential mortgage-backed securities	1,448.5	23.7	(15.0)	1.5	1,458.7	6.2
Agency residential pass-through obligations	41.2	0	(0.6)	0	40.6	0.2
Commercial mortgage-backed securities	2,266.9	12.0	(25.5)	0	2,253.4	9.6
Other asset-backed securities	2,350.7	4.6	(4.4)	0.2	2,351.1	10.0
Redeemable preferred stocks	188.8	5.1	(2.0)	0	191.9	0.8
Total fixed maturities	16,287.1	76.5	(121.6)	1.8	16,243.8	69.2
Equity securities:						
Nonredeemable preferred stocks	734.2	135.4	(16.1)	0	853.5	3.6
Common equities	1,437.5	1,377.0	(2.1)	0	2,812.4	12.0
Short-term investments	3,572.9	0	0	0	3,572.9	15.2
Total portfolio ^{1,2}	\$22,031.7	\$1,588.9	\$(139.8)	\$1.8	\$23,482.6	100.0%

(\$ in millions)	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Net Realized Gains (Losses)	Fair Value	% of Total Fair Value
December 31, 2015						
Fixed maturities:						
U.S. government obligations	\$ 2,425.4	\$ 4.4	\$ (0.6)	\$ 0	\$ 2,429.2	11.6%
State and local government obligations	2,677.6	47.5	(3.7)	0	2,721.4	13.0
Foreign government obligations	18.6	0	0	0	18.6	0.1
Corporate debt securities	3,713.2	11.3	(33.0)	0.1	3,691.6	17.6
Residential mortgage-backed securities	1,726.0	22.1	(20.6)	(0.8)	1,726.7	8.3
Agency residential pass-through obligations	90.3	0.1	(1.1)	0	89.3	0.4
Commercial mortgage-backed securities	2,665.7	16.9	(29.4)	0	2,653.2	12.7
Other asset-backed securities	1,771.1	1.4	(5.1)	0.5	1,767.9	8.4
Redeemable preferred stocks	260.0	17.6	(43.3)	0	234.3	1.1
Total fixed maturities	15,347.9	121.3	(136.8)	(0.2)	15,332.2	73.2
Equity securities:						
Nonredeemable preferred stocks	674.2	122.8	(15.7)	1.3	782.6	3.7
Common equities	1,494.3	1,170.4	(14.2)	0	2,650.5	12.7
Short-term investments	2,172.0	0	0	0	2,172.0	10.4
Total portfolio ^{1,2}	\$19,688.4	\$1,414.5	\$(166.7)	\$1.1	\$20,937.3	100.0%

¹Our portfolio reflects the effect of unsettled security transactions and collateral on any open derivative positions; at December 31, 2016, \$27.8 million was included in "other liabilities," compared to \$23.1 million in "other assets" at December 31, 2015.

²The total fair value of the portfolio at both December 31, 2016 and 2015 included \$1.3 billion of securities held in a consolidated, non-insurance subsidiary of the holding company, net of any unsettled security transactions.

At December 31, 2016, bonds and certificates of deposit in the principal amount of \$206.6 million were on deposit to meet state insurance regulatory and/or rating agency requirements. We did not hold any securities of any one issuer, excluding

U.S. government obligations, with an aggregate cost or fair value exceeding 10% of total shareholders' equity at December 31, 2016 or 2015. At December 31, 2016, we did not hold any debt securities that were non-income producing during the preceding 12 months.

Short-Term Investments Our short-term investments may include commercial paper and other investments that are expected to mature within one year. We did not hold any treasury bills issued by the Australian government at December 31, 2016, compared to \$2.5 million at December 31, 2015, which were included in short-term investments. We did not hold any repurchase transactions where we lent collateral at December 31, 2016 or 2015. During 2016, we entered into repurchase commitment transactions, which were open for a total of three days. In these transactions, we loaned U.S. Treasury securities to internally approved counterparties in exchange for cash equal to the fair value of the securities. These transactions were entered into as overnight arrangements. On the days that we invested in repurchase transactions, the largest single outstanding balance was \$240.0 million, which was open for two days; the average daily balance was \$217.0 million.

Also included in short-term investments are reverse repurchase commitment transactions, where we loan cash to approved counterparties and receive U.S. Treasury Notes pledged as collateral against the cash borrowed. Our exposure to credit risk is limited due to the nature of the collateral (i.e., U.S. Treasury Notes) received. We have counterparty exposure on these trades in the event of a counterparty default to the extent the general collateral security's value is below the amount of cash we delivered to acquire the collateral. The short-term duration of the transactions (primarily overnight) reduces that exposure.

We had no open reverse repurchase commitments at December 31, 2016 or December 31, 2015. During 2016, our largest outstanding balance of reverse repurchase commitments was \$265.0 million, which was open for one day. For the 38 days we invested in these transactions, the average daily balance of reverse repurchase commitments was \$113.8 million.

To the extent our repurchase and reverse repurchase transactions were with the same counterparty and subject to an enforceable master netting arrangement, we could elect to offset these transactions. Consistent with past practice, we have elected not to offset these transactions and therefore report these transactions on a gross basis on our balance sheets.

Hybrid Securities Included in our fixed-maturity and equity securities are hybrid securities, which are reported at fair value at December 31:

(millions)	2016	2015
Fixed maturities:		
Corporate debt securities	\$ 40.1	\$ 49.1
Residential mortgage-backed securities	170.5	144.3
Commercial mortgage-backed securities	0	17.3
Other asset-backed securities	8.9	11.3
Total fixed maturities	219.5	222.0
Equity securities:		
Nonredeemable preferred stocks	0	50.7
Total hybrid securities	\$219.5	\$272.7

Certain corporate debt securities are accounted for as hybrid securities since they were acquired at a substantial premium and contain a change-in-control put option (derivative) that permits the investor, at its sole option if and when a change in control is triggered, to put the security back to the issuer at a 1% premium to par. Due to this change-in-control put option and the substantial market premium paid to acquire these securities, there is the potential that the election to put, upon the change in control, would result in an acceleration of the recognition of the remaining premium paid on these securities in our results of operations. This would result in a loss of \$3.0 million as of December 31, 2016, if all of these bonds experienced a simultaneous change in control and we elected to exercise all of our put options. The put feature limits the potential loss in value that could be experienced in the event a corporate action occurs that results in a change in control that materially diminishes the credit quality of the issuer. We are under no obligation to exercise the put option we hold if a change in control occurs.

The residential mortgage-backed securities accounted for as hybrid securities are obligations of the issuer with payments of principal based on the performance of a reference pool of loans. This embedded derivative results in the securities incorporating the risk of default from both the issuer and the related loan pool.

During 2016, we sold the commercial mortgage-backed securities referred to in the table above. These securities contained fixed interest rate reset features that would have increased the coupons in the event the securities were not fully paid off on the anticipated repayment date. These reset features had the potential to more than double our initial purchase yield for each security.

The other asset-backed security in the table above represents one hybrid security that was acquired at a deep discount to par due to a failing auction, and contains a put option that allows the investor to put that security back to the auction at par if the auction is restored. This embedded derivative had the potential to more than double our initial investment yield at acquisition.

During 2016, we sold the remaining nonredeemable preferred stocks referred to in the table above. These securities were perpetual preferred stocks with fixed-rate coupons that have call features, whereby the change in value of the call features is a component of the overall change in value of the preferred stocks.

Fixed Maturities The composition of fixed maturities by maturity at December 31, 2016, was:

(millions)	Cost	Fair Value
Less than one year	\$ 3,680.5	\$ 3,682.1
One to five years	9,324.7	9,298.2
Five to ten years	3,226.9	3,197.3
Ten years or greater	55.0	66.2
Total	\$16,287.1	\$16,243.8

Asset-backed securities are classified in the maturity distribution table based upon their projected cash flows. All other securities that do not have a single maturity date are reported based upon expected average maturity. Contractual maturities may differ from expected maturities because the issuers of the securities may have the right to call or prepay obligations.

Gross Unrealized Losses As of December 31, 2016, we had \$137.7 million of gross unrealized losses in our fixed-income securities (i.e., fixed-maturity securities, nonredeemable preferred stocks, and short-term investments) and \$2.1 million in our common equities. We currently do not intend to sell the fixed-income securities and determined that it is more likely that we will not be required to sell these securities for the period of time necessary to recover their cost bases. A review of our fixed-income securities indicated that the issuers were current with respect to their interest obligations and that there was no evidence of deterioration of the current cash flow projections that would indicate we would not receive the remaining principal at maturity. For common equities, 95% of our common stock portfolio was indexed to the Russell 1000; as such, this portfolio may contain securities in a loss position for an extended period of time, subject to possible write-downs, as described below. We may retain these securities as long as the portfolio and index correlation remain similar. To the extent there is issuer-specific deterioration, we may write-down the securities of that issuer. The remaining 5% of our common stocks were part of a managed equity strategy selected and administered by an external investment advisor. If our review of loss position securities were to indicate there was a fundamental, or market, impairment on these securities that was determined to be other-than-temporary, we would recognize a write-down in accordance with our stated policy.

The following tables show the composition of gross unrealized losses by major security type and by the length of time that individual securities have been in a continuous unrealized loss position:

(\$ in millions)	Total No. of Sec.	Total Fair Value	Gross Unrealized Losses	Less than 12 Months			12 Months or Greater		
				No. of Sec.	Fair Value	Unrealized Losses	No. of Sec.	Fair Value	Unrealized Losses
December 31, 2016									
Fixed maturities:									
U.S. government obligations	30	\$ 2,774.0	\$ (29.1)	30	\$2,774.0	\$ (29.1)	0	\$ 0	\$ 0
State and local government obligations	618	1,497.9	(20.7)	584	1,404.3	(19.6)	34	93.6	(1.1)
Corporate debt securities	184	2,615.1	(24.3)	175	2,559.9	(24.0)	9	55.2	(0.3)
Residential mortgage-backed securities	178	917.7	(15.0)	69	175.8	(1.1)	109	741.9	(13.9)
Agency residential pass-through obligations	55	36.0	(0.6)	48	33.9	(0.6)	7	2.1	0
Commercial mortgage-backed securities	111	1,347.3	(25.5)	85	1,061.2	(22.9)	26	286.1	(2.6)
Other asset-backed securities	103	1,605.2	(4.4)	89	1,423.3	(3.9)	14	181.9	(0.5)
Redeemable preferred stocks	2	31.0	(2.0)	0	0	0	2	31.0	(2.0)
Total fixed maturities	1,281	10,824.2	(121.6)	1,080	9,432.4	(101.2)	201	1,391.8	(20.4)
Equity securities:									
Nonredeemable preferred stocks	13	329.6	(16.1)	8	175.2	(3.8)	5	154.4	(12.3)
Common equities	75	22.1	(2.1)	69	19.7	(1.7)	6	2.4	(0.4)
Total equity securities	88	351.7	(18.2)	77	194.9	(5.5)	11	156.8	(12.7)
Total portfolio	1,369	\$11,175.9	\$(139.8)	1,157	\$9,627.3	\$(106.7)	212	\$1,548.6	\$(33.1)

(\$ in millions)	Total No. of Sec.	Total Fair Value	Gross Unrealized Losses	Less than 12 Months			12 Months or Greater		
				No. of Sec.	Fair Value	Unrealized Losses	No. of Sec.	Fair Value	Unrealized Losses
December 31, 2015									
Fixed maturities:									
U.S. government obligations	22	\$ 897.1	\$ (0.6)	22	\$ 897.1	\$ (0.6)	0	\$ 0	\$ 0
State and local government obligations	290	606.7	(3.7)	264	500.7	(2.6)	26	106.0	(1.1)
Corporate debt securities	215	2,580.6	(33.0)	197	2,294.6	(25.2)	18	286.0	(7.8)
Residential mortgage-backed securities	188	1,294.7	(20.6)	115	493.4	(3.7)	73	801.3	(16.9)
Agency residential pass-through obligations	61	84.9	(1.1)	61	84.9	(1.1)	0	0	0
Commercial mortgage-backed securities	207	2,046.5	(29.4)	171	1,694.6	(25.8)	36	351.9	(3.6)
Other asset-backed securities	101	1,548.6	(5.1)	92	1,472.0	(4.5)	9	76.6	(0.6)
Redeemable preferred stocks	9	199.4	(43.3)	6	119.4	(14.5)	3	80.0	(28.8)
Total fixed maturities	1,093	9,258.5	(136.8)	928	7,556.7	(78.0)	165	1,701.8	(58.8)
Equity securities:									
Nonredeemable preferred stocks	10	301.8	(15.7)	5	124.2	(1.7)	5	177.6	(14.0)
Common equities	64	164.8	(14.2)	60	161.4	(14.2)	4	3.4	0
Total equity securities	74	466.6	(29.9)	65	285.6	(15.9)	9	181.0	(14.0)
Total portfolio	1,167	\$9,725.1	\$(166.7)	993	\$7,842.3	\$(93.9)	174	\$1,882.8	\$(72.8)

During 2016, the number of securities in our fixed-maturity portfolio with unrealized losses increased, primarily in the less than 12 month segment of the table, as a result of rising interest rates since December 31, 2015. We had no material decreases in valuation as a result of credit rating downgrades on our fixed-maturity securities during the year. All of the fixed-maturity securities in an unrealized loss position at December 31, 2016 in the table above are current with respect to required principal and interest payments. Unrealized losses on our nonredeemable preferred stocks related to 13 issues with unrealized losses, averaging approximately 5% of our total cost of those securities. We reviewed these securities and concluded that the unrealized losses are market-related adjustments to the values, which were determined not to be other-than-temporary; we expect to recover our initial investments on these securities. The number of issuers with unrealized losses in our common stock portfolio increased during 2016. A review of the securities in a loss position did not uncover fundamental issues with the issuers that would indicate other-than-temporary impairments existed. Additionally, market expectations for recovery in the next 12 months would put the fair values at or above our current book values. Lastly, we determined, as of the balance sheet date, that it was not likely these securities would be sold prior to that recovery.

Other-Than-Temporary Impairment (OTTI) The following table shows the total non-credit portion of the OTTI recorded in accumulated other comprehensive income, reflecting the original non-credit loss at the time the credit impairment was determined (i.e., unadjusted for valuation changes subsequent to the original write-down):

(millions)	December 31,	
	2016	2015
Fixed maturities:		
Residential mortgage-backed securities	\$(43.3)	\$(43.3)
Commercial mortgage-backed securities	(0.6)	(0.6)
Total fixed maturities	\$(43.9)	\$(43.9)

The following tables provide rollforwards of the amounts related to credit losses recognized in earnings for the periods ended December 31, 2016, 2015, and 2014, for which a portion of the OTTI losses were also recognized in accumulated other comprehensive income at the time the credit impairments were determined and recognized:

(millions)	Residential Mortgage- Backed	Commercial Mortgage- Backed	Total
	Total at December 31, 2015	\$12.4	
Reductions for securities sold/matured	0	0	0
Change in recoveries of future cash flows expected to be collected ^{1,2}	(1.3)	0	(1.3)
Total at December 31, 2016	\$11.1	\$0.4	\$11.5

(millions)	Residential Mortgage- Backed	Commercial Mortgage- Backed	Total
	Total at December 31, 2014	\$12.7	
Reductions for securities sold/matured	(1.4)	0	(1.4)
Change in recoveries of future cash flows expected to be collected ^{1,2}	1.1	0	1.1
Total at December 31, 2015	\$12.4	\$0.4	\$12.8

(millions)	Residential Mortgage- Backed	Commercial Mortgage- Backed	Total
	Total at December 31, 2013	\$19.2	
Reductions for securities sold/matured	(0.1)	0	(0.1)
Change in recoveries of future cash flows expected to be collected ^{1,2}	(6.4)	0	(6.4)
Total at December 31, 2014	\$12.7	\$0.4	\$13.1

¹Reflects expected recovery of prior period impairments that will be accreted into income over the remaining life of the security.

²Includes \$1.9 million, \$2.9 million, and \$4.3 million at December 31, 2016, 2015, and 2014, respectively, recognized in income in excess of the cash flows expected to be collected at the time of the write-downs.

During 2016, we recorded \$25.4 million in write-downs on securities in our redeemable preferred stock portfolio. These securities had been in an unrealized loss position for greater than 12 months. During the year, we determined that we did not intend to hold these securities for the period of time necessary to recover their respective cost bases, given our evaluation of the length of time for such recovery.

For the remaining securities in our fixed-income portfolio, although we determined it is more likely that we will not be required to sell the securities prior to the recovery of their respective cost bases (which could be maturity), we are required to measure the amount of potential credit losses on the securities that were in an unrealized loss position. In that process, we considered a number of factors and inputs related to the individual securities. The methodology and significant inputs used to measure the amount of credit losses in our portfolio included: current performance indicators on the business model or underlying assets (e.g., delinquency rates, foreclosure rates, and default rates); credit support (via current levels of subordination); historical credit ratings; and updated cash flow expectations based upon these performance indicators. In order to determine the amount of credit loss, if any, the net present value of the cash flows expected (i.e., expected recovery value) was calculated using the current book yield for each security, and was compared to its current amortized value. In the event that the net present value was below the amortized value, a credit loss would be deemed to exist, and the security would be written down. We did not have any credit impairment write-downs for the periods ended December 31, 2016, 2015 or 2014.

Realized Gains (Losses) The components of net realized gains (losses) for the years ended December 31, were:

(millions)	2016	2015	2014
Gross realized gains on security sales			
Fixed maturities:			
U.S. government obligations	\$ 24.6	\$ 17.5	\$ 24.0
State and local government obligations	16.0	7.8	9.3
Corporate and other debt securities	43.3	31.2	37.2
Residential mortgage-backed securities	2.4	4.9	2.7
Agency residential pass-through obligations	0.1	0	0
Commercial mortgage-backed securities	13.3	15.7	17.0
Redeemable preferred stocks	20.9	0.1	2.7
Total fixed maturities	120.6	77.2	92.9
Equity securities:			
Nonredeemable preferred stocks	11.9	65.3	90.0
Common equities	61.3	50.4	107.3
Short-term investments	0.1	0	0
Subtotal gross realized gains on security sales	193.9	192.9	290.2
Gross realized losses on security sales			
Fixed maturities:			
U.S. government obligations	(2.4)	(0.9)	(7.6)
State and local government obligations	(1.6)	(0.3)	(0.5)
Corporate and other debt securities	(2.5)	(5.0)	(2.8)
Residential mortgage-backed securities	0	(0.4)	(0.2)
Agency residential pass-through obligations	(0.2)	(0.4)	0
Commercial mortgage-backed securities	(5.6)	(1.3)	(8.3)
Redeemable preferred stocks	(6.6)	0	(3.2)
Total fixed maturities	(18.9)	(8.3)	(22.6)
Equity securities:			
Nonredeemable preferred stocks	(5.3)	(3.2)	0
Common equities	(15.7)	(38.4)	(7.3)
Short-term investments	(0.1)	0	0
Subtotal gross realized losses on security sales	(40.0)	(49.9)	(29.9)
Net realized gains (losses) on security sales			
Fixed maturities:			
U.S. government obligations	22.2	16.6	16.4
State and local government obligations	14.4	7.5	8.8
Corporate and other debt securities	40.8	26.2	34.4
Residential mortgage-backed securities	2.4	4.5	2.5
Agency residential pass-through obligations	(0.1)	(0.4)	0
Commercial mortgage-backed securities	7.7	14.4	8.7
Redeemable preferred stocks	14.3	0.1	(0.5)
Total fixed maturities	101.7	68.9	70.3
Equity securities:			
Nonredeemable preferred stocks	6.6	62.1	90.0
Common equities	45.6	12.0	100.0
Subtotal net realized gains (losses) on security sales	153.9	143.0	260.3
Other-than-temporary impairment losses			
Fixed maturities:			
Redeemable preferred stocks	(25.3)	0	0
Total fixed maturities	(25.3)	0	0
Equity securities:			
Common equities	(0.3)	(8.7)	(7.2)
Subtotal investment other-than-temporary impairment losses	(25.6)	(8.7)	(7.2)
Other asset impairment	(59.7)	0	0
Subtotal other-than-temporary impairment losses	(85.3)	(8.7)	(7.2)
Other gains (losses)			
Hybrid securities	2.1	(1.3)	30.5
Derivative instruments	(20.0)	(20.7)	(64.1)
Litigation settlements	0.4	0.4	4.7
Subtotal other gains (losses)	(17.5)	(21.6)	(28.9)
Total net realized gains (losses) on securities	\$ 51.1	\$112.7	\$224.2

Gross realized gains and losses were predominantly the result of sales transactions in our fixed-income portfolio related to movements in credit spreads and interest rates and sales from our equity portfolios. In addition, gains and losses reflect recoveries from litigation settlements related to investments and holding period valuation changes on hybrids and derivatives. Also included are write-downs for securities determined to be other-than-temporarily impaired. The other asset impairment relates to renewable energy investments, which are reflected in “other assets” on the balance sheet, under which the future pretax cash flows are expected to be less than the carrying value of the assets.

Net Investment Income The components of net investment income for the years ended December 31, were:

(millions)	2016	2015	2014
Fixed maturities:			
U.S. government obligations	\$ 18.2	\$ 28.3	\$ 46.2
State and local government obligations	52.3	60.7	50.1
Foreign government obligations	0.4	0.4	0.4
Corporate debt securities	110.7	102.4	82.1
Residential mortgage-backed securities	46.1	52.2	44.9
Agency residential pass-through obligations	1.2	2.1	0
Commercial mortgage-backed securities	81.6	74.6	66.0
Other asset-backed securities	28.0	22.0	16.7
Redeemable preferred stocks	14.9	15.0	15.5
Total fixed maturities	353.4	357.7	321.9
Equity securities:			
Nonredeemable preferred stocks	48.6	43.7	38.6
Common equities	57.2	51.0	46.6
Short-term investments	19.7	2.2	1.3
Investment income	478.9	454.6	408.4
Investment expenses	(22.4)	(22.8)	(18.9)
Net investment income	\$456.5	\$431.8	\$389.5

The amount of investment income (interest and dividends) we recognize varies from year to year based on the average assets during the year and the book yields of the securities in our portfolio. In addition to proceeds from debt offerings in each of the last three years, the increase in our portfolio’s average assets in 2016, compared to 2015, was the result of strong underwriting premium growth. The increase in investment income from our portfolio’s growth was slightly offset by a lower portfolio yield due to the sharp decline in interest rates (which was prevalent during most of 2016), affecting investment yields on new cash and portfolio turnover, as well as our decision to shorten our portfolio duration early in the year and invest in a higher amount of short-term paper which have lower overall yields. The increase in income in 2015 over 2014 reflects the acquisition of a controlling interest in ARX, strong underwriting profitability, and a slight increase in portfolio yields compared to 2014.

Trading Securities At December 31, 2016 and 2015, we did not hold any trading securities and we did not have any net realized gains (losses) on trading securities for the years ended December 31, 2016, 2015, and 2014.

Derivative Instruments For all derivative positions discussed below, realized holding period gains and losses are netted with any upfront cash that may be exchanged under the contract to determine if the net position should be classified either as an asset or liability. To be reported as a net derivative asset and a component of the available-for-sale portfolio, the inception-to-date holding period (realized) gain on the derivative position at period end would have to exceed any upfront cash received. On the other hand, a net derivative liability would include any inception-to-date realized loss plus the amount of upfront cash received (or netted, if upfront cash was paid) and would be reported as a component of other liabilities. These net derivative assets/liabilities are not separately disclosed on the balance sheet due to their immaterial effect on our financial condition, cash flows, and results of operations.

The following table shows the status of our derivative instruments at December 31, 2016 and 2015, and for the years ended December 31, 2016, 2015, and 2014:

(millions)	Notional Value ¹				Purpose	Balance Sheet ²		Comprehensive Income Statement			
						Assets (Liabilities) Fair Value		Pretax Net Realized Gains (Losses)			
	December 31,		December 31,			Years ended December 31,					
Derivatives designated as:	2016	2015	2014		Classification	2016	2015	2016	2015	2014	
Hedging instruments											
<u>Closed:</u>											
Ineffective cash flow hedge	\$370	\$ 18	\$ 44		Manage interest rate risk	NA	\$0	\$ 0	\$ (1.3)	\$ 0.2	\$ 0.5
Non-hedging instruments											
<u>Assets:</u>											
Interest rate swaps	0	750	750		Manage portfolio duration	Investments—fixed maturities	0	4.4	0	(23.4)	(64.6)
<u>Closed:</u>											
Interest rate swaps	750	0	0		Manage portfolio duration	NA	0	0	(19.0)	0	0
U.S. Treasury Note futures	135	691	0		Manage portfolio duration	NA	0	0	0.3	2.5	0
Total	NA	NA	NA				\$0	\$4.4	\$(20.0)	\$(20.7)	\$(64.1)

¹The amounts represent the value held at year end for open positions and the maximum amount held during the year for closed positions.

²To the extent we held both derivative assets and liabilities with the same counterparty that were subject to an enforceable master netting arrangement, we reported them on a gross basis on our balance sheets, consistent with our historical presentation.

NA = Not Applicable

CASH FLOW HEDGES

During 2016, we entered into a \$350 million forecasted transaction to hedge against a possible rise in interest rates in anticipation of a debt offering under which we issued \$500 million of 2.45% Senior Notes due 2027. When the contract was closed, the \$1.4 million loss on the derivative was immediately recognized as a realized loss.

The remaining portion of our ineffective cash flow hedge, which is reflected in the table above, resulted from the repurchase of a portion of our 6.70% Fixed-to-Floating Rate Junior Subordinated Debentures due 2067 during all three years presented, and we reclassified the unrealized gain on forecasted transactions to net realized gains on securities.

During 2016, we reclassified \$1.9 million from accumulated other comprehensive income to interest expense on our closed debt issuance cash flow hedges, compared to \$1.8 million during 2015 and \$2.0 million during 2014.

See *Note 4 – Debt* for further discussion.

INTEREST RATE SWAPS and U.S. TREASURY FUTURES

We use interest rate swaps and treasury futures contracts from time to time to manage the fixed-income portfolio duration. During 2016, we closed all of our remaining interest rate swap positions and, at December 31, 2016, did not have a cash collateral balance. At December 31, 2015 and 2014, we held interest rate swap positions for which we were paying a fixed rate and receiving a variable rate, effectively shortening the duration of our fixed-income portfolio. As of December 31, 2015 and 2014, the balance of the cash collateral that we had received from the applicable counterparty on our then open positions was \$4.9 million and \$16.1 million, respectively. We opened and closed treasury futures during 2016 and 2015; no positions were outstanding at either year end.

3. FAIR VALUE

We have categorized our financial instruments, based on the degree of subjectivity inherent in the method by which they are valued, into a fair value hierarchy of three levels, as follows:

- *Level 1*: Inputs are unadjusted, quoted prices in active markets for identical instruments at the measurement date (e.g., U.S. government obligations, active exchange-traded equity securities, and certain short-term securities).
- *Level 2*: Inputs (other than quoted prices included within Level 1) that are observable for the instrument either directly or indirectly (e.g., certain corporate and municipal bonds and certain preferred stocks). This includes: (i) quoted prices for similar instruments in active markets, (ii) quoted prices for identical or similar instruments in markets that are not active, (iii) inputs other than quoted prices that are observable for the instruments, and (iv) inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- *Level 3*: Inputs that are unobservable. Unobservable inputs reflect our subjective evaluation about the assumptions market participants would use in pricing the financial instrument (e.g., certain structured securities and privately held investments).

Determining the fair value of the investment portfolio is the responsibility of management. As part of the responsibility, we evaluate whether a market is distressed or inactive in determining the fair value for our portfolio. We review certain market level inputs to evaluate whether sufficient activity, volume, and new issuances exist to create an active market. Based on this evaluation, we concluded that there was sufficient activity related to the sectors and securities for which we obtained valuations.

The composition of the investment portfolio by major security type and our outstanding debt was:

(millions)	Fair Value			Total	Cost
	Level 1	Level 2	Level 3		
December 31, 2016					
Fixed maturities:					
U.S. government obligations	\$2,870.1	\$ 0	\$ 0	\$ 2,870.1	\$ 2,899.2
State and local government obligations	0	2,502.6	0	2,502.6	2,509.5
Foreign government obligations	24.5	0	0	24.5	24.5
Corporate debt securities	0	4,550.9	0	4,550.9	4,557.8
Subtotal	2,894.6	7,053.5	0	9,948.1	9,991.0
Asset-backed securities:					
Residential mortgage-backed	0	1,458.7	0	1,458.7	1,448.5
Agency residential pass-through obligations	0	40.6	0	40.6	41.2
Commercial mortgage-backed	0	2,253.1	0.3	2,253.4	2,266.9
Other asset-backed	0	2,351.1	0	2,351.1	2,350.7
Subtotal asset-backed securities	0	6,103.5	0.3	6,103.8	6,107.3
Redeemable preferred stocks:					
Financials	0	59.5	0	59.5	59.8
Utilities	0	30.9	0	30.9	30.5
Industrials	0	101.5	0	101.5	98.5
Subtotal redeemable preferred stocks	0	191.9	0	191.9	188.8
Total fixed maturities	2,894.6	13,348.9	0.3	16,243.8	16,287.1
Equity securities:					
Nonredeemable preferred stocks:					
Financials	138.1	715.4	0	853.5	734.2
Subtotal nonredeemable preferred stocks	138.1	715.4	0	853.5	734.2
Common equities:					
Common stocks	2,812.0	0	0	2,812.0	1,437.1
Other risk investments	0	0	0.4	0.4	0.4
Subtotal common equities	2,812.0	0	0.4	2,812.4	1,437.5
Total fixed maturities and equity securities	5,844.7	14,064.3	0.7	19,909.7	18,458.8
Short-term investments	3,009.3	563.6	0	3,572.9	3,572.9
Total portfolio	\$8,854.0	\$14,627.9	\$ 0.7	\$23,482.6	\$22,031.7
Debt	\$ 0	\$ 3,188.5	\$127.3	\$ 3,315.8	\$ 3,148.2

(millions)	Fair Value				Cost
	Level 1	Level 2	Level 3	Total	
December 31, 2015					
Fixed maturities:					
U.S. government obligations	\$2,429.2	\$ 0	\$ 0	\$ 2,429.2	\$ 2,425.4
State and local government obligations	0	2,721.4	0	2,721.4	2,677.6
Foreign government obligations	18.6	0	0	18.6	18.6
Corporate debt securities	0	3,691.6	0	3,691.6	3,713.2
Subtotal	2,447.8	6,413.0	0	8,860.8	8,834.8
Asset-backed securities:					
Residential mortgage-backed	0	1,726.7	0	1,726.7	1,726.0
Agency residential pass-through obligations	0	89.3	0	89.3	90.3
Commercial mortgage-backed	0	2,643.3	9.9	2,653.2	2,665.7
Other asset-backed	0	1,767.9	0	1,767.9	1,771.1
Subtotal asset-backed securities	0	6,227.2	9.9	6,237.1	6,253.1
Redeemable preferred stocks:					
Financials	0	92.0	0	92.0	76.8
Utilities	0	51.2	0	51.2	65.1
Industrials	0	91.1	0	91.1	118.1
Subtotal redeemable preferred stocks	0	234.3	0	234.3	260.0
Total fixed maturities	2,447.8	12,874.5	9.9	15,332.2	15,347.9
Equity securities:					
Nonredeemable preferred stocks:					
Financials	154.9	627.7	0	782.6	674.2
Subtotal nonredeemable preferred stocks	154.9	627.7	0	782.6	674.2
Common equities:					
Common stocks	2,650.2	0	0	2,650.2	1,494.0
Other risk investments	0	0	0.3	0.3	0.3
Subtotal common equities	2,650.2	0	0.3	2,650.5	1,494.3
Total fixed maturities and equity securities	5,252.9	13,502.2	10.2	18,765.3	17,516.4
Short-term investments	2,056.3	115.7	0	2,172.0	2,172.0
Total portfolio	\$7,309.2	\$13,617.9	\$ 10.2	\$20,937.3	\$19,688.4
Debt	\$ 0	\$ 2,722.9	\$164.9	\$ 2,887.8	\$ 2,707.9

Our portfolio valuations, excluding short-term investments, classified as either Level 1 or Level 2 in the above tables are priced exclusively by external sources, including: pricing vendors, dealers/market makers, and exchange-quoted prices. During 2016 and 2015, we did not have any transfers between Level 1 and Level 2.

Our short-term security holdings classified as Level 1 are highly liquid, actively marketed, and have a very short duration, primarily 30 days or less to redemption. These securities are held at their original cost, adjusted for any accretion of discount, since that value very closely approximates what an active market participant would be willing to pay for such securities. The remainder of our short-term securities are classified as Level 2 and are not priced externally since these securities continually trade at par value. These securities are classified as Level 2 since they are primarily longer-dated auction securities issued by municipalities that contain a redemption put feature back to the auction pool with a redemption period typically less than seven days. The auction pool is created by a liquidity provider and if the auction is not available at the end of the seven days, we have the right to put the security back to the issuer at par.

At December 31, 2016, vendor-quoted prices represented 52% of our Level 1 classifications (excluding short-term investments), compared to 49% at December 31, 2015. The securities quoted by vendors in Level 1 primarily represent our holdings in U.S. Treasury Notes, which are frequently traded and the quotes are considered similar to exchange-traded quotes. The balance of our Level 1 pricing comes from quotes obtained directly from trades made on active exchanges.

At December 31, 2016, vendor-quoted prices comprised 99% of our Level 2 classifications (excluding short-term investments), while dealer-quoted prices represented 1%, compared to 97% and 3% at December 31, 2015, respectively. In our process for selecting a source (e.g., dealer, pricing service) to provide pricing for securities in our portfolio, we reviewed documentation from the sources that detailed the pricing techniques and methodologies used by these sources and determined if their policies adequately considered market activity, either based on specific transactions for the particular security type or based on modeling of securities with similar credit quality, duration, yield, and structure that were recently transacted. Once a source is chosen, we continue to monitor any changes or modifications to their processes by reviewing their documentation on internal controls for pricing and market reviews. We review quality control measures of our sources as they become available to determine if any significant changes have occurred from period to period that might indicate issues or concerns regarding their evaluation or market coverage.

As part of our pricing procedures, we obtain quotes from more than one source to help us fully evaluate the market price of securities. However, our internal pricing policy is to use a consistent source for individual securities in order to maintain the integrity of our valuation process. Quotes obtained from the sources are not considered binding offers to transact. Under our policy, when a review of the valuation received from our selected source appears to be outside of what is considered market level activity (which is defined as trading at spreads or yields significantly different than those of comparable securities or outside the general sector level movement without a reasonable explanation), we may use an alternate source's price. To the extent we determine that it may be prudent to substitute one source's price for another, we will contact the initial source to obtain an understanding of the factors that may be contributing to the significant price variance, which often leads the source to adjust their pricing input data for future pricing.

To allow us to determine if our initial source is providing a price that is outside of a reasonable range, we review our portfolio pricing on a weekly basis. We frequently challenge prices from our sources when a price provided does not match our expectations based on our evaluation of market trends and activity. Initially, we perform a review of our portfolio by sector to identify securities whose prices appear outside of a reasonable range. We then perform a more detailed review of fair values for securities disclosed as Level 2. We review dealer bids and quotes for these and/or similar securities to determine the market level context for our valuations. We then evaluate inputs relevant for each class of securities disclosed in the preceding hierarchy tables.

For our structured debt securities, including commercial, residential, and asset-backed securities, we evaluate available market-related data for these and similar securities related to collateral, delinquencies, and defaults for historical trends and reasonably estimable projections, as well as historical prepayment rates and current prepayment assumptions and cash flow estimates. We further stratify each class of our structured debt securities into more finite sectors (e.g., planned amortization class, first pay, second pay, senior, subordinated, etc.) and use duration, credit quality, and coupon to determine if the fair value is appropriate.

For our corporate debt and preferred stock (redeemable and nonredeemable) portfolios, as well as the notes and debentures issued by The Progressive Corporation (see *Note 4 – Debt*), we review securities by duration, coupon, and credit quality, as well as changes in interest rate and credit spread movements within that stratification. The review also includes recent trades, including: volume traded at various levels that establish a market, issuer specific fundamentals, and industry specific economic news as it comes to light.

For our municipal securities (e.g., general obligations, revenue, and housing), we stratify the portfolio to evaluate securities by type, coupon, credit quality, and duration to review price changes relative to credit spread and interest rate changes. Additionally, we look to economic data as it relates to geographic location as an indication of price-to-call or maturity predictors. For municipal housing securities, we look to changes in cash flow projections, both historical and reasonably estimable projections, to understand yield changes and their effect on valuation.

Lastly, for our short-term securities, we look at acquisition price relative to the coupon or yield. Since our short-term securities are typically 90 days or less to maturity, with the majority listed in Level 2 being seven days or less to redemption, we believe that acquisition price is the best estimate of fair value.

We also review data assumptions as supplied by our sources to determine if that data is relevant to current market conditions. In addition, we independently review each sector for transaction volumes, new issuances, and changes in spreads, as well as the overall movement of interest rates along the yield curve to determine if sufficient activity and liquidity exists to provide a credible source for our market valuations.

During each valuation period, we create internal estimations of portfolio valuation (performance returns), based on current market-related activity (i.e., interest rate and credit spread movements and other credit-related factors) within each major sector of our portfolio. We compare our internally generated portfolio results with those generated based on quotes we received externally and research material valuation differences. We compare our results to index returns for each major sector adjusting for duration and credit quality differences to better understand our portfolio's results. Additionally, we review on a monthly basis our external sales transactions and compare the actual final market sales price to a previous market valuation price. This review provides us further validation that our pricing sources are providing market level prices, since we are able to explain significant price changes (i.e., greater than 2%) as known events occur in the marketplace and affect a particular security's price at sale.

This analysis provides us with additional comfort regarding each source's process, the quality of its review, and its willingness to improve its analysis based on feedback from clients. We believe this effort helps ensure that we are reporting the most representative fair values for our securities.

Except as described below, our Level 3 securities are also priced externally; however, due to several factors (e.g., nature of the securities, level of inactivity, and lack of similar securities trading to obtain observable market level inputs), these valuations are more subjective in nature. Certain private equity investments and fixed-income investments included in the Level 3 category are valued using external pricing supplemented by internal review and analysis.

After all the valuations are received and our review is complete, if the inputs used by vendors are determined to not contain sufficient observable market information, we will reclassify the affected security valuations to Level 3. At December 31, 2016 and 2015, securities in our fixed-maturity portfolio listed as Level 3 were comprised substantially of securities that were either: (i) private placements, (ii) thinly held and/or traded securities, or (iii) non-investment-grade or non-rated securities with little liquidity. Based on these factors, it was difficult to independently verify observable market inputs that were used to generate the external valuations we received. Despite the lack of sufficient observable market information for our Level 3 securities, we believe the valuations received, in conjunction with our procedures for evaluating third-party prices, support the fair values reported in the financial statements.

We did not hold any internally-priced securities at December 31, 2016 or 2015.

We review the prices from our external sources for reasonableness using internally developed assumptions to derive prices for the securities, which are then compared to the prices we received. During 2016 or 2015, there were no material assets or liabilities measured at fair value on a nonrecurring basis. Based on our review, all the prices received from external sources remain unadjusted.

The following tables provide a summary of changes in fair value associated with Level 3 assets for the years ended December 31, 2016 and 2015:

(millions)	Level 3 Fair Value							Fair Value at Dec. 31, 2016
	Fair Value at Dec. 31, 2015	Calls/ Maturities/ Paydowns	Purchases	Sales	Net Realized (Gain)/Loss on Sales	Change in Valuation	Net Transfers In (Out)	
Fixed maturities:								
Asset-backed securities:								
Commercial mortgage-backed	\$ 9.9	\$(9.6)	\$0	\$0	\$0	\$ 0	\$0	\$0.3
Total fixed maturities	9.9	(9.6)	0	0	0	0	0	0.3
Equity securities:								
Nonredeemable preferred stocks:								
Financials	0	0	0	0	0	0	0	0
Common equities:								
Other risk investments	0.3	0	0	0	0	0.1	0	0.4
Total Level 3 securities	\$10.2	\$(9.6)	\$0	\$0	\$0	\$0.1	\$0	\$0.7

(millions)	Level 3 Fair Value							
	Fair Value at Dec. 31, 2014	Calls/ Maturities/ Paydowns	Purchases	Sales	Net Realized (Gain)/Loss on Sales	Change in Valuation	Net Transfers In (Out)	Fair Value at Dec. 31, 2015
Fixed maturities:								
Asset-backed securities:								
Commercial mortgage-backed	\$11.6	\$(1.3)	\$0	\$0	\$ 0	\$(0.4)	\$ 0	\$ 9.9
Total fixed maturities	11.6	(1.3)	0	0	0	(0.4)	0	9.9
Equity securities:								
Nonredeemable preferred stocks:								
Financials ¹	69.3	0	0	0	(39.4)	(1.4)	(28.5)	0
Common equities:								
Other risk investments	0.4	0	0	0	0	(0.1)	0	0.3
Total Level 3 securities	\$81.3	\$(1.3)	\$0	\$0	\$(39.4)	\$(1.9)	\$(28.5)	\$10.2

¹The \$69.3 million decrease during the year reflects the reclassification of our 5% interest in ARX upon our acquisition of a controlling interest in ARX. The \$39.4 million reflects our inception-to-date gain recognized, including the \$1.4 million reduction in valuation that occurred during the first six months of 2015.

The following tables provide a summary of the quantitative information about Level 3 fair value measurements for our applicable securities at December 31:

(\$ in millions)	Quantitative Information about Level 3 Fair Value Measurements			
	Fair Value at Dec. 31, 2016	Valuation Technique	Unobservable Input	Unobservable Input Assumption
Fixed maturities:				
Asset-backed securities:				
Commercial mortgage-backed	\$0.3	External vendor	Prepayment rate ¹	0
Total fixed maturities	0.3			
Subtotal Level 3 securities	0.3			
Third-party pricing exemption securities ²	0.4			
Total Level 3 securities	\$0.7			

¹Assumes that one security has 0% of the principal amount of the underlying loans that will be paid off prematurely in each year.

²The fair values for these securities were obtained from non-binding external sources where unobservable inputs are not reasonably available to us.

(\$ in millions)	Quantitative Information about Level 3 Fair Value Measurements			
	Fair Value at Dec. 31, 2015	Valuation Technique	Unobservable Input	Unobservable Input Assumption
Fixed maturities:				
Asset-backed securities:				
Commercial mortgage-backed	\$ 9.9	External vendor	Prepayment rate ¹	0
Total fixed maturities	9.9			
Subtotal Level 3 securities	9.9			
Third-party pricing exemption securities ²	0.3			
Total Level 3 securities	\$10.2			

¹Assumes that one security has 0% of the principal amount of the underlying loans that will be paid off prematurely in each year.

²The fair values for these securities were obtained from non-binding external sources where unobservable inputs are not reasonably available to us.

Due to the relative size of the Level 3 securities' fair values compared to the total portfolio's fair value, any changes in pricing methodology would not have a significant change in valuation that would materially impact net or comprehensive income.

4. DEBT

Debt at December 31 consisted of:

(millions)	2016		2015	
	Carrying Value	Fair Value	Carrying Value	Fair Value
3.75% Senior Notes due 2021 (issued: \$500.0, August 2011)	\$ 498.4	\$ 528.8	\$ 498.1	\$ 528.7
2.45% Senior Notes due 2027 (issued: \$500.0, August 2016)	495.8	464.6	0	0
6 5/8% Senior Notes due 2029 (issued: \$300.0, March 1999)	295.9	380.1	295.7	376.0
6.25% Senior Notes due 2032 (issued: \$400.0, November 2002)	395.2	499.0	395.0	490.6
4.35% Senior Notes due 2044 (issued: \$350.0, April 2014)	346.4	362.3	346.4	352.8
3.70% Senior Notes due 2045 (issued: \$400.0, January 2015)	395.1	372.5	395.0	362.0
6.70% Fixed-to-Floating Rate Junior Subordinated Debentures due 2067 (issued: \$1,000.0, June 2007; outstanding: \$594.6 and \$614.4)	594.1	581.2	612.8	612.8
Other debt instruments	127.3	127.3	164.9	164.9
Total	\$3,148.2	\$3,315.8	\$2,707.9	\$2,887.8

The other debt instruments reported in the table above represent ARX indebtedness and consist of:

Type of debt instrument	December 31, 2016		December 31, 2015		Stated Maturity Date(s)
	Number of Instruments	Carrying Value	Number of Instruments	Carrying Value	
Term loans	2	\$ 62.1	2	\$ 87.1	December 2018 and 2019
Junior subordinated notes ¹	2	41.2	2	41.2	June 2036 and 2037
Senior notes	4	24.0	4	24.0	Various ²
Surplus note ³	0	0	1	12.6	November 2021
Total		\$127.3		\$164.9	

¹ARX issued junior subordinated floating rate notes to trusts established by ARX in connection with issuances of trust preferred securities by the trust (discussed below).

²The senior notes mature in May 2033, April 2034, December 2034, and June 2035.

³The surplus note was debt of the subsidiary disposed of by ARX in the exchange transaction during 2016 (see Note 16 – Goodwill and Intangible Assets for further discussion).

Aggregate required principal payments on debt outstanding at December 31, 2016, are as follows:

(millions) Year	Payments
2017	\$ 25.0
2018	25.0
2019	11.3
2020	0.8
2021	500.0
Thereafter	2,609.8
Total	\$3,171.9

The Progressive Corporation Debt

Excluding the other debt instruments, all of the outstanding debt was issued by The Progressive Corporation, the ultimate holding company. The holding company debt includes amounts that were borrowed and contributed to the capital of its insurance subsidiaries or used, or made available for use, for other business purposes. Fair values for these debt instruments are obtained from external sources. There are no restrictive financial covenants or credit rating triggers on The Progressive Corporation debt.

Interest on all debt issued by The Progressive Corporation is payable semiannually at the stated rates. However, the 6.70% Fixed-to-Floating Rate Junior Subordinated Debentures due 2067 (the “6.70% Debentures”) will only bear interest at this

fixed annual rate through June 14, 2017. Thereafter, the 6.70% Debentures will bear interest at an annual rate equal to the three-month London Interbank Offered Rate (LIBOR) plus 2.0175%, and interest will be payable quarterly until the 6.70% Debentures are redeemed or retired.

Except for the 6.70% Debentures, all remaining principal on the Senior Notes is due at the maturity stated in the tables above. The Senior Notes are redeemable, in whole or in part, at any time; however, the redemption price will equal the greater of the principal amount of the Senior Notes or a “make whole” amount calculated by reference to the present values of remaining scheduled principal and interest payments under the Senior Notes. Commencing on June 15, 2017, we have the right to redeem the 6.70% Debentures at par. If not previously redeemed, the 6.70% Debentures will become due on June 15, 2037, the scheduled maturity date, but only to the extent that we have received sufficient net proceeds from the sale of certain qualifying capital securities. The Progressive Corporation must use its commercially reasonable efforts, subject to certain market disruption events, to sell enough qualifying capital securities to permit repayment of the 6.70% Debentures in full on the scheduled maturity date or, if sufficient proceeds are not realized from the sale of such qualifying capital securities by such date, on each interest payment date thereafter. Any remaining outstanding principal will be due on June 15, 2067, the final maturity date.

The Progressive Corporation issued \$500 million of our 2.45% Senior Notes due 2027 (the “2.45% Senior Notes”) in August 2016, and \$400 million of 3.70% Senior Notes due 2045 (the “3.70% Senior Notes”) in January 2015, in underwritten public offerings. We received proceeds, after deducting underwriter’s discounts, commissions and other issuance costs, of approximately \$495.6 million and \$394.9 million, respectively, and paid approximately \$0.9 million and \$0.8 million of costs related to the issuance of the 2.45% Senior Notes and 3.70% Senior Notes, respectively.

Prior to issuance of our debt securities, we entered into forecasted transactions to hedge against possible rises in interest rates. When the contracts were closed upon issuance of the applicable debt securities, we recognized unrealized gains (losses) as part of accumulated other comprehensive income for all of the Senior Notes and 6.70% Debentures, except for the 2.45% Senior Notes. Upon issuance of the 2.45% Senior Notes, we recognized a realized loss of \$1.4 million (See *Note 2 – Investments* for further discussion). The following table shows the original gain (loss) recognized at debt issuance and the unamortized balance at December 31, 2016, on a pretax basis:

(millions)	Unrealized Gain (Loss) at Debt Issuance	Unamortized Balance at December 31, 2016
3.75% Senior Notes	\$ (5.1)	\$ (2.6)
6 5/8% Senior Notes	(4.2)	(2.9)
6.25% Senior Notes	5.1	3.7
4.35% Senior Notes	(1.6)	(1.5)
3.70% Senior Notes	(12.9)	(12.4)
6.70% Debentures	34.4	1.2

These unrealized gains (losses) are being amortized as adjustments to interest expense over the life of the related Senior Notes, and over the 10-year fixed interest rate term for the 6.70% Debentures. In addition to this amortization, during 2016 and 2015, we reclassified \$0.1 million and \$0.2 million, respectively, on a pretax basis, from accumulated other comprehensive income on the balance sheet to net realized gains on securities on the comprehensive income statement, reflecting the portion of the unrealized gain on forecasted transactions that was related to the portion of the 6.70% Debentures repurchased during the periods.

During 2016 and 2015, we repurchased, in the open market, \$19.8 million and \$18.4 million, respectively, in aggregate principal amount of our 6.70% Debentures. Since the carrying value of the debt we repurchased differed from the amount paid to extinguish the debt, we recognized a gain of \$1.6 million during 2016 and a loss of \$0.9 million during 2015.

ARX Debt (i.e., Other debt instruments)

The other debt instruments were issued by ARX, prior to The Progressive Corporation acquiring a controlling interest in 2015. ARX, not The Progressive Corporation or any of its other subsidiaries, is responsible for the other debt, which includes amounts that were borrowed and contributed to the capital of ARX’s insurance subsidiaries or used, or made available for use, for other business purposes.

In estimating the fair values of the other debt instruments, it was determined that the fair values of these notes are equal to the carrying value, based on the current rates offered for debt of similar maturities and interest rates.

The term loans require ARX and its subsidiaries to maintain specified debt leverage and fixed charge coverage ratios, as well as maintain a minimum risk-based capital ratio and minimum financial strength and credit ratings, as provided by A.M. Best Company, Inc. As of December 31, 2016, ARX was in compliance with these covenants.

Monthly interest and principal payments are made on the term loans, with interest calculated based on the 30-day LIBOR plus 2.25%. Principal payments of \$25.0 million are required to be paid during the next twelve months on these term loans. The term loans are secured by 100% of the outstanding common stock of four subsidiaries of ARX.

Interest on the junior subordinated notes and the senior notes is paid quarterly at a floating rate tied to the three-month LIBOR rate. The junior subordinated notes and senior notes can be redeemed, in whole or in part, at the option of ARX at par, plus accrued and unpaid interest, on any interest payment date.

Pursuant to agreements entered into by ARX relating to the trust preferred securities transactions, ARX established trusts that are entirely owned by ARX. The trusts, which are the holders of the junior subordinated notes, issued trust preferred securities to third parties. The shares in the trusts are not transferable. The trusts are considered special purpose variable interest entities for which ARX is not the primary beneficiary and, therefore, they are accounted for under the equity method of accounting and not consolidated with ARX. Our ownership interest of \$1.3 million in the variable interest entities is reported as a component of "other assets" on our consolidated balance sheets.

The Progressive Corporation Line of Credit

During 2016, we renewed the unsecured, discretionary line of credit (the "Line of Credit") with PNC Bank, National Association (PNC) in the maximum principal amount of \$100 million. The prior line of credit, entered into in March 2015, had expired. The Line of Credit is on substantially the same terms and conditions as the prior line of credit. Subject to the terms and conditions of the Line of Credit documents, advances under the Line of Credit (if any) will bear interest at a variable rate equal to the higher of PNC's Prime Rate or the sum of the Federal Funds Open Rate plus 50 basis points. Each advance must be repaid on the 30th day after the advance or, if earlier, on April 30, 2017, the expiration date of the Line of Credit. Prepayments are permitted without penalty. All advances under the Line of Credit are subject to PNC's discretion. We had no borrowings under the Line of Credit or the prior line of credit in 2016 or 2015.

5. INCOME TAXES

The components of our income tax provision were as follows:

<u>(millions)</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Current tax provision			
Federal	\$469.6	\$655.3	\$594.4
State	12.7	14.7	0
Deferred tax expense (benefit)			
Federal	(66.3)	(47.7)	32.0
State	(2.5)	(11.2)	0
Total income tax provision	<u>\$413.5</u>	<u>\$611.1</u>	<u>\$626.4</u>

As a result of our acquisition of a controlling interest in ARX in 2015, state income taxes are now being included in the income tax provision. In prior years, state income taxes were not significant. The provision for income taxes in the accompanying consolidated statements of comprehensive income differed from the statutory rate as follows:

(\$ in millions)	2016		2015		2014	
Income before income taxes	<u>\$1,470.7</u>		<u>\$1,911.6</u>		<u>\$1,907.4</u>	
Tax at statutory federal rate	\$ 514.8	35%	\$ 669.1	35%	\$ 667.6	35%
Tax effect of:						
Tax credits	(62.2)	(4)	(1.9)	0	(2.2)	0
Dividends received deduction	(22.6)	(2)	(19.8)	(1)	(18.3)	(1)
Exempt interest income	(15.7)	(1)	(17.8)	(1)	(13.8)	(1)
Non-taxable gain ¹	0	0	(13.8)	(1)	0	0
Tax-deductible dividends	(6.1)	0	(7.9)	0	(6.5)	0
State income taxes, net of federal taxes	6.6	0	2.3	0	0	0
Other items, net	(1.3)	0	0.9	0	(0.4)	0
Total income tax provision	<u>\$ 413.5 28%</u>		<u>\$ 611.1 32%</u>		<u>\$ 626.4 33%</u>	

¹Represents the tax effect of holding period gains on the 5% interest in ARX we owned prior to acquisition of a controlling interest on April 1, 2015.

The decrease in the effective tax rate during the year reflects \$58.7 million of federal tax benefits resulting from our investments in two federal renewable energy tax credit funds. All of the expected tax benefits from these investments were recorded in our income tax provision during the year.

Deferred income taxes reflect the effect for financial statement reporting purposes of temporary differences between the financial statement carrying amounts and the tax bases of assets and liabilities. At December 31, 2016 and 2015, the components of the net deferred tax asset (liability) were as follows:

(millions)	2016	2015
Federal deferred tax assets:		
Unearned premiums reserve	\$ 515.6	\$ 453.3
Investment basis differences	31.3	40.5
Non-deductible accruals	259.9	231.4
Loss and loss adjustment expense reserves	76.5	75.3
Hedges on forecasted transactions	5.1	4.4
Other	8.9	9.6
Federal deferred tax liabilities:		
Net unrealized gains on securities	(507.2)	(436.7)
Deferred acquisition costs	(227.9)	(197.4)
Property and equipment	(120.2)	(110.7)
Prepaid expenses	(9.2)	(11.9)
Intangible assets-ARX acquisition	(145.3)	(166.4)
Deferred gain on extinguishment of debt	(1.5)	(2.2)
Other	(7.7)	(7.0)
Net federal deferred tax liability	(121.7)	(117.8)
Net state deferred tax asset	10.4	8.5
Net deferred tax liability	<u>\$(111.3)</u>	<u>\$(109.3)</u>

Although realization of the deferred tax assets is not assured, management believes that it is more likely than not that the deferred tax assets will be realized based on our expectation that we will be able to fully utilize the deductions that are ultimately recognized for tax purposes and, therefore, no valuation allowance was needed at December 31, 2016 or 2015.

At December 31, 2016 and 2015, we had \$41.2 million and \$25.1 million, respectively, of net taxes payable (included in other liabilities on the balance sheet).

The Progressive Corporation and its wholly-owned subsidiaries file a consolidated income tax return. This group has been a participant in the Compliance Assurance Program (CAP) since 2007. Under CAP, the Internal Revenue Service (IRS)

begins its examination process for the tax year before the tax return is filed, by examining significant transactions and events as they occur. The goal of the CAP program is to expedite the exam process and to reduce the level of uncertainty regarding a taxpayer's tax filing positions.

All federal income tax years prior to 2013 are closed to examination for both Progressive and ARX. The IRS exams for 2013-2015 for Progressive have been completed. We consider these years to be effectively settled. The 2016 tax year remains open.

ARX and its wholly owned subsidiaries file their own consolidated income tax return since we own less than 80% of their outstanding stock. This group was last examined by the IRS for the 2011 and 2012 tax years, which we consider to be effectively settled. The 2013-2016 tax years remain open to examination.

The statute of limitations for state income tax purposes generally remains open for three to four years from the return filing date, depending upon the jurisdiction. There has been no significant state income tax audit activity.

We recognize interest and penalties, if any, as a component of income tax expense. For the year ended December 31, 2016, less than \$0.1 million of interest and penalties expense has been recorded in the tax provision. For the year ended December 31, 2015, \$0.1 million of interest and penalties expense has been recorded in the tax provision. We have not recorded any unrecognized tax benefits, or any related interest and penalties, as of December 31, 2016 and 2015.

6. LOSS AND LOSS ADJUSTMENT EXPENSE RESERVES

We write personal and commercial auto insurance, residential property insurance, and other specialty property-casualty insurance and related services throughout the United States. As a property-casualty insurance company, we could be exposed to hurricanes or other catastrophes. To help mitigate this risk, we maintain catastrophic reinsurance coverage on our Property business. Although the occurrence of a major catastrophe could have a significant effect on our monthly or quarterly results, we believe that, based on historical experience, such an event would not be so material as to disrupt the overall normal operations of Progressive. We are unable to predict the frequency or severity of any such events that may occur in the near term or thereafter.

As we are primarily an insurer of motor vehicles and residential property, we have limited exposure to environmental, asbestos, and general liability claims. We have established reserves for such exposures, in amounts that we believe to be adequate based on information currently known. These claims are not expected to have a material effect on our liquidity, financial condition, cash flows, or results of operations.

Loss and Loss Adjustment Expense Reserves

Loss and loss adjustment expense (LAE) reserves represent our best estimate of our ultimate liability for losses and LAE relating to events that occurred prior to the end of any given accounting period but have not yet been paid. For our vehicle businesses, which represent about 95% of our total carried reserves, Progressive's actuarial staff reviews over 400 subsets of business data, which are at a combined state, product, and line coverage level (the "products"), to calculate the needed loss and LAE reserves. We begin our review of a set of data by producing multiple estimates of needed reserves, using both paid and incurred data, to determine if a reserve change is required. In the event of a wide variation among results generated by the different projections, our actuarial group will further analyze the data using additional quantitative analysis. Each review develops a point estimate for a relatively small subset of the business, which allows us to establish meaningful reserve levels for that subset. We believe our comprehensive process of reviewing at a subsegment level provides us more meaningful estimates of our aggregate loss reserves.

The actuarial staff completes separate projections of needed case and incurred but not recorded (IBNR) reserves. Since a large majority of the parties involved in an accident report their claims within a short time period after the occurrence, we do not carry a significant amount of IBNR reserves for older accident years. Based on the methodology we use to estimate case reserves for our vehicle businesses, we do not have expected development on reported claims included in our IBNR reserves. We do, however, include anticipated salvage and subrogation recoveries in our IBNR reserves, which could result in negative carried IBNR reserves, primarily in our physical damage reserves.

Assumptions regarding needed reserve levels made by the actuarial staff take into consideration influences on available historical data that reduce the predictiveness of our projected future loss costs. Internal considerations that are process-related, which generally result from changes in our claims organization's activities, include claim closure rates, the number of claims that are closed without payment, and the level of the claims representatives' estimates of the needed case reserve for each claim. These changes and their effect on the historical data are studied at the state level versus on a larger, less indicative, countrywide basis. External items considered include the litigation atmosphere, state-by-state changes in medical costs, and the availability of services to resolve claims. These also are better understood at the state level versus at a more macro, countrywide level.

Similar to our vehicle businesses, our actuarial staff analyzes loss and LAE property data on an accident period basis. Many of the methodologies and key parameters reviewed are similar. Unlike our vehicle businesses, primarily due to the low levels of reserves, data is reviewed at a macro level and a range of reserves are generated to determine a reasonable range. In addition, for our Property business, since claims adjusters primarily establish the case reserves, the actuarial staff includes expected development on case reserves as a component of the overall IBNR reserves.

Activity in the loss and loss adjustment expense reserves is summarized as follows:

(millions)	2016	2015	2014
Balance at January 1	\$10,039.0	\$ 8,857.4	\$ 8,479.7
Less reinsurance recoverables on unpaid losses	1,442.7	1,185.9	1,045.9
Net balance at January 1	8,596.3	7,671.5	7,433.8
Net loss and loss adjustment reserves (disposed) acquired ¹	(2.5)	222.4	0
Total beginning reserves	8,593.8	7,893.9	7,433.8
Incurred related to:			
Current year	16,967.1	14,657.1	13,330.3
Prior years	(87.5)	(315.1)	(24.1)
Total incurred	16,879.6	14,342.0	13,306.2
Paid related to:			
Current year	11,149.0	9,577.3	8,831.5
Prior years	4,757.4	4,062.3	4,237.0
Total paid	15,906.4	13,639.6	13,068.5
Net balance at December 31	9,567.0	8,596.3	7,671.5
Plus reinsurance recoverables on unpaid losses	1,801.0	1,442.7	1,185.9
Balance at December 31	\$11,368.0	\$10,039.0	\$ 8,857.4

¹During 2016, \$2.5 million net reserves were disposed by ARX in the exchange transaction (see Note 16 – Goodwill and Intangible Assets for further discussion). During 2015, \$222.4 million net reserves were acquired in ARX acquisition.

We experienced favorable reserve development of \$87.5 million in 2016, \$315.1 million in 2015 and \$24.1 million in 2014, respectively, which is reflected as "Incurred related to prior years" in the table above.

2016

- Approximately \$56 million of the favorable prior year reserve development was attributable to accident year 2015, and approximately \$51 million of favorable development was attributable to accident years 2013 and prior. This favorable development was partially offset by \$19 million of unfavorable development attributable to accident year 2014.
- Our Personal Lines and Property businesses incurred \$54 million and \$52 million, respectively, of favorable loss and LAE reserve development, partially offset by the unfavorable loss and LAE development in Commercial Lines. In our Property business both the severity and frequency of late reported claims was less than anticipated.
- Our personal auto product developed favorably \$40 million, almost evenly split between Direct and Agency.
- Our personal auto business incurred favorable case development primarily in bodily injury due to a lower than anticipated severity.

- Our personal auto and Commercial Lines businesses incurred unfavorable IBNR loss reserve development, primarily due to a higher severity and frequency of late reported claims than anticipated for accident year 2015, due in part to storms in late December 2015, resulting in a greater number of claims being reported in January 2016 than anticipated.
- In addition, our Commercial Lines business experienced unfavorable case reserve development for accident year 2014 primarily due to a higher severity than anticipated on our largest limits, while case reserve development for accident years 2015 and 2013 and prior was favorable.

2015

- Approximately \$239 million of the favorable prior year reserve development was primarily attributable to accident year 2014.
- Favorable reserve development occurred in all segments; our combined Agency auto business and Direct auto business experienced approximately \$217 million of total development, with the remainder split between our Commercial Lines and Property businesses.
- In our personal auto and Commercial Lines businesses, we incurred favorable case loss reserve development primarily in bodily injury and uninsured motorist bodily injury coverages, due to lower than anticipated severity.
- Our Property business development was favorable due to lower than anticipated severity and frequency across all products, primarily in accident years 2014 and 2013.

2014

- Approximately \$25 million of the favorable prior year reserve development was primarily attributable to accident year 2010.
- Favorable reserve development in our Commercial Lines business of \$49 million was partially offset by unfavorable development in our Agency auto business of \$24 million. Our Direct auto business experienced slight favorable development.
- The favorable reserve development in our Commercial Lines business was primarily related to favorable case reserve development on our high limit policies.
- In Agency auto, the unfavorable development was primarily attributable to personal injury protection loss reserves and adjusting and other LAE reserves.

Incurred and Paid Claims Development by Accident Year

The tables below present our incurred and paid claims development by accident year for the last five years, which generally represents the number of years for which claims incurred typically remain outstanding. The tables below include inception-to-date information for companies acquired and wholly exclude companies disposed of, rather than including information from the date of acquisition, or until the date of disposition. We believe that the most meaningful presentation of claims development is through the retrospective approach by presenting all relevant historical information for all periods presented.

We have elected to present our incurred and paid claims development consistent with our GAAP reportable segments (see *Note 10 – Segment Information* for a discussion of our segment reporting), with a further disaggregation of our Personal Lines and Commercial Lines claims development between liability and physical damage, since the loss patterns are significantly different between them. The other business primarily includes reserves for the business written in Australia and for our run-off products, which are not considered material, and, therefore, we are not including separate claims development tables.

The following tables show incurred and paid claims development, net of reinsurance, by accident year. Only the most recent year is audited; all prior years are considered required supplementary information and, therefore, are unaudited. Expected development on our case reserves is excluded from the IBNR reserves on our vehicle businesses, as discussed above. For the Property business, the IBNR reserves include expected case development based on the methodology used in establishing the case reserves for that segment. The cumulative number of incurred claims are based on accident coverages (e.g., bodily injury, collision, comprehensive, personal injury protection, property damage) related to opened claims. Coverage counts related to claims closed without payment are excluded from the cumulative number of incurred claims.

Personal Lines – Agency – Liability

(\$ in millions)

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance						As of December 31, 2016	
Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2012 ¹	2013 ¹	2014 ¹	2015 ¹	2016		
2012	\$3,372.5	\$3,375.9	\$3,385.5	\$3,395.0	\$ 3,352.4	\$ 0.1	691,743
2013		3,506.0	3,520.9	3,518.2	3,528.0	53.9	696,614
2014			3,702.1	3,627.7	3,633.2	57.3	701,611
2015				3,774.9	3,773.8	142.1	702,917
2016					4,082.9	555.6	724,842
				Total	\$18,370.3		

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance					
Accident Year	For the years ended December 31,				
	2012 ¹	2013 ¹	2014 ¹	2015 ¹	2016
2012	\$1,673.7	\$2,690.0	\$3,070.2	\$3,238.2	\$ 3,308.4
2013		1,684.0	2,794.1	3,173.1	3,362.9
2014			1,809.0	2,868.1	3,284.5
2015				1,793.1	2,976.0
2016					1,941.6
				Total	\$14,873.4
				All outstanding liabilities before 2012, net of reinsurance	59.0
				Liabilities for claims and claim adjustment expenses, net of reinsurance	\$ 3,555.9

¹Required supplementary information (unaudited)

Personal Lines – Agency – Physical Damage

(\$ in millions)

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance						As of December 31, 2016	
Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2012 ¹	2013 ¹	2014 ¹	2015 ¹	2016		
2012	\$1,948.7	\$1,954.5	\$1,956.6	\$1,956.0	\$ 1,958.0	\$ 0	1,302,848
2013		2,014.0	2,001.4	2,000.1	1,999.4	(2.4)	1,347,820
2014			2,107.5	2,090.3	2,089.9	(2.0)	1,374,623
2015				2,136.8	2,137.2	(4.6)	1,336,089
2016					2,423.4	(87.4)	1,387,512
				Total	\$10,607.9		

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance					
Accident Year	For the years ended December 31,				
	2012 ¹	2013 ¹	2014 ¹	2015 ¹	2016
2012	\$1,903.9	\$1,958.4	\$1,958.1	\$1,957.9	\$ 1,957.1
2013		1,952.7	2,003.9	2,002.0	2,001.3
2014			2,078.8	2,091.6	2,090.6
2015				2,106.2	2,138.1
2016					2,391.0
				Total	\$10,578.1
				All outstanding liabilities before 2012, net of reinsurance	0.3
				Liabilities for claims and claim adjustment expenses, net of reinsurance	\$ 30.1

¹Required supplementary information (unaudited)

Personal Lines – Direct – Liability

(\$ in millions)

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance						As of December 31, 2016	
Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2012 ¹	2013 ¹	2014 ¹	2015 ¹	2016		
2012	\$2,507.4	\$2,469.1	\$2,480.0	\$2,488.2	\$ 2,471.6	\$ (0.1)	526,665
2013		2,619.4	2,621.8	2,615.8	2,649.8	40.9	550,135
2014			2,946.8	2,887.4	2,898.1	44.0	592,017
2015				3,330.5	3,328.3	122.4	656,712
2016					3,819.0	488.9	722,585
				Total	\$15,166.8		

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance						As of December 31, 2016	
Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2012 ¹	2013 ¹	2014 ¹	2015 ¹	2016		
2012	\$1,221.9	\$1,972.4	\$2,264.4	\$2,385.0	\$ 2,438.3		
2013		1,252.0	2,085.1	2,375.5	2,521.3		
2014			1,413.0	2,278.0	2,624.2		
2015				1,545.2	2,615.0		
2016					1,780.6		
				Total	\$11,979.4		
				All outstanding liabilities before 2012, net of reinsurance	31.7		
				Liabilities for claims and claim adjustment expenses, net of reinsurance	\$ 3,219.1		

¹Required supplementary information (unaudited)

Personal Lines – Direct – Physical Damage

(\$ in millions)

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance						As of December 31, 2016	
Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2012 ¹	2013 ¹	2014 ¹	2015 ¹	2016		
2012	\$1,562.4	\$1,556.5	\$1,557.3	\$1,557.0	\$1,558.1	\$ 0	1,314,480
2013		1,653.7	1,635.6	1,634.6	1,633.4	(2.3)	1,367,281
2014			1,889.3	1,862.2	1,861.7	(2.2)	1,470,879
2015				2,110.7	2,097.7	(5.7)	1,539,503
2016					2,521.0	(115.0)	1,673,575
				Total	\$9,671.9		

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance						As of December 31, 2016	
Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2012 ¹	2013 ¹	2014 ¹	2015 ¹	2016		
2012	\$1,540.1	\$1,560.2	\$1,559.1	\$1,558.4	\$1,557.9		
2013		1,612.9	1,638.2	1,636.2	1,635.3		
2014			1,874.6	1,864.1	1,862.7		
2015				2,094.7	2,100.1		
2016					2,505.0		
				Total	\$9,661.0		
				All outstanding liabilities before 2012, net of reinsurance	0.3		
				Liabilities for claims and claim adjustment expenses, net of reinsurance	\$ 11.2		

¹Required supplementary information (unaudited)

Commercial Lines – Liability

(\$ in millions)

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance						As of December 31, 2016	
Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2012 ¹	2013 ¹	2014 ¹	2015 ¹	2016		
2012	\$800.1	\$827.4	\$810.7	\$807.8	\$ 794.8	\$ 0	78,425
2013		864.2	864.6	865.4	865.0	23.3	78,090
2014			822.5	795.4	820.3	22.6	74,675
2015				897.6	911.1	51.0	77,263
2016					1,185.8	168.4	89,830
				Total	\$4,577.0		

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance					
Accident Year	For the years ended December 31,				
	2012 ¹	2013 ¹	2014 ¹	2015 ¹	2016
2012	\$228.6	\$465.4	\$621.5	\$715.8	\$ 759.9
2013		233.3	509.4	659.1	752.5
2014			234.0	438.7	610.0
2015				238.4	501.5
2016					298.6
				Total	\$2,922.5
				All outstanding liabilities before 2012, net of reinsurance	20.8
				Liabilities for claims and claim adjustment expenses, net of reinsurance	\$1,675.3

¹Required supplementary information (unaudited)

Commercial Lines – Physical Damage

(\$ in millions)

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance						As of December 31, 2016	
Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2012 ¹	2013 ¹	2014 ¹	2015 ¹	2016		
2012	\$266.6	\$267.7	\$268.4	\$267.6	\$ 267.8	\$ 0	65,804
2013		256.2	254.2	254.5	253.7	(0.5)	62,654
2014			240.3	239.7	238.6	(0.1)	59,616
2015				274.4	274.1	(0.8)	62,609
2016					379.6	(4.6)	74,810
				Total	\$1,413.8		

Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance					
Accident Year	For the years ended December 31,				
	2012 ¹	2013 ¹	2014 ¹	2015 ¹	2016
2012	\$247.6	\$266.9	\$267.3	\$267.8	\$ 267.6
2013		239.4	253.1	253.9	253.7
2014			224.6	238.3	237.7
2015				248.5	271.9
2016					336.7
				Total	\$1,367.6
				All outstanding liabilities before 2012, net of reinsurance	0.4
				Liabilities for claims and claim adjustment expenses, net of reinsurance	\$ 46.6

¹Required supplementary information (unaudited)

Property Business

(\$ in millions)

Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance						As of December 31, 2016	
Accident Year	For the years ended December 31,					Total of IBNR Liabilities Plus Expected Development on Reported Claims	Cumulative Number of Incurred Claim Counts
	2012 ¹	2013 ¹	2014 ¹	2015 ¹	2016		
2012	\$296.4	\$273.4	\$260.8	\$252.9	\$ 253.5	\$ 1.5	33,236
2013		307.3	283.3	254.3	254.1	3.3	30,578
2014			415.5	389.1	379.7	9.5	40,957
2015				460.0	416.5	31.7	41,788
2016					568.6	98.1	50,159
				Total	<u>\$1,872.4</u>		
Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance							
Accident Year	For the years ended December 31,						
	2012 ¹	2013 ¹	2014 ¹	2015 ¹	2016		
2012	\$178.0	\$229.7	\$242.4	\$248.4	\$ 250.2		
2013		185.1	234.2	244.9	249.5		
2014			269.2	351.5	365.9		
2015				280.3	372.8		
2016					415.2		
				Total	\$1,653.6		
				All outstanding liabilities before 2012, net of reinsurance	5.9		
				Liabilities for claims and claim adjustment expenses, net of reinsurance	<u>\$ 224.7</u>		

¹Required supplementary information (unaudited)

Subsequent to the date of acquisition, Progressive and ASI have worked together to refine the methodologies used by ASI in establishing their loss and LAE reserves. Therefore, past experience may not be indicative of future performance.

The following table reconciles the net incurred and paid claims development tables to the liability for claims and claim adjustment expenses:

(millions)	2016
Net outstanding liabilities	
Personal Lines	
Agency, Liability	\$ 3,555.9
Agency, Physical Damage	30.1
Direct, Liability	3,219.1
Direct, Physical Damage	11.2
Commercial Lines	
Liability	1,675.3
Physical Damage	46.6
Property	224.7
Other business	37.1
<hr/>	
Liabilities for unpaid claims and claim adjustment expenses, net of reinsurance	8,800.0
<hr/>	
Reinsurance recoverable on unpaid claims	
Personal Lines	
Agency, Liability	724.5
Agency, Physical Damage	0
Direct, Liability	724.3
Direct, Physical Damage	0
Commercial Lines	
Liability	59.5
Physical Damage	0
Property	132.7
Other business	154.9
<hr/>	
Total reinsurance recoverable on unpaid claims	\$ 1,795.9
<hr/>	
Unallocated claims adjustment expense related to:	
Liabilities for unpaid claims and claim adjustment expenses, net of reinsurance	767.0
Reinsurance recoverable on unpaid claims	5.1
<hr/>	
Total gross liability for unpaid claims and claim adjustment expense	\$11,368.0

The following table shows the average historical claims duration as of December 31, 2016:

(Required Supplementary Information – Unaudited)

Average Annual Percentage Payout of Incurred Claims by Age, Net of Reinsurance	Years				
	1	2	3	4	5
Personal Lines					
Agency, Liability	48.5%	30.6%	11.2%	5.2%	2.1%
Agency, Physical Damage	98.3%	1.8%	(0.1)%	—%	—%
Direct, Liability	47.6%	31.0%	11.6%	5.2%	2.2%
Direct, Physical Damage	99.5%	0.6%	(0.1)%	(0.1)%	—%
Commercial Lines					
Liability	26.9%	28.9%	19.2%	11.3%	5.5%
Physical Damage	91.7%	6.8%	0.1%	0.1%	(0.1)%
Property	70.9%	21.1%	4.3%	2.1%	0.7%

7. REINSURANCE

The effect of reinsurance on premiums written and earned for the years ended December 31, was as follows:

(millions)	2016		2015		2014	
	Written	Earned	Written	Earned	Written	Earned
Direct premiums	\$23,941.9	\$23,111.2	\$21,086.5	\$20,454.1	\$18,914.8	\$18,648.4
Ceded premiums:						
Regulated plans	(439.4)	(425.1)	(358.0)	(362.6)	(251.9)	(241.4)
Non-Regulated plans	(149.0)	(212.1)	(164.5)	(192.4)	(8.3)	(8.5)
Total ceded premiums	(588.4)	(637.2)	(522.5)	(555.0)	(260.2)	(249.9)
Net premiums	\$23,353.5	\$22,474.0	\$20,564.0	\$19,899.1	\$18,654.6	\$18,398.5

The Regulated plans primarily include the following:

- Federal reinsurance plan
 - National Flood Insurance Program (NFIP)
- State-provided reinsurance facilities
 - Michigan Catastrophic Claims Association (MCCA)
 - North Carolina Reinsurance Facility (NCRF)
 - Florida Hurricane Catastrophe Fund (FHCF)
- State-mandated involuntary plans
 - Commercial Automobile Insurance Procedures/Plans (CAIP)

The Non-Regulated plans primarily include amounts ceded on Property business under catastrophic and quota share reinsurance agreements. During 2016, ARX terminated its quota share reinsurance agreement.

During 2016, ceded written premiums increased 13%, partially reflecting reinsurance coverage on a pilot program we launched during the year to provide commercial auto insurance coverage to an Uber Technologies subsidiary in Texas. We are reinsuring this coverage to minimize our exposure. In addition, we recognized a full year of ceded premiums on the catastrophe reinsurance held by ASI, compared to nine months in 2015, which was partially offset by ASI's termination of a quota share reinsurance contract.

Losses and loss adjustment expenses were net of reinsurance ceded of \$764.4 million in 2016, \$457.3 million in 2015, and \$322.7 million in 2014. The increase in losses and loss adjustment expenses ceded in 2016, compared to the prior years, is primarily driven by the impact of catastrophic flooding events on the business serviced by ARX, as part of its participation in NFIP.

Our prepaid reinsurance premiums and reinsurance recoverables were comprised of the following at December 31:

(\$ in millions)	Prepaid Reinsurance Premiums				Reinsurance Recoverables			
	2016		2015		2016		2015	
Regulated plans:								
MCCA	\$ 36.5	21%	\$ 31.4	16%	\$1,452.7	77%	\$1,217.6	82%
CAIP	40.2	24	37.1	19	170.6	9	134.0	9
NCRF	27.5	16	25.6	13	67.0	4	56.7	4
NFIP	49.1	29	45.0	22	78.5	4	10.4	1
Other	0.1	0	0	0	3.5	0	2.8	0
Total Regulated plans	153.4	90	139.1	70	1,772.3	94	1,421.5	96
Non-Regulated plans:								
Property	3.2	2	52.6	26	62.9	3	35.5	2
Other	13.9	8	7.6	4	49.6	3	31.8	2
Total Non-Regulated plans	17.1	10	60.2	30	112.5	6	67.3	4
Total	\$170.5	100%	\$199.3	100%	\$1,884.8	100%	\$1,488.8	100%

The year-over-year decrease in the prepaid reinsurance premiums in the Property business primarily reflects ARX's termination of its quota share reinsurance agreement and the disposition of an insurance subsidiary that wrote commercial property insurance that was reinsured.

The increase in reinsurance recoverables during 2016 reflects both new claims and development under the MCCA program, along with recoverables under the NFIP resulting from the severe flooding in Louisiana and under reinsurance provided in connection with a catastrophe bond transaction.

Reinsurance contracts do not relieve us from our obligations to policyholders. Failure of reinsurers to honor their obligations could result in losses to us. Our exposure to losses from the failure of Regulated plans is minimal, since these plans are funded by the federal government or by mechanisms supported by the insurance companies in the applicable state. We evaluate the financial condition of our other reinsurers and monitor concentrations of credit risk to minimize our exposure to significant losses from reinsurer insolvencies.

8. STATUTORY FINANCIAL INFORMATION

Consolidated statutory surplus was \$8,560.0 million and \$7,575.5 million at December 31, 2016 and 2015, respectively. Statutory net income was \$1,022.3 million, \$1,333.1 million, and \$1,289.5 million for the years ended December 31, 2016, 2015, and 2014, respectively.

At December 31, 2016, \$722.7 million of consolidated statutory surplus represented net admitted assets of our insurance subsidiaries and affiliates that are required to meet minimum statutory surplus requirements in such entities' states of domicile. The companies may be licensed in states other than their states of domicile, which may have higher minimum statutory surplus requirements. Generally, the net admitted assets of insurance companies that, subject to other applicable insurance laws and regulations, are available for transfer to the parent company cannot include the net admitted assets required to meet the minimum statutory surplus requirements of the states where the companies are licensed.

During 2016, the insurance subsidiaries paid aggregate cash dividends of \$389.5 million to their parent company. Based on the dividend laws currently in effect, the insurance subsidiaries could pay aggregate dividends of \$1,161.5 million in 2017 without prior approval from regulatory authorities, provided the dividend payments are not made within 12 months of previous dividends paid by the applicable subsidiary.

9. EMPLOYEE BENEFIT PLANS

Except to the extent specifically included, references in this *Note 9* to Progressive refer to The Progressive Corporation and its subsidiaries other than ARX and its subsidiaries, and references to ARX refer to ARX and its subsidiaries. ARX maintains employee benefit plans that are separate from the plans that cover employees of The Progressive Corporation's other subsidiaries.

Retirement Plans Progressive has a defined contribution pension plan (401(k) Plan) that covers most of its employees who are United States residents and have been employed with the company for at least 30 days. Under Progressive's 401(k) Plan, we match up to a maximum of 6% of an employee's eligible compensation contributed to the plan. Employee and company matching contributions are invested, at the direction of the employee, in a number of investment options available under the plan, including various mutual funds, a self-directed brokerage option, and a Progressive common stock fund. Progressive's common stock fund is an employee stock ownership program (ESOP) within the 401(k) Plan. At December 31, 2016, the ESOP held 25.2 million of our common shares, all of which are included in shares outstanding. Dividends on these shares are reinvested in common shares or paid out in cash, at the election of the participant, and the related tax benefit is recorded as part of our tax provision.

Matching contributions made by Progressive for its 401(k) Plan were \$85.6 million, \$78.4 million, and \$74.8 million for the years ended December 31, 2016, 2015, and 2014, respectively.

ARX employees are covered by separate qualified defined contribution plans. Matching contributions of up to 6% of each employee's eligible compensation are made each pay period. Contributions to these plans for the year ended December 31, 2016 and the nine months ended December 31, 2015 (the period of time subsequent to The Progressive Corporation acquiring a controlling interest in ARX) were \$1.2 million and \$0.7 million, respectively.

Postemployment Benefits Progressive provides various postemployment benefits to former or inactive employees who meet eligibility requirements, and to their beneficiaries and covered dependents. Postemployment benefits include salary continuation and disability-related benefits, including workers' compensation and, if elected, continuation of health-care benefits for specified limited periods. The liability for these benefits was \$21.7 million and \$22.6 million at December 31, 2016 and 2015, respectively.

Postretirement Benefits Progressive provides postretirement health and life insurance benefits to all employees who met age and length of service requirements at December 31, 1988. At December 31, 2016, there are approximately 100 people who are eligible for these postretirement benefits. Progressive's funding policy for these benefits is to contribute annually, to a 501(c)(9) trust, the maximum amount that can be deducted for federal income tax purposes.

Incentive Compensation Plans – Employees Progressive's incentive compensation programs include both non-equity incentive plans (cash) and equity incentive plans. Progressive's cash incentive compensation includes a cash bonus program for a limited number of senior executives and Progressive's Gainsharing program for other employees; the structures of these programs are similar in nature. Progressive's equity incentive compensation plans provide for the granting of restricted stock awards and restricted stock unit awards (collectively, "restricted equity awards") to key members of management. Since 2010, Progressive has only issued restricted stock units as the form of equity compensation.

ARX provides cash bonuses to its employees, both annual and periodic, and has an equity compensation plan under which it has granted stock option awards, exercisable for shares of ARX common stock, to certain of its key employees. These stock option awards include both nonqualified and incentive stock options; all such stock options are subject to the put and call provisions of the ARX stockholders' agreement (See *Note 15 – Redeemable Noncontrolling Interest*). As a result of these provisions, and the determination that the ultimate settlement of these awards would be in cash, the ARX stock options are treated as liability awards for accounting purposes.

The amounts charged to income for Progressive and ARX incentive compensation plans for the years ended December 31, were:

(millions)	2016		2015		2014	
	Pretax	After Tax	Pretax	After Tax	Pretax	After Tax
Non-equity incentive plans – cash	\$386.8	\$251.4	\$337.7	\$219.5	\$266.2	\$173.0
Equity incentive plans:						
Equity awards	80.9	52.6	64.5	41.9	51.4	33.4
Liability awards	4.3	2.8	1.7	1.1	0	0

The increase in expense for the equity awards during 2016 primarily reflects an increase in management's expectation of the percentage of certain performance-based awards that will ultimately vest (discussed below). For the liability awards, the increase reflects both revisions to the Black-Scholes values during the year, as well as recognizing 12 months of expense in 2016, compared to 9 months in 2015 (the period in which Progressive had a controlling financial interest in ARX).

Progressive's 2003 Incentive Plan has expired, and no new awards may be made under this plan; all awards granted prior to the plan's expiration have vested, been forfeited, or expired, prior to December 31, 2015. Progressive's 2010 Equity Incentive Plan and 2015 Equity Incentive Plan, which provide for the granting of equity-based compensation to officers and other key employees, originally authorized awards for up to 18.0 million shares and up to 13.0 million shares, respectively.

The restricted equity awards are issued as either time-based or performance-based awards. All restricted stock units are settled at or after vesting in Progressive common shares from existing treasury shares on a one-to-one basis. The time-based awards vest in equal installments upon the lapse of specified periods of time, typically three, four, and five years.

The performance-based awards were granted to approximately 45 Progressive executives and senior managers in 2016 in addition to their time-based awards, to provide additional incentive to achieve pre-established profitability and growth targets, relative investment performance, or specific growth measures.

Vesting of performance-based awards is contingent upon the achievement of predetermined performance goals within specified time periods. The targets for the performance-based awards, as well as the number of units that ultimately may vest, vary by grant. All performance-based awards include a specified number of units that will vest if performance meets a

specified target and minimum performance goals. If at least the minimum performance goals are achieved, the range at which an award can vest is determined by the type of measurement goals included in the award, as follows:

Performance Measurement	Year(s) of Grant	Vesting range (as a percentage of target)
Growth of our personal and commercial auto businesses, compared to market	2013-2016	0-250%
	2012	0-200%
Investment results relative to peer group	2012-2016	0-200%
Growth in percentage of auto policies bundled with other specified types of policies (granted to two senior executive officers)	2015	0% or 100-200%
Unit growth in a particular customer segment (granted to nine senior level employees)	2016	85-150%

Generally, time-based and performance-based equity awards are expensed pro rata over their respective vesting periods based on the market value of the awards at the time of grant. Performance-based equity awards that contain variable vesting criteria are expensed based on management's expectation of the percentage of the award, if any, that will ultimately vest. These estimates can change periodically throughout the measurement period.

A summary of all employee restricted equity award activity during the years ended December 31, follows:

Restricted Equity Awards	2016		2015		2014	
	Number of Shares ¹	Weighted Average Grant Date Fair Value	Number of Shares ¹	Weighted Average Grant Date Fair Value	Number of Shares ¹	Weighted Average Grant Date Fair Value
Beginning of year	7,725,227	\$23.37	9,051,564	\$21.27	9,918,575	\$20.13
Add (deduct):						
Granted ²	1,870,660	31.54	2,489,976	25.20	3,542,984	19.32
Vested	(2,422,700)	21.50	(3,682,644)	19.53	(4,228,673)	16.99
Forfeited	(221,814)	24.64	(133,669)	21.63	(181,322)	20.75
End of year ^{3,4}	6,951,373	\$26.18	7,725,227	\$23.37	9,051,564	\$21.27

¹Includes restricted stock units; 2015 and 2014 also include restricted stock. Upon vesting, all units will be converted on a one-for-one basis into Progressive common shares funded from existing treasury shares. All performance-based awards are included at their target amounts.

²We reinvest dividend equivalents on restricted stock units. For 2016, 2015, and 2014, the number of units "granted" shown in the table above includes 165,045, 196,947, and 538,749 of dividend equivalent units, respectively, at a weighted average grant date fair value of \$0, since the dividends were factored into the grant date fair value of the original grant.

³At December 31, 2016, the number of shares included 1,892,924 performance-based units at their target amounts. We expect 3,186,065 units to vest based upon our current estimates of the likelihood of achieving the pre-determined performance goals applicable to each award.

⁴At December 31, 2016, the total unrecognized compensation cost related to unvested equity awards was \$86.4 million, which includes performance-based awards at their currently estimated vesting value. This compensation expense will be recognized into the income statement over the weighted average vesting period of 2.1 years.

The aggregate fair value of the restricted equity awards that vested during the years ended December 31, 2016, 2015, and 2014, was \$77.0 million, \$105.4 million, and \$109.6 million, respectively, based on the actual stock price on the applicable vesting date.

As a result of the put and call rights described in *Note 15 – Redeemable Noncontrolling Interest*, all outstanding stock options awarded to ARX employees prior to April 1, 2015, are treated as liability awards for accounting purposes; however, the awards maintain the specific features per the original award agreements. The value of each option is based upon our good faith estimate of the fair market value as of the end of the reporting period and the pro-rata expense is recognized.

A summary of all ARX employee stock option activity since acquisition, follows:

	2016		2015	
	Number of Shares	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
Options Outstanding				
Beginning of year	24,995	\$526.46	NA	NA
At acquisition date 4/1/2015	NA	NA	26,000	\$513.72
Add (deduct):				
Exercised ¹	0	0	(1,005)	197.01
End of year	24,995	\$526.46	24,995	\$526.46
Exercisable, end of year	16,995	\$438.77	12,995	\$386.69

NA = Not Applicable

¹At the time of exercise in 2015, the value earned by the option holders was \$1.1 million.

	2016		2015	
	Number of Shares	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
Non-Vested Options Outstanding				
Beginning of year	12,000	\$677.81	NA	NA
At acquisition date 4/1/2015	NA	NA	14,800	\$675.55
Add (deduct):				
Vested	(4,000)	607.95	(2,800)	665.85
End of year ¹	8,000	\$712.74	12,000	\$677.81

NA = Not Applicable

¹At December 31, 2016 and 2015, the remaining unrecognized compensation cost related to unvested options was \$1.6 million and \$2.9 million, respectively, and the remaining weighted average vesting period on the unvested awards was 1.36 years and 1.72 years, respectively.

Incentive Compensation Plans – Directors Progressive's 2003 Directors Equity Incentive Plan, which provides for the granting of equity-based awards, including restricted stock awards, to non-employee directors, originally authorized awards for up to 1.4 million shares.

Beginning in 2016, The Progressive Corporation provided their non-employee directors an option as to their form of compensation for serving as members of the Board of Directors. The directors can elect either to only receive restricted stock awards or a combination of restricted stock awards and cash. Prior to 2016, The Progressive Corporation granted restricted stock awards as the sole form of compensation to non-employee directors.

The restricted stock awards are issued as time-based awards. The vesting period (i.e., requisite service period) is typically 11 months from the date of each grant. To the extent a director is newly appointed during the year, or a director's committee assignments change, the vesting period may be shorter, but always at least equal to six months, one day as required by the terms of the plan. Both the restricted stock awards and cash, if elected, are expensed pro rata over their respective vesting periods based on the market value of the awards at the time of grant.

A summary of all directors' restricted stock activity during the years ended December 31, follows:

	2016		2015		2014	
	Number of Shares	Weighted Average Grant Date Fair Value	Number of Shares	Weighted Average Grant Date Fair Value	Number of Shares	Weighted Average Grant Date Fair Value
Restricted Stock						
Beginning of year	89,427	\$27.23	81,579	\$25.45	93,254	\$26.19
Add (deduct):						
Granted	55,839	33.24	89,427	27.23	90,649	25.44
Vested	(89,427)	27.23	(81,579)	25.45	(93,254)	26.19
Forfeited	0	0	0	0	(9,070)	25.36
End of year	55,839	\$33.24	89,427	\$27.23	81,579	\$25.45

The aggregate fair value of the restricted stock vested, during the years ended December 31, 2016, 2015, and 2014, was \$3.0 million, \$2.2 million, and \$2.2 million, respectively, based on the actual stock price at time of vesting.

Deferred Compensation The Progressive Corporation Executive Deferred Compensation Plan (Deferral Plan) permits eligible Progressive executives to defer receipt of some or all of their annual bonuses and all of their annual equity awards. Deferred cash compensation is deemed invested in one or more investment funds, including Progressive common shares, offered under the Deferral Plan and elected by the participant. All Deferral Plan distributions attributable to deferred cash compensation will be paid in cash.

For all equity awards granted in or after March 2005, and deferred pursuant to the Deferral Plan, the deferred amounts are deemed invested in our common shares and are ineligible for transfer to other investment funds in the Deferral Plan; distributions of these deferred awards will be made in Progressive common shares. For all restricted stock awards granted prior to that date, the deferred amounts are eligible to be transferred to any of the investment funds in the Deferral Plan; distributions of these deferred awards will be made in cash. We reserved 11.1 million of our common shares for issuance under the Deferral Plan. An irrevocable grantor trust has been established to provide a source of funds to assist us in meeting our liabilities under the Deferral Plan.

The Deferral Plan Irrevocable Grantor Trust account held the following assets at December 31:

(millions)	2016	2015
Progressive common shares ¹	\$122.2	\$108.5
Other investment funds ²	136.9	124.8
Total	<u>\$259.1</u>	<u>\$233.3</u>

¹Included 4.7 million and 4.4 million common shares as of December 31, 2016 and 2015, respectively, to be distributed in common shares.

²Amount is included in other assets on the balance sheet.

10. SEGMENT INFORMATION

We write personal and commercial auto insurance, residential property insurance, and other specialty property-casualty insurance and related services. Our Personal Lines segment writes insurance for personal autos and recreational vehicles (our special lines products). The Personal Lines segment is comprised of both the Agency and Direct businesses. The Agency business includes business written by our network of more than 35,000 independent insurance agencies, including brokerages in New York and California, and strategic alliance business relationships (other insurance companies, financial institutions, and national agencies). The Direct business includes business written directly by us online, by phone, or on mobile devices. We operate our personal auto businesses throughout the United States; we sell personal auto physical damage and auto property damage liability insurance in Australia and recognized net premiums earned on our Australian business of \$20.2 million, \$15.9 million, and \$17.1 million, in 2016, 2015, and 2014, respectively.

Our Commercial Lines segment writes primary liability and physical damage insurance for automobiles and trucks owned and/or operated predominantly by small businesses in the business auto, for-hire transportation, contractor, for-hire specialty, tow, and for-hire livery markets. This segment operates in 49 states and is distributed through both the independent agency and direct channels.

Our Property segment writes residential property insurance for homeowners, other property owners, and renters primarily through the independent agency channel in 38 states and the District of Columbia as of December 31, 2016. Our Property business primarily consists of the operations of American Strategic Insurance (ASI) and other insurance subsidiaries. ASI also acts as a participant in the "Write Your Own" program for the National Flood Insurance Program and, as such, writes flood insurance in 40 states and the District of Columbia.

Our other indemnity businesses manage our run-off businesses.

Our service businesses provide insurance-related services, including processing CAIP business, and serving as an agent for homeowners, general liability, and workers' compensation insurance through our programs with ASI and unaffiliated insurance companies.

All segment revenues are generated from external customers and we do not have a reliance on any major customer. All intercompany transactions, including those between Progressive and ASI, are eliminated in consolidation.

We evaluate profitability based on pretax underwriting profit (loss) for the Personal Lines, Commercial Lines, and Property segments and for the other indemnity businesses. Pretax underwriting profit (loss) is calculated as net premiums earned plus fees and other revenues, less: (i) losses and loss adjustment expenses; (ii) policy acquisition costs; and (iii) other underwriting expenses. Service business pretax profit (loss) is the difference between service business revenues and service business expenses.

Expense allocations are based on certain assumptions and estimates primarily related to revenue and volume; stated segment operating results would change if different methods were applied. We do not allocate assets or income taxes to operating segments. In addition, we do not separately identify depreciation expense by segment, and such allocation would be impractical. Companywide depreciation expense was \$137.4 million in 2016, \$103.7 million in 2015, and \$97.1 million in 2014. The accounting policies of the operating segments are the same as those described in *Note 1 – Reporting and Accounting Policies*.

Following are the operating results for the years ended December 31:

(millions)	2016		2015		2014	
	Revenues	Pretax Profit (Loss)	Revenues	Pretax Profit (Loss)	Revenues	Pretax Profit (Loss)
Personal Lines						
Agency	\$ 9,791.7	\$ 492.8	\$ 9,108.6	\$ 713.2	\$ 9,087.0	\$ 683.0
Direct	9,396.5	412.2	8,185.9	403.4	7,474.0	423.4
Total Personal Lines ¹	19,188.2	905.0	17,294.5	1,116.6	16,561.0	1,106.4
Commercial Lines	2,421.3	155.2	1,995.9	318.3	1,837.5	315.8
Property ²	864.5	32.5	609.1	61.3	—	—
Other indemnity ³	0	(1.6)	(0.4)	(1.0)	0	(11.9)
Total underwriting operations	22,474.0	1,091.1	19,899.1	1,495.2	18,398.5	1,410.3
Fees and other revenues ⁴	332.5	NA	302.0	NA	309.1	NA
Service businesses	103.3	11.3	86.3	8.8	56.0	5.1
Investments ⁵	530.0	507.6	567.3	544.5	632.6	613.7
Gains (losses) on extinguishment of debt	1.6	1.6	(0.9)	(0.9)	(4.8)	(4.8)
Interest expense	NA	(140.9)	NA	(136.0)	NA	(116.9)
Consolidated total	\$23,441.4	\$1,470.7	\$20,853.8	\$1,911.6	\$19,391.4	\$1,907.4

NA = Not Applicable

¹Personal auto insurance accounted for 92% of the total Personal Lines segment net premiums earned in 2016, 2015, and 2014; insurance for our special lines products (e.g., motorcycles, ATVs, RVs, manufactured homes, watercraft, and snowmobiles) accounted for the balance of the Personal Lines net premiums earned.

²We began reporting our Property business as a segment on April 1, 2015, upon acquisition of a controlling interest in ARX; therefore, the year ended 2015 only includes results for nine months and is not comparable to results reported for 2016. During 2016 and 2015, pretax loss also includes \$62.1 million and \$46.8 million, respectively, of amortization expense predominately associated with the acquisition of a controlling interest in ARX. Although this expense is included in our Property segment, it is not reported in the consolidated results of ARX and, therefore, will not affect the value of the net income attributable to the noncontrolling interest.

³Our professional liability group recognized \$0.4 million of reinstatement premiums paid to our reinsurers pursuant to their reinsurance contracts during 2015. This premium reduction was reflected in our companywide total results.

⁴Pretax profit (loss) for fees and other revenues are allocated to operating segments.

⁵Revenues represent recurring investment income and total net realized gains (losses) on securities; pretax profit is net of investment expenses.

Our management uses underwriting margin and combined ratio as primary measures of underwriting profitability. Underwriting profitability is calculated by subtracting losses and loss adjustment expenses, policy acquisition costs, and other underwriting expenses from the total of net premiums earned and fees and other revenues. The underwriting margin is the pretax underwriting profit (loss) expressed as a percentage of net premiums earned (i.e., revenues from underwriting

operations). Combined ratio is the complement of the underwriting margin. Following are the underwriting margins/combined ratios for our underwriting operations for the years ended December 31:

	2016		2015		2014	
	Underwriting Margin	Combined Ratio	Underwriting Margin	Combined Ratio	Underwriting Margin	Combined Ratio
Personal Lines						
Agency	5.0%	95.0	7.8%	92.2	7.5%	92.5
Direct	4.4	95.6	4.9	95.1	5.7	94.3
Total Personal Lines	4.7	95.3	6.5	93.5	6.7	93.3
Commercial Lines	6.4	93.6	15.9	84.1	17.2	82.8
Property ¹	3.8	96.2	10.1	89.9	NA	NA
Other indemnity ²	NM	NM	NM	NM	NM	NM
Total underwriting operations	4.9	95.1	7.5	92.5	7.7	92.3

NA = Not Applicable; Property business written prior to April 2015 was negligible.

¹We began reporting our Property business as a segment on April 1, 2015, when we acquired a controlling interest in ARX; therefore, the year ended 2015 only includes results for nine months and is not comparable to results reported for 2016. Included in both 2016 and 2015 is 7.2 points and 7.7 points, respectively, of amortization expense predominately associated with the acquisition of a controlling interest in ARX.

²Underwriting margins/combined ratios are not meaningful (NM) for our other indemnity businesses due to the low level of premiums earned by, and the variability of loss costs in, such businesses.

11. OTHER COMPREHENSIVE INCOME (LOSS)

The components of other comprehensive income (loss), including reclassification adjustments by income statement line item, for the years ended December 31, were as follows:

(millions)	Components of Changes in Accumulated Other Comprehensive Income (after tax)						
	Pretax total accumulated other comprehensive income	Total tax (provision) benefit	After tax total accumulated other comprehensive income	Total net unrealized gains (losses) on securities	Net unrealized gains on forecasted transactions	Foreign currency translation adjustment	Loss attributable to NCI
Total at December 31, 2015	\$1,234.5	\$(434.1)	\$800.4	\$809.0	\$(8.2)	\$(1.5)	\$1.1
Other comprehensive income (loss) before reclassifications:							
Investment securities	320.5	(112.6)	207.9	207.9	0	0	0
Net non-credit related OTTI losses, adjusted for valuation changes	(0.1)	0.1	0	0	0	0	0
Forecasted transactions	0	0	0	0	0	0	0
Foreign currency translation adjustment	0.6	(0.2)	0.4	0	0	0.4	0
Loss attributable to noncontrolling interest	5.1	(1.9)	3.2	0	0	0	3.2
Total other comprehensive income (loss) before reclassifications	326.1	(114.6)	211.5	207.9	0	0.4	3.2
Less: Reclassification adjustment for amounts realized in net income by income statement line item:							
Net impairment losses recognized in earnings	(27.1)	9.5	(17.6)	(17.6)	0	0	0
Net realized gains (losses) on securities	146.3	(51.4)	94.9	94.9	0	0	0
Interest expense	1.9	(0.7)	1.2	0	1.2	0	0
Total reclassification adjustment for amounts realized in net income	121.1	(42.6)	78.5	77.3	1.2	0	0
Total other comprehensive income (loss)	205.0	(72.0)	133.0	130.6	(1.2)	0.4	3.2
Total at December 31, 2016	\$1,439.5	\$(506.1)	\$933.4	\$939.6	\$(9.4)	\$(1.1)	\$4.3

(millions)	Components of Changes in Accumulated Other Comprehensive Income (after tax)						
	Pretax total accumulated other comprehensive income	Total tax (provision) benefit	After tax total accumulated other comprehensive income	Total net unrealized gains (losses) on securities	Net unrealized gains on forecasted transactions	Foreign currency translation adjustment	Loss attributable to NCI
Total at December 31, 2014	\$1,574.0	\$(550.9)	\$1,023.1	\$1,021.9	\$ 1.5	\$(0.3)	\$ 0
Other comprehensive income (loss) before reclassifications:							
Investment securities	(198.7)	67.5	(131.2)	(131.2)	0	0	0
Net non-credit related OTTI losses, adjusted for valuation changes	0	0	0	0	0	0	0
Forecasted transactions	(12.9)	4.5	(8.4)	0	(8.4)	0	0
Foreign currency translation adjustment	(1.8)	0.6	(1.2)	0	0	(1.2)	0
Loss attributable to noncontrolling interest	1.6	(0.5)	1.1	0	0	0	1.1
Total other comprehensive income (loss) before reclassifications	(211.8)	72.1	(139.7)	(131.2)	(8.4)	(1.2)	1.1
Less: Reclassification adjustment for amounts realized in net income by income statement line item:							
Net impairment losses recognized in earnings	(23.8)	8.4	(15.4)	(15.4)	0	0	0
Net realized gains (losses) on securities	149.7	(52.5)	97.2	97.1	0.1	0	0
Interest expense	1.8	(0.6)	1.2	0	1.2	0	0
Total reclassification adjustment for amounts realized in net income	127.7	(44.7)	83.0	81.7	1.3	0	0
Total other comprehensive income (loss)	(339.5)	116.8	(222.7)	(212.9)	(9.7)	(1.2)	1.1
Total at December 31, 2015	\$1,234.5	\$(434.1)	\$ 800.4	\$ 809.0	\$(8.2)	\$(1.5)	\$1.1

(millions)	Components of Changes in Accumulated Other Comprehensive Income (after tax)						
	Pretax total accumulated other comprehensive income	Total tax (provision) benefit	After tax total accumulated other comprehensive income	Total net unrealized gains (losses) on securities	Net unrealized gains on forecasted transactions	Foreign currency translation adjustment	Loss attributable to NCI
Total at December 31, 2013	\$1,464.1	\$(512.4)	\$ 951.7	\$ 947.0	\$ 4.1	\$ 0.6	\$0
Other comprehensive income (loss) before reclassifications:							
Investment securities	362.1	(126.7)	235.4	235.4	0	0	0
Net non-credit related OTTI losses, adjusted for valuation changes	0	0	0	0	0	0	0
Forecasted transactions	(1.6)	0.6	(1.0)	0	(1.0)	0	0
Foreign currency translation adjustment	(1.3)	0.4	(0.9)	0	0	(0.9)	0
Loss attributable to noncontrolling interest	0	0	0	0	0	0	0
Total other comprehensive income (loss) before reclassifications	359.2	(125.7)	233.5	235.4	(1.0)	(0.9)	0
Less: Reclassification adjustment for amounts realized in net income by income statement line item:							
Net impairment losses recognized in earnings	(7.7)	2.7	(5.0)	(5.0)	0	0	0
Net realized gains (losses) on securities	255.0	(89.2)	165.8	165.5	0.3	0	0
Interest expense	2.0	(0.7)	1.3	0	1.3	0	0
Total reclassification adjustment for amounts realized in net income	249.3	(87.2)	162.1	160.5	1.6	0	0
Total other comprehensive income (loss)	109.9	(38.5)	71.4	74.9	(2.6)	(0.9)	0
Total at December 31, 2014	\$1,574.0	\$(550.9)	\$1,023.1	\$1,021.9	\$ 1.5	\$(0.3)	\$0

In an effort to manage interest rate risk, we entered into forecasted transactions on each of The Progressive Corporation's outstanding debt issuances. Upon issuing the Senior Notes (except the 2.45% Senior Notes) and the 6.70% Subordinated Debentures, the gains (losses) recognized on these cash flow hedges are recorded as unrealized gains (losses) in accumulated other comprehensive income and amortized into interest expense over the term of the related debt issuance (see *Note 4 – Debt* for further discussion). We expect to reclassify \$0.4 million (pretax) into income during the next 12 months, related to net unrealized gains on forecasted transactions.

To the extent we repurchased any of our outstanding debt, a portion of the unrealized gain (loss) would need to be recognized as a realized gain (loss) since the cash flow hedge is deemed ineffective. During 2016, 2015, and 2014, we repurchased in the open market a portion of our 6.70% Debentures and reclassified \$0.1 million, \$0.2 million, and \$0.5 million, respectively, on a pretax basis, from accumulated other comprehensive income on the balance sheet to net realized gains on securities on the comprehensive income statement (see *Note 4 – Debt* for further discussion).

12. LITIGATION

The Progressive Corporation and/or its insurance subsidiaries are named as defendants in various lawsuits arising out of claims made under insurance policies written by our insurance subsidiaries in the ordinary course of business. We consider all legal actions relating to such claims in establishing our loss and loss adjustment expense reserves.

In addition, The Progressive Corporation and/or its insurance subsidiaries are named as defendants in a number of class action or individual lawsuits that challenge certain of the operations of the insurance subsidiaries. Other insurance companies face many of these same issues.

We describe litigation contingencies for which a loss is probable. In addition, we establish accruals for these lawsuits when we can reasonably estimate potential loss exposure, which may include a range of loss. As to lawsuits for which the loss is considered probable but not estimable, we do not establish an accrual. Nevertheless, we continue to evaluate this pending litigation to determine if any losses not deemed probable and estimable become so, at which point we would establish an accrual at our best estimate of the loss or range of loss.

We also describe litigation contingencies for which a loss is reasonably possible (but not probable). When disclosing reasonably possible litigation contingencies, we will also disclose the amount or range of possible loss, if we are able to make that determination. We review all reasonably possible losses on an ongoing basis to determine whether the likelihood of incurring a loss has become probable, or whether the circumstances have changed such that we may now reasonably estimate a range of loss.

We may also be exposed to litigation contingencies that are remote. Remote litigation contingencies are those for which the likelihood of a loss is slight at period end. We do not disclose, or establish accruals for, remote litigation contingencies, but we evaluate these contingencies on an ongoing basis to determine whether the likelihood of a loss has increased.

Each year, certain of our pending litigation matters are brought to conclusion and/or settlement. Many of these concluded matters involve the same or similar fact patterns as the matters described below. For cases that have settled, but for which settlement is not complete, an accrual is established at our best estimate of the loss exposure. We regularly review these and other accruals to ensure they are adequate, and that there is not the possibility of material losses in excess of our accruals.

Settlements that are complete are fully reflected in our financial statements. The amounts accrued and/or paid for settlements during the periods presented were not material to our consolidated financial condition, cash flows, or results of operations.

The pending lawsuits summarized below are in various stages of development, and the outcomes are uncertain at this time. At period end, except to the extent an immaterial accrual has been established, we do not consider the losses from these pending cases to be both probable and estimable, and we are unable to estimate a range of loss at this time. It is not possible to determine loss exposure for a number of reasons, including, without limitation, one or more of the following: liability appears to be remote; putative class action lawsuits generally pose immaterial exposure until a class is actually certified, which, historically, has not been granted by the courts in the vast majority of our cases in which class certification has been sought; class definitions are often indefinite and preclude detailed exposure analysis; and complaints rarely state an amount sought as relief, and when such amount is stated, it is often a function of pleading requirements and may be unrelated to the potential exposure.

We plan to contest these suits vigorously, but may pursue settlement negotiations in some cases, if appropriate. In the event that any one or more of these cases results in a substantial judgment against, or settlement by, us or if our accruals (if any) prove to be inadequate, the resulting liability could have a material adverse effect on our consolidated financial condition, cash flows, and/or results of operations. Based on information currently known, we do not believe that the outcome of any pending cases described below will have a material impact on our consolidated financial condition, cash flows, and/or results of operations.

At December 31, 2016, pending lawsuits that challenge certain of the operations of the vehicle insurance subsidiaries included:

- Putative class actions:
 - alleging we sell or charge insureds for illusory coverage or coverage lower than amounts allowed by law for personal injury protection (PIP) coverage, uninsured motorist/underinsured motorist coverage and other coverages and pay related claims at levels lower than allowed by law.
 - challenging our practices in physical damage claims relating to how these claims are handled, adjusted and ultimately paid.
 - challenging our practice in Florida of adjusting PIP and first-party medical payments.
 - challenging our adjustment of medical bills submitted by insureds in bodily injury claims.
 - challenging the manner in which we grant a discount for anti-theft devices.
 - challenging general claim practices such as subrogation practices, interest payments in arbitration awards, use of deductibles, setting off certain claim payments based on other coverages and payments, and other claim practices.

- Certified or conditionally certified class action lawsuits:
 - alleging that we undervalued total loss claims through the use of certain valuation tools.
 - alleging that we fail to provide proper uninsured motorist coverage.
 - challenging our adjustment of medical bills submitted by insureds in bodily injury claims.
- *Qui tam* lawsuits alleging we did not comply with purported obligations to reimburse Medicare for medical payments made to Medicare beneficiaries.

13. COMMITMENTS AND CONTINGENCIES

We have certain noncancelable operating lease commitments with lease terms greater than one year for property and computer equipment. The minimum commitments under these agreements at December 31, 2016, were as follows:

(millions)	Commitments
2017	\$ 49.8
2018	45.1
2019	32.6
2020	17.0
2021	8.1
Thereafter	2.3
Total	\$154.9

Some of the leases have options to renew at the end of the lease periods. The expense we incurred for the leases disclosed above, as well as other operating leases that may be cancelable or have terms less than one year, was:

(millions)	Expense
2016	\$72.9
2015	66.6
2014	63.4

We also have certain noncancelable purchase obligations. The minimum commitment under these agreements at December 31, 2016, was \$481.8 million.

During 2016, the insurance operations of ARX entered into several multiple-layer property catastrophe excess of loss reinsurance contracts with various reinsurers with terms ranging from one to three years. The minimum commitment under these contracts was \$100.5 million at December 31, 2016.

As of December 31, 2016, we had no open investment funding commitments; we had no uncollateralized lines or letters of credit as of December 31, 2016 or 2015.

14. DIVIDENDS

We maintain a policy of paying an annual variable dividend that, if declared, would be payable shortly after the close of the year. This annual variable dividend is based on a target percentage of after-tax underwriting income multiplied by a performance factor (Gainshare factor), determined during 2016 and prior year by reference to the Agency auto, Direct auto, special lines, and Commercial Lines business units, subject to the limitations discussed below. The target percentage is determined by our Board of Directors on an annual basis and announced to shareholders and the public. In December 2015, the Board determined the target percentage for 2016 to be 33-1/3% of annual after-tax underwriting income, which is unchanged from the target percentage in both 2015 and 2014.

The Gainshare factor can range from zero to two and is determined by comparing our operating performance for the specified business units for the year to certain predetermined profitability and growth objectives approved by the Compensation Committee of the Board. This Gainshare factor is also used in the annual cash bonus program currently in place for our employees (our "Gainsharing program"). For 2016, the Gainshare factor was 1.67, compared to 1.60 in 2015 and 1.32 in 2014.

Our annual dividend program will result in a variable payment to shareholders each year, subject to certain limitations. If the Gainshare factor is zero or if our comprehensive income is less than after-tax underwriting income, no dividend would be payable under our annual variable dividend policy. In addition, the ultimate decision on whether or not a dividend will be paid is in the discretion of the Board of Directors. The Board could decide to alter our policy, or not to pay the annual variable dividend, at any time prior to the declaration of the dividend for the year. Such an action by the Board could result from, among other reasons, changes in the insurance marketplace, changes in our performance or capital needs, changes in federal income tax laws, disruptions of national or international capital markets, or other events affecting our business, liquidity, or financial position.

Following is a summary of our shareholder dividends that were declared in the last three years:

Dividend Type	Declared	Paid	Amount	
			Per Share	Total ¹
Annual – Variable	December 2016	February 2017	\$0.6808	\$395.4
Annual – Variable	December 2015	February 2016	0.8882	519.2
Annual – Variable	December 2014	February 2015	0.6862	404.1

¹Based on an estimate of shares outstanding as of the record date. For the dividends declared in December 2015 and 2014, we paid \$519.0 million and \$403.6 million, respectively.

15. REDEEMABLE NONCONTROLLING INTEREST

In connection with the April 2015 acquisition of a controlling interest in ARX, The Progressive Corporation entered into a stockholders' agreement with the other ARX stockholders. As part of the stockholders' agreement, the minority ARX shareholders have the right to "put" their ARX shares to Progressive in two installments, one in early 2018 and one in early 2021, and Progressive has the ability to "call" a portion of the outstanding shares shortly thereafter. If these rights are exercised in full when available, our ownership stake in ARX capital stock will exceed 80% in 2018 and will reach 100% in 2021. The purchase prices for shares to be purchased by Progressive pursuant to these put or call rights will be determined by adding (A) the price per share paid at the closing on April 1, 2015, to (B) the product of the change in the fully diluted net tangible book value per share of ARX between December 31, 2014 and December 31, 2017 (for the 2018 put or call purchases) or December 31, 2020 (for the 2021 put or call purchases) times a multiple of between 1.0 and 2.0. The multiple will be determined based on the growth and profitability of ARX's business over the applicable time period, pursuant to criteria included in the stockholders' agreement. Among other provisions, the stockholders' agreement also prohibits ARX from taking a number of actions, including the payment of dividends, without the consent of The Progressive Corporation and two other stockholders.

Since these securities are redeemable upon the occurrence of an event that is not solely within the control of Progressive, we have recorded the redeemable noncontrolling interest as mezzanine equity on our consolidated balance sheets, which represents the minority shares at the current estimated purchase price pursuant to the put and call provisions of the stockholders' agreement. The estimated purchase price is based, in part, on the change in tangible net book value of ARX from December 31, 2014 to the balance sheet dates.

The redeemable noncontrolling interest was initially recorded at a fair value of \$411.5 million, representing the minority shares at the net acquisition price adjusted for the fair value of the put and call rights. The value of the put and call rights on the acquisition date was based on an internally developed modified binomial model. Subsequent changes to the redeemable noncontrolling interest are based on the maximum redemption value at the end of the reporting period, as determined in accordance with the stockholders' agreement.

The changes in the components of redeemable NCI during the year ended December 31, 2016 and 2015, were:

(millions)	December 31, 2016	December 31, 2015
Balance, Beginning of period	\$464.9	\$ 0
Fair value at date of acquisition	0	411.5
Net income attributable to NCI	26.2	32.9
Other comprehensive income (loss) attributable to NCI	(3.2)	(1.1)
Purchase of shares from NCI	0	(12.6)
Change in redemption value of NCI	(4.2)	34.2
Balance, End of period	\$483.7	\$464.9

16. GOODWILL AND INTANGIBLE ASSETS

Goodwill

During 2016, the carrying amount of goodwill increased \$1.8 million as a result of an exchange transaction ARX entered into with a third party. Pursuant to the exchange, ARX acquired 100% of the equity interest in an insurance subsidiary (and an affiliated company) that writes residential property insurance and disposed of 100% of the equity interest in an insurance subsidiary (and an affiliated company) that writes commercial property insurance. The book values of the entities that were acquired and disposed of were approximately equal at the time of the exchange.

There were no goodwill impairment charges recognized during the years ended December 31, 2016 and 2015. Goodwill recorded at December 31, 2016 and 2015 was \$449.4 million and \$447.6 million, respectively.

Intangible Assets

The following table is a summary of the net carrying amount of other intangible assets as of December 31, 2016 and 2015:

(millions)	December 31, 2016	December 31, 2015
Intangible assets subject to amortization	\$420.4	\$482.5
Indefinite-lived intangible assets ¹	12.4	12.4
Total	\$432.8	\$494.9

¹ Indefinite-lived intangible assets are comprised of state insurance and agent licenses.

Intangible assets subject to amortization consisted of the following:

(millions) Category	December 31, 2016			December 31, 2015		
	Gross Carrying Amount	Accumulated Amortization ¹	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization ¹	Net Carrying Amount
Policies in force	\$256.2	\$ 64.1	\$192.1	\$256.2	\$27.5	\$228.7
Agency relationships	159.2	19.9	139.3	159.2	8.5	150.7
Software rights	79.1	18.8	60.3	79.1	8.2	70.9
Trade name	34.8	6.1	28.7	34.8	2.6	32.2
Total	\$529.3	\$108.9	\$420.4	\$529.3	\$46.8	\$482.5

¹ Total does not include \$0.6 million of accumulated amortization related to state insurance licenses previously subject to amortization.

Amortization expense was \$62.1 million and \$46.8 million for the years ended December 31, 2016 and 2015, respectively. No amortization expense was incurred on intangible assets subject to amortization prior to the ARX acquisition on April 1, 2015.

The estimated aggregate amortization on these intangible assets for each of the next five years as of December 31, 2016, is as follows:

(millions) Year	Amortization Expense
2017	\$62.1
2018	62.1
2019	62.1
2020	60.4
2021	60.1

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of The Progressive Corporation

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of comprehensive income, changes in shareholders' equity and cash flows, present fairly, in all material respects, the financial position of The Progressive Corporation and its subsidiaries at December 31, 2016 and December 31, 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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

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

PricewaterhouseCoopers LLP

Cleveland, Ohio
March 1, 2017

Management's Report on Internal Control over Financial Reporting

Progressive's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934. Our internal control structure was designed under the supervision of our Chief Executive Officer and Chief Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

Our internal control over financial reporting includes policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of assets; provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and our directors; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on our financial statements.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our evaluation under the framework in *Internal Control – Integrated Framework (2013)*, management concluded that our internal control over financial reporting was effective as of December 31, 2016.

During the fourth quarter 2016, there were no changes in our internal control over financial reporting identified in the internal control review process that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PricewaterhouseCoopers LLP, an independent registered public accounting firm that audited the financial statements included in this Annual Report, has audited, and issued an attestation report on the effectiveness of, our internal control over financial reporting as of December 31, 2016; such report appears herein.

CEO and CFO Certifications

Susan Patricia Griffith, President and Chief Executive Officer of The Progressive Corporation, and John P. Sauerland, Vice President and Chief Financial Officer of The Progressive Corporation, have issued the certifications required by Sections 302 and 906 of The Sarbanes-Oxley Act of 2002 and applicable SEC regulations with respect to Progressive's 2016 Annual Report on Form 10-K, including the financial statements provided in this Report. Among other matters required to be included in those certifications, Mrs. Griffith and Mr. Sauerland have each certified that, to the best of their knowledge, the financial statements, and other financial information included in the Annual Report on Form 10-K, fairly present in all material respects the financial condition, results of operations, and cash flows of Progressive as of, and for, the periods presented. See Exhibits 31 and 32 to Progressive's Annual Report on Form 10-K for the complete Section 302 and 906 certifications, respectively.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Our consolidated financial statements and the related notes, together with the supplemental information, should be read in conjunction with the following discussion and analysis of our consolidated financial condition and results of operations.

I. OVERVIEW

The Progressive Corporation is a holding company that does not have any revenue producing operations, physical property, or employees of its own. The Progressive Group of Insurance Companies consists of our insurance subsidiaries and affiliates. The Progressive Group of Insurance Companies, together with our holding company and subsidiaries and affiliates, comprise what we refer to as Progressive.

We have been offering insurance to consumers since 1937. We estimate that we are the country's fourth largest private passenger auto insurer and the number one writer of commercial auto insurance based on premiums written. Our insurance companies offer personal and commercial auto insurance, residential property insurance, and other specialty property-casualty insurance and related services throughout the United States, as well as personal auto physical damage and auto property damage liability insurance in Australia. Our Personal Lines segment writes insurance for personal autos and recreational vehicles, which we refer to as our special lines products, through more than 35,000 independent insurance agencies and directly to consumers online, on mobile devices, and over the phone. Our Commercial Lines segment offers insurance for cars and trucks owned and/or operated predominantly by small businesses through both the independent agency and direct channels. Our Property segment writes residential property insurance for homeowners, other property owners, and renters predominantly in the independent agency channel. Our underwriting operations, combined with our service and investment operations, make up the consolidated group.

The Progressive Corporation receives cash through subsidiary dividends, security sales, borrowings, and other transactions, and uses these funds to contribute to its subsidiaries (e.g., to support growth), to make payments to shareholders and debt holders (e.g., dividends and interest, respectively), and to repurchase its common shares and debt, as well as for acquisitions and other business purposes that might arise.

During the year, The Progressive Corporation received cash from the following sources:

- Subsidiary dividends – received \$263.5 million of dividends, net of capital contributions, from our insurance and non-insurance subsidiaries, and
- Debt issuance – issued \$500 million of 2.45% Senior Notes due 2027 in August 2016, to take advantage of the low interest rate environment and to increase our financial flexibility.

Consistent with our policy to deploy underleveraged capital for share repurchases and shareholder dividends, and in light of our strong capital position, during 2016, The Progressive Corporation took the following actions:

- Dividends – declared a \$0.6808 per share annual variable dividend, which returned \$395.4 million of capital to our shareholders, and
- Repurchases – repurchased both our common shares and debt securities
 - Shares – bought back 6.1 million of our common shares at a total cost of \$192.5 million
 - Debt – repurchased \$19.8 million principal amount of our 6.70% Fixed-to-Floating Rate Junior Subordinated Debentures due 2067.

We ended 2016 with \$11.1 billion of total capital (debt and equity). We continue to manage our investing and financing activities in order to maintain sufficient capital to support all the insurance we can profitably write, constrained only by our ability to provide high-quality customer service, and deploying underleveraged capital to shareholders.

A. Operating Results

We experienced strong growth across the board in 2016. We ended the year with \$23.4 billion of net premiums written, \$2.8 billion more than we wrote in 2015, which set a new company record for the increase in premiums during a single year. Our companywide policies in force grew 7% year-over-year to end the year with a total of 16.5 million policies in force. At the same time, we met our profitability objective and saw retention improve in both Personal and Commercial Lines as we made progress on our Destination Era strategy.

On a year-over-year basis, net income attributable to Progressive was down 19%, while comprehensive income was up 11%. Net income was \$1.0 billion, or \$1.76 per share, in 2016. Pretax underwriting profitability for the year was down 27%, reflecting both higher catastrophe losses in 2016 and less favorable prior accident year development, in each case compared to the prior year.

Investment income (e.g., interest and dividends) increased 5% on a year-over-year basis, reflecting an increase in average assets partially offset by lower pretax book yield due to the sharp decline in interest rates available for investing new cash and portfolio turnover during much of the year. Higher other-than-temporary impairment losses in 2016, compared to 2015, contributed to the 55% decrease in net realized gains. The write-downs included \$59.7 million (\$38.8 million after tax) of "other asset" impairments, relating to two renewable energy tax credit investments made during the year, under which the future pretax cash flows are expected to be less than the original carrying value of the assets. As a result of these investments, we also recorded \$58.7 million of federal tax benefits in our income tax provision during 2016, which represented all of the expected tax benefits from these investments.

Comprehensive income was \$1.2 billion, an increase of \$119.1 million from last year, primarily due to unrealized gains on investments, reflecting, in large part, the significant return on our common stock portfolios.

B. Insurance Operations

For 2016, our companywide underwriting profit margin was 4.9%. All of our operating segments were profitable. Our underwriting profitability by segment was 4.7% for Personal Lines, 6.4% for Commercial Lines, and 3.8% for Property. Our special lines products also had a profitable year and favorably impacted our total Personal Lines combined ratio by about 0.6 points.

During the year, on a companywide basis, we recognized 2.5 loss ratio points related to catastrophe losses, which was almost double the point impact of catastrophes on 2015 results. The combined ratios for our Personal Lines and Property businesses were unfavorably impacted by 1.9 points and 19.7 points, respectively, as a result of these catastrophe losses. The catastrophe losses in 2016 were primarily due to severe storms in Florida, Louisiana, Texas, and Colorado, including Hurricane Matthew. According to data collected by the Insurance Services Office, a national aggregator of carrier data, industry losses from severe thunderstorm catastrophes were double the most recent 19-year average based on the state mix of our Property business.

For the year, our companywide prior accident year development was minimal at 0.4 points of favorable impact on our combined ratio, compared to 2015 when we recognized 1.6 points of favorable development. Our overall incurred severity in our personal auto businesses increased about 4%, while frequency increased about 1%, compared to the prior year. Our Commercial Lines profitability was negatively affected by an increase in accident frequency during the summer months, as well as unfavorable prior accident year loss reserve development. We responded quickly by adjusting rates and implementing underwriting restrictions where necessary. These actions aided Commercial Lines profitability for the year but restricted growth in the latter part of the year, as discussed below.

On a year-over-year basis, net premiums written and earned increased 14% and 13%, respectively. Changes in net premiums written are a function of new business applications, premium per policy, and retention.

During 2016, total new personal auto applications increased 13% on a year-over-year basis, including an 18% increase in our Agency auto business and a 9% increase in our Direct auto business, reflecting our improved competitive position in the marketplace from our latest auto product model. The Direct growth was tempered, however, by our reduction in advertising spending during the latter part of the year, as we took actions to ensure our profit margin goals were achieved.

For our Commercial Lines business, new applications increased 11% for the year; however, much of this increase occurred in the first half of the year. For the first six months of 2016, our Commercial Lines new applications grew 22%. As we started to see accident frequency rise, we raised rates and implemented underwriting restrictions mostly during the second half of the year. As a result, new applications increased 8% in third quarter 2016 and decreased 9% in the fourth quarter. We will continue to monitor market conditions and respond appropriately.

Since we did not acquire a controlling interest in ARX Holding Corp. (ARX) until April 2015, full year comparisons are not meaningful. Comparing the amount of new applications that the Property business wrote for the last nine months 2016, on a year-over-year basis, new applications increased 17%. The increase primarily reflects state expansion in the property business written by ARX as well as in Progressive's renters business.

During 2016, on a year-over-year basis, our written premium per policy for both our Agency and Direct auto businesses increased 5%, primarily reflecting rate increases taken during the year. Written premium per policy for our special lines products was relatively flat, compared to last year. Commercial Lines experienced a 10% increase in written premium per policy, which resulted primarily from rate changes as discussed previously. For the Property business, written premium per policy decreased 7%. The decrease primarily reflects the exchange transaction that occurred during 2016, where ARX acquired a residential property insurance company and divested a commercial property insurance company (discussed in more detail under *Results of Operations – Underwriting – Property* section). The written premium per policy on residential business is much lower than the written premium per policy on commercial business.

To grow policies in force, it is critical that we retain our customers for longer periods. Consequently, increasing retention is one of our most important priorities, and our efforts to increase the number of multi-product households continue to be a key initiative to support that goal. Policy life expectancy, which is our actuarial estimate of the average length of time that a policy will remain in force before cancellation or lapse in coverage, is one measure of customer retention in our vehicle businesses. We have seen our policy life expectancy increase in Personal Lines, both auto and special lines, as well as our Commercial Lines businesses during 2016. Through our Destination Era initiatives, we are seeing customers bundle their auto coverage with other products more often, which tends to translate to longer relationships with these customers.

C. Investments

The fair value of our investment portfolio was \$23.5 billion at December 31, 2016. Our asset allocation strategy is to maintain 0-25% of our portfolio in Group I securities, with the balance (75%-100%) of our portfolio in our Group II securities (the securities allocated to Group I and II are defined below under *Results of Operations – Investments*). At December 31, 2016, 18% of our portfolio was allocated to Group I securities and 82% to Group II securities, compared to 20% and 80%, respectively, at December 31, 2015.

Our investment income generated a pretax book yield of 2.3% for 2016, compared to 2.4% for 2015. Our investment portfolio produced a fully taxable equivalent (FTE) total return of 4.0% for 2016, compared to 1.6% for 2015. Our fixed-income and common stock portfolios had FTE total returns of 2.9% and 12.8%, respectively, for 2016, and 1.7% and 0.8%, for 2015.

At December 31, 2016, the fixed-income portfolio had a weighted average credit quality of A+ and a duration of 2.2 years, compared to A+ and 1.9 years at December 31, 2015. During the year, our portfolio duration was as low as 1.8 years from the first quarter through the third quarter. We lengthened our portfolio duration modestly during the fourth quarter in response to higher interest rates. We maintain our fixed-income portfolio strategy of investing in high-quality, liquid securities. We remain confident in our preference for shorter duration positioning during times of low interest rates as a means to limit any decline in portfolio value from an increase in rates, and we expect long-term benefits from any return to more substantial yields.

II. FINANCIAL CONDITION

A. Holding Company

The Progressive Corporation received dividends from its subsidiaries, net of capital contributions, of \$263.5 million in 2016 and \$2.1 billion for the three-year period ended December 31, 2016. Regulatory restrictions on subsidiary dividends are described in *Note 8 – Statutory Financial Information*.

During the last three years, we issued \$1.25 billion of senior notes to take advantage of attractive terms in the market and provide additional financial flexibility. The proceeds of these issuances, which were net of \$14.7 million of underwriting discounts and commissions and other expenses, have been and are intended to continued to be used for general corporate purposes.

During the last three years, we repurchased, in the open market, a portion of our 6.70% Fixed-to-Floating Rate Junior Subordinated Debentures (6.70% Debentures) for a total cost of \$86.4 million, when management believed that the securities were attractively priced and there was adequate capital available for such purpose. Through February 2017, we acquired an additional \$26.3 million in principal amount of our 6.70% Debentures on the open market for a total cost, excluding interest, of \$26.1 million. As a result of these repurchases, we have also been able to reduce our future interest expense. Since the ARX acquisition in April 2015, ARX has repaid \$45.9 million of principal amount of their outstanding

debt securities. See *Note 4 – Debt* and the *Liquidity and Capital Resources* section below for a further discussion of our debt activity. Our debt-to-total capital (debt plus shareholders' equity, which does not include redeemable noncontrolling interest) ratios at December 31, 2016, 2015, and 2014 were 28.3%, 27.1%, and 23.8%, respectively, and were below our financial policy of maintaining a ratio of less than 30%.

Over the last three years, we also continued our practice of repurchasing our common shares and paying dividends to our shareholders in accordance with our financial policies. As of December 31, 2016, we had 6.6 million shares remaining under our 2011 Board repurchase authorization. The following table shows our share repurchase activity during the last three years:

(millions, except per share amounts)	2016	2015	2014
Total number of shares purchased	6.1	7.3	11.1
Total cost	\$192.5	\$208.5	\$271.4
Average price paid per share	\$31.59	\$28.41	\$24.56

We maintain a policy of paying an annual variable dividend that, if declared, would be payable shortly after the close of the year. See *Note 14 – Dividends* for a further discussion of our annual variable dividend policy. Under this policy we declared dividends in each of the last three years. Following is a summary of our shareholder dividends that were declared in the last three years:

(millions, except per share amounts) Dividend Type	Declared	Paid	Amount	
			Per Share	Total Paid ¹
Annual – Variable	December 2016	February 2017	\$0.6808	\$395.4
Annual – Variable	December 2015	February 2016	\$0.8882	\$519.0
Annual – Variable	December 2014	February 2015	\$0.6862	\$403.6

¹ Amounts paid may differ from the year-end dividend accrual since our accrual was based on an estimate of shares outstanding as of the record date.

B. Liquidity and Capital Resources

Progressive's insurance operations create liquidity by collecting and investing premiums from new and renewal business in advance of paying claims. As primarily an auto insurer, our claims liabilities are generally short in duration. Typically, at any point in time, approximately 50% of our outstanding loss and LAE reserves are paid within the following twelve months and less than 20% are still outstanding after three years. See *Note 6 – Loss and Loss Adjustment Expense Reserves* for further information on the timing of claims payments.

For the three years ended December 31, 2016, operations generated positive cash flows of about \$6.7 billion, and cash flows are expected to remain positive in both the short-term and reasonably foreseeable future. In 2016, operating cash flows increased \$409.3 million, compared to 2015, primarily due to an increase in premiums collected and a reduction in taxes paid, partially offset by an increase in paid losses and an increase in acquisition costs.

As of December 31, 2016, our consolidated statutory surplus was \$8.6 billion, compared to \$7.6 billion at December 31, 2015. Our net premiums written-to-surplus ratio was 2.7 to 1 at year-end 2016 and 2015, compared to 2.9 to 1 at the end of 2014. The decrease from 2014 is due to the fact that our Property business maintains a lower premiums written-to-surplus ratio than we maintain on our vehicle businesses. At year-end 2016, we also had access to \$1.3 billion of securities held in a non-insurance subsidiary, portions of which could be contributed to the capital of our insurance subsidiaries to support growth or for other purposes. We used \$395.4 million of available funds to pay the annual variable dividend in February 2017.

Our insurance subsidiaries' risk-based capital ratios are well in excess of minimum regulatory requirements. These ratios are series of dynamic surplus-related calculations required by the laws of various states that contain a variety of factors that are applied to financial balances based on the degree of certain risks (e.g., asset, credit, and underwriting). Nonetheless, the payment of dividends by our insurance subsidiaries may be subject to certain limitations. See *Note 8 – Statutory Financial Information* for additional information on insurance subsidiary dividends and *Note 15 – Redeemable Noncontrolling Interest* for information on the dividend restriction under the ARX stockholders' agreement.

As of December 31, 2016, we held \$6.4 billion in short-term investments and U.S. Treasury securities. Based on our portfolio allocation and investment strategies, we believe that we have sufficient readily available marketable securities to cover our claims payments in the event our cash flow from operations was negative. See Item 1A, "Risk Factors," in our Form 10-K filed with the Securities and Exchange Commission (SEC) for a discussion of certain matters that may affect our portfolios and capital position.

ARX has total scheduled principal payments of \$25 million in each of the next two years, which we expect will be funded through ARX's operating cash flows.

On and after June 15, 2017, we will have the right, at our discretion, to redeem our outstanding 6.70% Debentures at par, in whole or in part, together with any accrued and unpaid interest. At December 31, 2016, we had \$594.6 million in principal amount outstanding. If we do not choose to redeem at June 15, 2017, the Debentures will convert from their current fixed interest rate to a variable rate equal to the 3-month LIBOR plus 2.0175%. If not so redeemed, the 6.70% Debentures will become due on June 15, 2037, subject to certain limitations set forth in the Debenture documents. We are evaluating our options with respect to the redemption of the 6.70% Debentures and have not made a decision at this time.

We seek to deploy capital in a prudent manner and use multiple data sources and modeling tools to estimate the frequency, severity, and correlation of identified exposures, including, but not limited to, catastrophic and other insured losses, natural disasters, and other significant business interruptions, to estimate our potential capital needs. Based upon our capital planning and forecasting efforts, we believe that we have sufficient capital resources, cash flows from operations, and borrowing capacity to support our current and anticipated business, scheduled principal and interest payments on our debt, any declared dividends, and other expected capital requirements. The covenants on The Progressive Corporation's existing debt securities do not include any rating or credit triggers that would require an adjustment of the interest rate or an acceleration of principal payments in the event our securities are downgraded by a rating agency.

Management views our capital position as consisting of three layers, each with a specific size and purpose:

- The first layer of capital, which we refer to as "regulatory capital," is the amount of capital we need to satisfy state insurance regulatory requirements and support our objective of writing all the business we can write and service, consistent with our underwriting discipline of achieving a combined ratio of 96 or better. This capital is held by our various insurance entities.
- The second layer of capital we call "extreme contingency." While our regulatory capital is, by definition, a cushion for absorbing financial consequences of adverse events, such as loss reserve development, litigation, weather catastrophes, and investment market corrections, we view that as a base and hold additional capital for even more extreme conditions. The modeling used to quantify capital needs for these conditions is extensive, including tens of thousands of simulations, representing our best estimates of such contingencies based on historical experience. This capital is held either at a non-insurance subsidiary of the holding company or in our insurance entities, where it is potentially eligible for a dividend up to the holding company. Regulatory restrictions on subsidiary dividends are discussed in *Note 8 – Statutory Financial Information*.
- The third layer is capital in excess of the sum of the first two layers and provides maximum flexibility to repurchase stock or other securities, satisfy acquisition-related commitments, and pay dividends to shareholders, among other purposes. This capital is largely held at a non-insurance subsidiary of the holding company.

At all times during the last two years, our total capital exceeded the sum of our regulatory capital layer plus our self-constructed extreme contingency layer. At December 31, 2016, we held total capital (debt plus shareholders' equity) of \$11.1 billion, compared to \$10.0 billion at December 31, 2015.

Short-Term Borrowings

During the last three years, we did not engage in short-term borrowings to fund our operations or for liquidity purposes. As discussed above, our insurance operations create liquidity by collecting and investing insurance premiums in advance of paying claims. Information concerning our insurance operations can be found below under *Results of Operations – Underwriting*, and details about our investment portfolio can be found below under *Results of Operations – Investments*.

During 2016, we renewed the unsecured, discretionary line of credit (the "Line of Credit") with PNC Bank, National Association (PNC) in the maximum principal amount of \$100 million. The prior line of credit, which was entered into during 2015, had expired. The Line of Credit is on substantially the same terms and conditions as the prior line of credit. All advances under this agreement are subject to PNC's discretion, would bear interest at a variable daily rate, and must be repaid on the earlier of the 30th day after the advance or the expiration date of the facility, April 30, 2017. We incurred no debt issuance costs and had no borrowings under either line of credit throughout 2016 or 2015.

We had no open repurchase commitments at December 31, 2016 or 2015. During 2016 and 2015, we entered into repurchase commitment transactions, which were open for a total of three days and four days, respectively. In these transactions, we loaned U.S. Treasury securities to internally approved counterparties in exchange for cash equal to the fair value of the securities. These transactions were entered into as overnight arrangements. On the days that we invested in repurchase transactions in 2016, the largest single outstanding balance was \$240.0 million, which was open for two days; the average daily balance was \$217.0 million. For 2015, the largest single outstanding balance was \$40.4 million, which was open for one day; the average daily balance was \$29.0 million. These investment transactions were entered into to enhance the yield from our fixed-income portfolio and not as a source of liquidity or funding for our operations.

C. Commitments and Contingencies

Contractual Obligations

A summary of our noncancelable contractual obligations as of December 31, 2016, follows:

(millions)	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Debt	\$ 3,171.9	\$ 25.0	\$ 36.3	\$ 500.8	\$2,609.8
Interest payments on debt ¹	1,806.5	129.8	220.9	220.2	1,235.6
Operating leases	154.9	49.8	77.7	25.1	2.3
Purchase obligations	481.8	390.9	78.6	6.6	5.7
Catastrophe excess of loss reinsurance contracts ²	100.5	73.8	26.7	0	0
Loss and loss adjustment expense reserves	11,368.0	5,822.0	3,516.5	1,022.7	1,006.8
Total	\$17,083.6	\$6,491.3	\$3,956.7	\$1,775.4	\$4,860.2

¹Includes interest on the 6.70% Debentures at the fixed annual rate through, but excluding, June 15, 2017. Amounts also include variable rate interest on the ARX debt for which we made assumptions in calculating the amount of future interest payments. We used the rates in effect as of December 31, 2016, for all future periods. See *Note 4 – Debt* for further discussion on the interest rates and maturity dates.

²During 2016, the insurance operations of ARX entered into several multiple-layer property catastrophe excess of loss reinsurance contracts with various reinsurers with terms ranging from one to three years.

Purchase obligations represent our noncancelable commitments for goods and services (e.g., software licenses, maintenance on information technology equipment, and media placements). Unlike many other forms of contractual obligations, loss and loss adjustment expense (LAE) reserves do not have definitive due dates and the ultimate payment dates are subject to a number of variables and uncertainties. As a result, the total loss and LAE reserve payments to be made by period, as shown above, are estimates based on our recent payment patterns. To further understand our claims payments, see *Note 6 – Loss and Loss Adjustment Expense Reserves*. In addition, we annually publish a comprehensive *Report on Loss Reserving Practices*, which was most recently filed with the SEC on a Form 8-K on August 12, 2016, that further discusses our claims payment development patterns, primarily related to our vehicle businesses. The majority of the loss and LAE reserves in our Property business are paid in less than one year.

During the last three years, the only other significant new contractual commitments we entered outside the ordinary course of business were the issuance of \$500 million of our 2.45% Senior Notes due in 2027, \$400 million of our 3.70% Senior Notes due in 2045, and \$350 million of our 4.35% Senior Notes due in 2044, and the put and call rights included in the ARX stockholders' agreement, as discussed in more detail in *Note 15 – Redeemable Noncontrolling Interest*.

As discussed in the *Liquidity and Capital Resources* section above, we believe that we have sufficient liquid investments, borrowing capability, cash flows, and other capital resources to satisfy these contractual obligations.

Off-Balance-Sheet Arrangements

During the last two years, our off-balance-sheet leverage included derivative positions (as disclosed in *Note 2 – Investments* and the *Derivative Instruments* section of this Management's Discussion and Analysis), operating leases, and purchase obligations (disclosed in the table above and *Note 13 – Commitments and Contingencies*). During 2016 and 2015, we entered into futures contracts on both 5-year and 10-year Treasury notes as a means to manage the overall duration of our fixed-income portfolio. These positions were closed in the same year they were entered in both 2016 and 2015 and we recorded a net \$0.3 million and \$2.5 million realized gain, respectively, on these positions for the period they were open. We did not have any open derivative positions at December 31, 2016 and only held interest rate swaps at December 31, 2015.

III. RESULTS OF OPERATIONS – UNDERWRITING

A. Segment Overview

We report our underwriting operations in three segments: Personal Lines, Commercial Lines, and Property. As a component of our Personal Lines segment, we report our Agency and Direct business results to provide further understanding of our products by distribution channel. Our other indemnity business represents our run-off businesses.

Our Personal Lines business writes insurance for personal autos and recreational vehicles, which are our special lines products, and represented 85% of our total net premiums written for 2016, 86% for 2015, and 90% for 2014. The decrease from 2014 primarily resulted from the acquisition of a controlling interest in ARX in 2015. We currently write our Personal Lines products in all 50 states. We also offer our personal auto product (not special lines products) in the District of Columbia and Australia.

Personal auto represented 92% of our total Personal Lines net premiums written in 2016, 2015, and 2014. These auto policies are primarily written for 6-month terms. The remaining Personal Lines business is comprised of special lines products (e.g., motorcycles, watercraft, and RVs), which are written for 12-month terms.

Our Commercial Lines business writes primary liability, physical damage, and other auto-related insurance for automobiles and trucks owned and/or operated predominantly by small businesses. Our Commercial Lines business represented 11% of our total net premiums written in both 2016 and 2015, and 10% in 2014. While we continue to write over 90% of our Commercial Lines business through the Agency channel, net premiums written through the Direct channel increased by 14% in 2016.

We currently write our Commercial Lines business in 49 states; we do not write Commercial Lines in Hawaii or the District of Columbia. The majority of our policies in this business are written for 12-month terms.

Our Property business writes residential property insurance (single family homes, condominium unit owners, rental coverage, etc.) for homeowners, other property owners, and renters. Our Property business represented 4% of our total net premiums written for 2016 and 3% for 2015 and primarily consists of the operations of the ARX organization, in which we acquired a controlling interest in the second quarter 2015. ARX wholly owns or controls the insurance companies that we refer to in the aggregate as "ASI." ASI, principally in the Agency channel, writes residential property insurance in 38 states and the District of Columbia and flood insurance in 40 states and the District of Columbia. Progressive also writes renters insurance in 34 states. Florida and Texas represented about half of the premium volume in the Property business. Property policies are generally written on a 12-month term.

B. Profitability

Profitability for our underwriting operations is defined by pretax underwriting profit, which is calculated as net premiums earned plus fees and other revenues less losses and loss adjustment expenses, policy acquisition costs, and other underwriting expenses. We also use underwriting profit margin, which is underwriting profit expressed as a percentage of net premiums earned, to analyze our results. For the three years ended December 31, our underwriting profitability results were as follows:

(\$ in millions)	2016		2015		2014	
	Underwriting Profit (Loss)		Underwriting Profit (Loss)		Underwriting Profit (Loss)	
	\$	Margin	\$	Margin	\$	Margin
Personal Lines						
Agency	\$ 492.8	5.0%	\$ 713.2	7.8%	\$ 683.0	7.5%
Direct	412.2	4.4	403.4	4.9	423.4	5.7
Total Personal Lines	905.0	4.7	1,116.6	6.5	1,106.4	6.7
Commercial Lines	155.2	6.4	318.3	15.9	315.8	17.2
Property ¹	32.5	3.8	61.3	10.1	—	—
Other indemnity ²	(1.6)	NM	(1.0)	NM	(11.9)	NM
Total underwriting operations	\$1,091.1	4.9%	\$1,495.2	7.5%	\$1,410.3	7.7%

¹We began reporting our Property business as a segment on April 1, 2015, when we acquired a controlling interest in ARX. For the years ended December 31, 2016 and 2015, amounts include \$62.1 million and \$46.8 million, respectively, of amortization expense predominately associated with the acquisition of a controlling interest in ARX. Although this expense is included in our Property segment, it is not reported in the consolidated results of ARX and, therefore, does not affect the value of the noncontrolling interest and will not affect amounts payable pursuant to the put and call rights under the ARX stockholders' agreement.

²Underwriting margins for our other indemnity businesses are not meaningful (NM) due to the low level of premiums earned by, and the variability of loss costs in, such businesses.

The lower underwriting profitability earned in 2016, compared to 2015 and 2014, primarily reflects higher catastrophe losses and less favorable prior accident year development. In addition, the Commercial Lines profitability was negatively impacted by an increase in accident frequency during 2016 and unfavorable prior accident year development.

Further underwriting results for our Personal Lines business, including results by distribution channel, the Commercial Lines business, the Property business, and our underwriting operations in total, as defined in *Note 10 – Segment Information*, were as follows:

Underwriting Performance¹	2016	2015	2014
Personal Lines – Agency			
Loss & loss adjustment expense ratio	75.3	72.6	72.8
Underwriting expense ratio	19.7	19.6	19.7
Combined ratio	95.0	92.2	92.5
Personal Lines – Direct			
Loss & loss adjustment expense ratio	76.8	75.0	74.2
Underwriting expense ratio	18.8	20.1	20.1
Combined ratio	95.6	95.1	94.3
Total Personal Lines			
Loss & loss adjustment expense ratio	76.1	73.7	73.4
Underwriting expense ratio	19.2	19.8	19.9
Combined ratio	95.3	93.5	93.3
Commercial Lines			
Loss & loss adjustment expense ratio	71.9	62.4	61.7
Underwriting expense ratio	21.7	21.7	21.1
Combined ratio	93.6	84.1	82.8
Property			
Loss & loss adjustment expense ratio	63.2	57.3	—
Underwriting expense ratio ²	33.0	32.6	—
Combined ratio ²	96.2	89.9	—
Total Underwriting Operations ³			
Loss & loss adjustment expense ratio	75.1	72.1	72.3
Underwriting expense ratio	20.0	20.4	20.0
Combined ratio	95.1	92.5	92.3
Accident year-Loss & loss adjustment expense ratio ⁴	75.5	73.7	72.4

¹Ratios are expressed as a percentage of net premiums earned; fees and other revenues are deducted from underwriting expenses in the ratio calculations.

²Included in 2016 and 2015, are 7.2 points and 7.7 points, respectively, of amortization expense predominately associated with our acquisition of a controlling interest in ARX. Excluding this expense, the Property business would have reported expense ratios of 25.8 and 24.9 and combined ratios of 89.0 and 82.2 for 2016 and 2015, respectively.

³Combined ratios for the other indemnity businesses are not presented separately due to the low level of premiums earned by, and the variability of loss costs in, such businesses. For the years ended December 31, 2016, 2015, and 2014, these businesses generated an underwriting loss of \$1.6 million, \$1.0 million, and \$11.9 million, respectively.

⁴The accident year ratios include only the losses that occurred during the period noted. As a result, accident period results will change over time, either favorably or unfavorably, as we revise our estimates of loss costs when payments are made or reserves for that accident period are reviewed.

Losses and Loss Adjustment Expenses (LAE)

(millions)	2016	2015	2014
Change in net loss and LAE reserves	\$ 973.2	\$ 702.4	\$ 237.7
Paid losses and LAE	15,906.4	13,639.6	13,068.5
Total incurred losses and LAE	\$16,879.6	\$14,342.0	\$13,306.2

Claims costs, our most significant expense, represent payments made, and estimated future payments to be made, to or on behalf of our policyholders, including expenses needed to adjust or settle claims. Claims costs are a function of loss severity

and frequency and, for our vehicle businesses, are influenced by inflation and driving patterns, among other factors, some of which are discussed below. In our Property business, claim severity is primarily a function of construction costs and the age of the structure. Accordingly, anticipated changes in these factors are taken into account when we establish premium rates and loss reserves. Loss reserves are estimates of future costs and our reserves are adjusted as underlying assumptions change and information develops. See *Critical Accounting Policies* for a discussion of the effect of changing estimates.

Our total loss and loss adjustment expense ratio increased 3.0 points in 2016 and decreased 0.2 points in 2015, compared to the prior year. Our accident year loss and LAE ratio, which excludes the impact of prior accident year reserve development during each calendar year, increased 1.8 points and 1.3 points in 2016 and 2015, respectively. Several factors that contributed to the year-over-year changes are discussed below and include catastrophe losses, changes in severity and frequency, and prior accident year reserve development. For our Commercial Lines business, the increase in our loss and LAE ratio was due to unfavorable development in 2016, compared to favorable development in the prior year, as well as increases in frequency in our bodily injury coverage.

We experienced severe weather conditions in several areas of the country during each of the last three years. Hail storms, tornadoes, wind, and flooding contributed to catastrophe losses each year. The following table shows catastrophe losses incurred for the years ended December 31:

(\$ in millions)	2016	2015	2014
Vehicle businesses	\$ 381.1	\$ 152.6	\$ 192.2
Property business ¹	170.7	101.9	—
Total catastrophe losses incurred	\$ 551.8	\$ 254.5	\$ 192.2
Increase to combined ratio	2.5 pts.	1.3 pts.	1.0 pts.

¹ Net of reinsurance, if applicable. We began reporting our Property business as a segment on April 1, 2015, when we acquired a controlling interest in ARX; therefore, the year ended 2015 only include results for nine months and is not comparable to results reported for the year ended 2016.

The catastrophe losses in 2016 were primarily due to severe storms in Colorado, Florida, Louisiana, and Texas, including Hurricane Matthew. Although we reinsure most of our Property business against various risks, including, but not limited to, catastrophic losses, in general, the loss and LAE from a single catastrophic event has to exceed \$50 million before we are covered by our property catastrophe excess of loss reinsurance, and in 2016, we had to exceed \$175 million from severe thunderstorms in the aggregate before we would be covered by our catastrophe bond reinsurance. The aggregate severe thunderstorm activity in our Property business was \$204.5 million and, therefore, we recorded a \$29.5 million reinsurance recoverable under the reinsurance provided in connection with the catastrophe bond, including \$9.1 million recorded in January 2017. We have responded, and will continue to respond, promptly to catastrophic events when they occur in order to provide exemplary claims service to our customers.

The following discussion of our severity and frequency trends in our personal auto businesses excludes comprehensive coverage because of its inherent volatility, as it is typically linked to catastrophic losses generally resulting from adverse weather. For our commercial auto products, the reported frequency and severity trends include comprehensive coverage. Comprehensive coverage insures against damage to a customer's vehicle due to various causes other than collision, such as windstorm, hail, theft, falling objects, and glass breakage.

Total personal auto incurred severity (i.e., average cost per claim, including both paid losses and the change in case reserves) on a calendar-year basis was up over the prior-year periods in the 1% to 4% range for the last three years.

- 2016 – Severity increased about 5% for our personal injury protection (PIP) coverage, about 3% for our property damage coverage, about 4% for collision coverage, and 2% for our bodily injury coverage.
- 2015 – Severity increased about 1% for our PIP coverage, about 3% for our property damage coverage, and about 4% for collision coverage, while severity in our bodily injury coverage was down about 2%.
- 2014 – Severity increased about 7% for our PIP coverage, about 5% for our property damage coverage, and approximately 3%-4% for our bodily injury and collision coverages.

On a calendar-year basis, our commercial auto products incurred severity increased 17% in 2016, compared to a 6% increase in 2015 and a decrease of 6% in 2014, as compared to the prior years. For 2016, in light of the significant growth in Commercial Lines, the increase in the commercial auto liability severity of about 10% on an accident year basis is a more

meaningful measure. Almost half of the increase in severity reflects a shift in the mix of business to for-hire trucking, which has higher average severity than the business auto and contractor market tiers.

It is a challenge to estimate future severity, especially for bodily injury and PIP claims, but we continue to monitor changes in the underlying costs, such as medical costs, health care reform, and jury verdicts, along with regulatory changes and other factors that may affect severity.

Our incurred frequency of personal auto accidents, on a calendar-year basis, was relatively flat compared to the prior-year periods in both 2016 and 2014 and was up about 2% in 2015.

- 2016 – Our collision coverage had a decrease in frequency of about 1%. Our property damage coverage frequency was relatively flat, while our PIP and bodily injury coverages had an increase in frequency of about 1% and 3%, respectively.
- 2015 – Our property damage and collision coverages had an increase in frequency of about 1%, and approximately 2%-3% for our bodily injury and PIP coverages.
- 2014 – Our bodily injury coverage had a decrease in frequency of about 2%. Frequency in our PIP coverage was down about 1%. Our property damage coverage frequency was relatively flat, while our collision coverage experienced an increase in frequency of about 1%.

On a year-over-year basis, incurred frequency in our Commercial Lines business saw an increase of about 4% for 2016, was relatively flat in 2015, and decreased about 4% in 2014. We began seeing frequency rise about mid-year, with the largest increase in our bodily injury frequency, primarily in the for-hire businesses. Although we cannot be certain of the causes of the increase, we did see an increase in the number of miles driven as a result of the economic growth and a shift in our mix of business towards higher frequency for-hire business market targets.

We closely monitor the changes in frequency, but the degree or direction of near-term frequency change is not something that we are able to predict with any certainty. We analyze trends to distinguish changes in our experience from external factors, such as changes in the number of vehicles per household, miles driven, gasoline prices, greater vehicle safety, and unemployment rates, versus those resulting from shifts in the mix of our business, to allow us to reserve more accurately for our loss exposure.

The table below presents the actuarial adjustments implemented and the loss reserve development experienced in the years ended December 31:

(\$ in millions)	2016	2015	2014
ACTUARIAL ADJUSTMENTS			
Reserve decrease (increase)			
Prior accident years	\$ 142.6	\$ 95.1	\$ 90.9
Current accident year	(6.2)	97.0	(81.3)
Calendar year actuarial adjustments	<u>\$ 136.4</u>	<u>\$ 192.1</u>	<u>\$ 9.6</u>
PRIOR ACCIDENT YEARS DEVELOPMENT			
Favorable (unfavorable)			
Actuarial adjustments	\$ 142.6	\$ 95.1	\$ 90.9
All other development	(55.1)	220.0	(66.8)
Total development	<u>\$ 87.5</u>	<u>\$ 315.1</u>	<u>\$ 24.1</u>
(Increase) decrease to calendar year combined ratio	<u>0.4 pts.</u>	<u>1.6 pts.</u>	<u>0.1 pts.</u>

Total development consists of both actuarial adjustments and “all other development.” The actuarial adjustments represent the net changes made by our actuarial staff to both current and prior accident year reserves based on regularly scheduled reviews. Through these reviews, our actuaries identify and measure variances in the projected frequency and severity trends, which allow them to adjust the reserves to reflect the current costs. For our Property business, 100% of the outstanding reserves are reviewed monthly and, as such, include any development on catastrophe losses as part of the actuarial adjustments. For the vehicle businesses, only a subset of our reserves is reviewed monthly as part of the actuarial adjustment process. Catastrophe losses for the vehicle businesses would be reflected in the all other development, discussed below, to the extent they related to prior year reserves. We report these actuarial adjustments separately for the current and prior accident years to reflect these adjustments as part of the total prior accident years’ development.

“All other development” represents claims settling for more or less than reserved, emergence of unrecorded claims at rates different than anticipated in our incurred but not recorded (IBNR) reserves, and changes in reserve estimates on specific claims. Although we believe the development from both the actuarial adjustments and “all other development” generally results from the same factors, as discussed below, we are unable to quantify the portion of the reserve development that might be applicable to any one or more of those underlying factors.

Our objective is to establish case and IBNR reserves that are adequate to cover all loss costs, while incurring minimal variation from the date that the reserves are initially established until losses are fully developed. As reflected in the table above, we experienced favorable development during the last three years. For 2016, we incurred favorable reserve development in both our Personal Lines and Property businesses, which was partially offset by unfavorable IBNR loss reserve development in our Commercial Lines business due to higher severity and frequency of late reported claims than anticipated for accident year 2015. The favorable development incurred in 2015 occurred in all our segments, while for 2014, favorable development in Commercial Lines was slightly higher than the unfavorable development in Agency auto. See *Note 6 – Loss and Loss Adjustment Expense Reserves*, for a more detailed discussion of our prior accident year development.

We continue to focus on our loss reserve analysis, attempting to enhance accuracy and to further our understanding of our loss costs. A detailed discussion of our loss reserving practices, primarily related to our vehicle businesses, can be found in our *Report on Loss Reserving Practices*, which was filed in a Form 8-K on August 12, 2016.

Because we are primarily an insurer of motor vehicles and residential property insurance, our exposure as an insurer of environmental, asbestos, and general liability claims is limited. We have established reserves for these exposures, in amounts that we believe to be adequate based on information currently known. These exposures have not had and are not expected to have a material effect on our liquidity, financial condition, cash flows, or results of operations.

Underwriting Expenses

Our underwriting expense ratio (i.e., policy acquisition costs and other underwriting expenses, less fees and other revenues, expressed as a percentage of net premiums earned) was 0.4 points lower on a year-over-year basis for 2016, compared to 2015, primarily reflecting a decrease in advertising spending in the second half of 2016 to help us achieve our profitability goal.

C. Growth

For our underwriting operations, we analyze growth in terms of both premiums and policies. Net premiums written represent the premiums from policies written during the period less any premiums ceded to reinsurers. Net premiums earned, which are a function of the premiums written in the current and prior periods, are earned as revenue over the life of the policy using a daily earnings convention. Policies in force, our preferred measure of growth since it removes the variability due to rate changes or mix shifts, represents all policies under which coverage was in effect as of the end of the period specified.

For the years ended December 31, (\$ in millions)	2016		2015		2014	
	\$	% Growth	\$	% Growth	\$	% Growth
NET PREMIUMS WRITTEN						
Personal Lines						
Agency	\$10,107.6	10%	\$ 9,230.1	1%	\$ 9,102.8	5%
Direct	9,711.9	15%	8,473.5	11%	7,656.4	12%
Total Personal Lines	19,819.5	12%	17,703.6	6%	16,759.2	8%
Commercial Lines	2,598.3	20%	2,171.2	15%	1,895.4	7%
Property	935.7	NA	689.6	NA	NA	NA
Total underwriting operations ¹	\$23,353.5	14%	\$20,564.0	10%	\$18,654.6	8%
NET PREMIUMS EARNED						
Personal Lines						
Agency	\$ 9,791.7	7%	\$ 9,108.6	0%	\$ 9,087.0	6%
Direct	9,396.5	15%	8,185.9	10%	7,474.0	11%
Total Personal Lines	19,188.2	11%	17,294.5	4%	16,561.0	8%
Commercial Lines	2,421.3	21%	1,995.9	9%	1,837.5	4%
Property	864.5	NA	609.1	NA	NA	NA
Total underwriting operations ¹	\$22,474.0	13%	\$19,899.1	8%	\$18,398.5	8%
December 31, (thousands)						
	2016		2015		2014	
	#	% Growth	#	% Growth	#	% Growth
POLICIES IN FORCE						
Agency auto	5,045.4	7%	4,737.1	0%	4,725.5	(2)%
Direct auto	5,348.3	9%	4,916.2	9%	4,505.5	7%
Total auto	10,393.7	8%	9,653.3	5%	9,231.0	2%
Special lines ²	4,263.1	4%	4,111.4	2%	4,030.9	1%
Personal Lines – total	14,656.8	6%	13,764.7	4%	13,261.9	2%
Commercial Lines	607.9	9%	555.8	8%	514.7	0%
Property	1,201.9	12%	1,076.5	NA	NA	NA

NA= not applicable since we began reporting our Property business as a segment on April 1, 2015, upon acquisition of a controlling interest in ARX; Property business written prior to that date was negligible.

¹For 2015, total underwriting operations include negative \$0.4 million written and earned premiums from reinstatement premiums paid to the reinsurers of our professional liability group business pursuant to reinsurance contracts.

²Includes insurance for motorcycles, ATVs, RVs, manufactured homes, watercraft, snowmobiles, and similar items.

At year-end 2016, we had a total of 16.5 million policies in force. The increase reflects both an increase in new applications and lengthening retention. For the Property business, part of the increase in policies in force for 2016 reflects the net addition of approximately 96,000 policies during the year, as a result of ARX entering into an exchange transaction (discussed below).

Although new policies are necessary to maintain a growing book of business, we continue to recognize the importance of retaining our current customers as a critical component of our continued growth. As shown in the tables below, we measure retention by policy life expectancy and the renewal ratio (i.e., the percent of policies that came up for renewal during the year that actually renewed). We disclose our changes in policy life expectancy using a trailing 12-month period since we believe this measure is indicative of recent experience, mitigates the effects of month-to-month variability, and addresses seasonality. We also review our customer retention for our personal auto products using a trailing 3-month period. Although using a trailing 3-month measure does not address seasonality and can reflect more volatility, this measure is more responsive to current experience and can be an indicator of how our retention rates are moving.

To analyze growth, we review new policies, rate levels, and the retention characteristics of our segments.

The Direct Business

	Growth Over Prior Year		
	2016	2015	2014
Auto: new applications	9%	13%	10%
renewal applications	10%	5%	8%
written premium per policy	5%	4%	3%
Auto retention measures:			
policy life expectancy – trailing 3-months	1%	5%	(4)%
trailing 12-months	4%	0%	3%
renewal ratio	(0.1)%	0.0%	0.5%

The Direct business includes business written directly by Progressive on the Internet, through mobile devices, and over the phone. Similar to the Agency business, the new application growth in the Direct business was attributable to the continued enhancements to our auto segmentation and underwriting models and Destination Era strategies.

Although both Agency and Direct auto benefited from the next generation of our auto product, the Direct growth was tempered by our reduction to advertising spending during the latter part of the year as we took actions to ensure our profit margin goals were achieved. During the second quarter 2016, we began to see the percentage growth in our Direct quotes decline and, toward the latter part of the year, quotes decreased on a year-over-year basis. Despite the decrease in the number of quotes, we did see that our conversion rate increased during this period. Our policies in force increased in all our consumer market tiers and, like in the Agency channel, experienced the strongest growth in our bundled auto/home customers.

E. Commercial Lines

	Growth Over Prior Year		
	2016	2015	2014
New applications	11%	15%	1%
Renewal applications	7%	0%	1%
Written premium per policy	10%	8%	4%
Policy life expectancy – trailing 12-months	6%	13%	0%

Our Commercial Lines business operates in the business auto, for-hire transportation, contractor, for-hire specialty, tow, and for-hire livery markets and is primarily written in the agency channel. Commercial Lines experienced positive new application growth in 2016. During the first half of 2016, there was a significant increase in our new application growth, reflecting strong demand and improved competitiveness in all of our business market targets. New application growth slowed during the second half of the year, in response to us raising rates and imposing underwriting restrictions, as claims costs increased, which allowed us to focus on targeted growth in more profitable business markets. These rate actions also contributed to the increase in our written premium per policy during the year.

Solid growth in renewal applications and the lengthening of policy life expectancy during 2016 primarily reflects the rate stability and improved competitive position, despite the actions taken during the second half of the year.

F. Property

	Growth Over Prior Year
	2016
New applications	17%
Renewal applications	7%
Written premium per policy	(7)%

Note: Property business prior to the April 1, 2015, acquisition of a controlling interest in ARX was negligible. New and renewal application growth was calculated using application counts from the last nine months of 2016, for comparability to application counts from 2015. Written premium per policy growth reflects 12 months of activity for 2016, compared to 9 months for 2015.

New application growth reflects state expansion during 2016 and the impact of an exchange transaction that occurred during the year. During 2016, ARX acquired 100% of the equity interest in an insurance subsidiary (and an affiliated company) that writes residential property insurance in Florida and disposed of 100% of the equity interest in an insurance subsidiary (and an affiliated company) that wrote commercial property insurance in three states. The residential property business we acquired writes significantly more applications, on average, each month, but at much lower rates than the commercial business we disposed. The commercial property business was not strategic to Progressive or ARX and presented a different risk profile from ASI's core residential property business. The exchange allows us to focus on growing the residential Property business.

ASI has exposure to catastrophe losses in the states in which it writes business. To help mitigate these risks, ASI purchases reinsurance from unaffiliated reinsurance companies (most of which are "A" rated by A.M. Best) and from a reinsurance company established as part of a catastrophe bond transaction. In addition, ASI purchases state-mandated hurricane reinsurance in Florida. During 2016, ASI ceded approximately 15% of the direct premiums written by it under these catastrophe reinsurance programs and ceded approximately 8% of direct premium written to the National Flood Insurance Program, compared to 10% and 7%, respectively, during the last nine months of 2015.

G. Other Indemnity

Our other indemnity businesses consist of managing our run-off businesses, including the run-off of our professional liability businesses. We only had three professional liability policies in force as of December 31, 2016, although we continue to process claims on expired policies. The operating losses that we incurred in each of the last three years primarily reflect actuarial reserve increases and adverse loss development on our run-off businesses, to the extent not reinsured.

H. Service Businesses

Our service businesses, which represent less than 0.5% of our total revenues and do not have a material effect on our overall operations, primarily include commercial automobile insurance procedures/plans (CAIP) and commission-based businesses.

I. Litigation

The Progressive Corporation and/or its insurance subsidiaries are named as defendants in various lawsuits arising out of claims made under insurance policies issued by the subsidiaries in the ordinary course of business. We consider all legal actions relating to such claims in establishing our loss and loss adjustment expense reserves.

In addition, various Progressive entities are named as defendants in a number of alleged class action or individual lawsuits arising out of the operations of the insurance subsidiaries. These cases include those alleging damages as a result of our practices in evaluating or paying medical or injury claims or benefits, including, but not limited to, personal injury protection, medical payments, uninsured motorist/underinsured motorist (UM/UIM), and bodily injury benefits; the utilization, content, or appearance of UM/UIM rejection forms; labor rates paid to auto body repair shops; and cases challenging other aspects of our claims or marketing practices or other business operations. Other insurance companies face many of these same issues. During the last three years, we have settled several class action and individual lawsuits. These settlements did not have a material effect on our financial condition, cash flows, or results of operations. See *Note 12 – Litigation* for a more detailed discussion.

J. Income Taxes

A deferred tax asset or liability is a tax benefit or expense that is expected to be realized in a future tax return. At both December 31, 2016 and 2015, we reported net deferred tax liabilities. We determined that we did not need a valuation allowance on our gross deferred tax assets for either year. Although realization of the gross deferred tax assets is not assured, management believes it is more likely than not that the gross deferred tax assets will be realized based on our expectation that we will be able to fully utilize the deductions that are ultimately recognized for tax purposes.

At December 31, 2016 and 2015, we had net current income taxes payable of \$41.2 million and \$25.1 million, respectively, which were reported as part of "other liabilities."

Our effective tax rate was 28% for 2016, compared to 32% and 33% for 2015 and 2014, respectively. The decrease in the effective rate during 2016 reflects \$58.7 million of federal tax benefits resulting from our investments in two renewable energy funds. All of the expected tax benefits from these investments were recorded in our income tax provision during the year.

There were no material changes in our uncertain tax positions.

See *Note 5 – Income Taxes* for further information.

IV. RESULTS OF OPERATIONS – INVESTMENTS

A. Portfolio Summary

At year-end 2016, the fair value of our investment portfolio was \$23.5 billion, approximately 12% greater than at year-end 2015, reflecting operating and investment returns and our debt issuance, which together more than offset our capital expenditures during the year, including share repurchases, debt servicing and repurchases, and shareholder dividends. Our investment income (interest and dividends) increased 5% in 2016 and 11% in 2015, as compared to the prior years, reflecting higher average assets in both periods. In 2016, we recognized \$110.8 million in net realized gains on securities held in our investment portfolios, compared to \$112.7 million and \$224.2 million in 2015 and 2014, respectively. During 2016, we also recorded a write-down of \$59.7 million related to an “other asset” impairment on two renewable energy tax credit fund investments.

B. Investment Results

We report total return to reflect more accurately our management philosophy governing the portfolio and our evaluation of investment results. The fully taxable equivalent (FTE) total return includes recurring investment income, adjusted to a fully taxable amount for certain securities that receive preferential tax treatment (e.g., municipal securities), net realized gains (losses) on securities, and changes in unrealized gains (losses) on investments.

The following summarizes investment results for the years ended December 31:

	2016	2015	2014
Pretax recurring investment book yield	2.3%	2.4%	2.4%
Weighted average FTE book yield	2.6%	2.7%	2.7%
FTE total return:			
Fixed-income securities	2.9%	1.7%	3.2%
Common stocks	12.8%	0.8%	12.6%
Total portfolio	4.0%	1.6%	4.5%

The higher fixed-income returns in 2016, as compared to 2015, reflect a narrowing of credit spreads (additional yield on non-treasury bonds relative to comparable treasury securities similar in maturity), which resulted in increased valuations, despite the rise in benchmark treasury rates. The higher common stock return in 2016, compared to 2015, reflected a higher overall equity market return in 2016.

A further break-down of our FTE total returns for our portfolio, including the net gains (losses) on our derivative positions, for the years ended December 31, follows:

	2016	2015	2014
Fixed-income securities:			
U.S. Treasury Notes	(0.5)%	0%	(0.3)%
Municipal bonds	2.3%	4.2%	6.0%
Corporate bonds	4.6%	2.7%	3.8%
Commercial mortgage-backed securities	3.9%	1.7%	5.1%
Collateralized mortgage obligations	2.7%	1.9%	2.6%
Other asset-backed securities and home-equity bonds	2.6%	1.2%	2.8%
Agency residential pass-through obligations	1.8%	0.6%	NA
Agency debt	(1.6)%	0.2%	NA
Preferred stocks	11.0%	0.4%	11.3%
Common stocks:			
Indexed	12.4%	1.8%	14.3%
Actively managed	20.8%	(7.0)%	2.9%

NA=Not applicable, since we did not hold these security types during 2014.

C. Portfolio Allocation

The composition of the investment portfolio at December 31, was:

(\$ in millions)	Fair Value	% of Total Portfolio	Duration (years)	Rating ¹
2016				
Fixed maturities	\$16,243.8	69.2%	2.6	A+
Nonredeemable preferred stocks	853.5	3.6	3.1	BBB-
Short-term investments	3,572.9	15.2	0.2	AA-
Total fixed-income securities	20,670.2	88.0	2.2	A+
Common equities	2,812.4	12.0	na	na
Total portfolio ^{2,3}	\$23,482.6	100.0%	2.2	A+
2015				
Fixed maturities	\$15,332.2	73.2%	2.1	A+
Nonredeemable preferred stocks	782.6	3.7	2.6	BBB-
Short-term investments	2,172.0	10.4	<0.1	A+
Total fixed-income securities	18,286.8	87.3	1.9	A+
Common equities	2,650.5	12.7	na	na
Total portfolio ^{2,3}	\$20,937.3	100.0%	1.9	A+

na = not applicable

¹Represents ratings at December 31, 2016 and 2015. Credit quality ratings are assigned by nationally recognized statistical rating organizations. To calculate the weighted average credit quality ratings, we weight individual securities based on fair value and assign a numeric score of 0-5, with non-investment-grade and non-rated securities assigned a score of 0-1. To the extent the weighted average of the ratings falls between AAA and AA+, we would assign an internal rating of AAA-.

²Our portfolio reflects the effect of unsettled security transactions and collateral on open derivative positions; at December 31, 2016, \$27.8 million was included in "other liabilities," compared to \$23.1 million in "other assets" at December 31, 2015.

³The total fair value of the portfolio at both December 31, 2016 and 2015, included \$1.3 billion of securities held in a consolidated, non-insurance subsidiary of the holding company, net of any unsettled security transactions.

Our asset allocation strategy is to maintain 0-25% of our portfolio in Group I securities, with the balance (75%-100%) of our portfolio in Group II securities.

We define Group I securities to include:

- common equities,
- nonredeemable preferred stocks,
- redeemable preferred stocks, except for 50% of investment-grade redeemable preferred stocks with cumulative dividends, which are included in Group II, and
- all other non-investment-grade fixed-maturity securities.

Group II securities include:

- short-term securities, and
- all other fixed-maturity securities, including 50% of investment-grade redeemable preferred stocks with cumulative dividends.

We believe this asset allocation strategy allows us to appropriately assess the risks associated with these securities for capital purposes and is in line with the treatment by our regulators.

The following tables show the composition of our Group I and Group II securities at December 31, 2016 and 2015:

(\$ in millions)	Fair Value	% of Total Portfolio
2016		
Group I securities:		
Non-investment-grade fixed maturities	\$ 356.2	1.5%
Redeemable preferred stocks ¹	135.3	0.6
Nonredeemable preferred stocks	853.5	3.6
Common equities	2,812.4	12.0
Total Group I securities	4,157.4	17.7
Group II securities:		
Other fixed maturities ²	15,752.3	67.1
Short-term investments	3,572.9	15.2
Total Group II securities	19,325.2	82.3
Total portfolio	\$23,482.6	100.0%
2015		
Group I securities:		
Non-investment-grade fixed maturities	\$ 611.7	2.9%
Redeemable preferred stocks ¹	155.1	0.7
Nonredeemable preferred stocks	782.6	3.7
Common equities	2,650.5	12.7
Total Group I securities	4,199.9	20.0
Group II securities:		
Other fixed maturities ²	14,565.4	69.6
Short-term investments	2,172.0	10.4
Total Group II securities	16,737.4	80.0
Total portfolio	\$20,937.3	100.0%

¹Includes non-investment-grade redeemable preferred stocks of \$78.7 million and \$75.9 million at December 31, 2016 and 2015, respectively.

²Includes investment-grade redeemable preferred stocks, with cumulative dividends, of \$56.6 million at December 31, 2016 and \$79.2 million at December 31, 2015.

To determine the allocation between Group I and Group II, we use the credit ratings from models provided by the National Association of Insurance Commissioners (NAIC) for classifying our residential and commercial mortgage-backed securities, excluding interest-only securities, and the credit ratings from nationally recognized statistical rating organizations (NRSRO) for all other debt securities. NAIC ratings are based on a model that considers the book price of our securities when assessing the probability of future losses in assigning a credit rating. As a result, NAIC ratings can vary from credit ratings issued by NRSROs. Management believes NAIC ratings more accurately reflect our risk profile when determining the asset allocation between Group I and II securities.

Unrealized Gains and Losses

As of December 31, 2016, our portfolio had pretax net unrealized gains, recorded as part of accumulated other comprehensive income, of \$1,449.1 million, compared to \$1,247.8 million at December 31, 2015.

During the year, the net unrealized gains in our fixed-income portfolio decreased \$17.4 million, the result of valuation declines primarily in our U.S. Treasury and municipal portfolios, in addition to sales of securities with net realized gains primarily in our U.S. Treasury, municipal, corporate, and nonredeemable preferred stock portfolios. The net unrealized gains in our common stock portfolio increased \$218.7 million during 2016, reflecting changes in the broad equity market during the year, adjusting for net gains recognized on security sales.

See *Note 2 – Investments* for further details on our gross unrealized gains and losses.

Other-Than-Temporary Impairment (OTTI)

Realized losses may include write-downs of securities determined to have had other-than-temporary declines in fair value. The write-down activity recorded in the comprehensive income statements for the years ended December 31, was as follows:

(millions)	Total Write-downs	Write-downs on Securities Sold	Write-downs on Securities Held at Period End
2016			
Redeemable preferred stocks ¹	\$25.4	\$ (0.1)	\$25.3
Common equities	1.7	(1.4)	0.3
Total investment portfolio	27.1	(1.5)	25.6
Other assets ²	59.7	0	59.7
Total write-downs	\$86.8	\$ (1.5)	\$85.3
2015			
Common equities	\$23.8	\$(15.1)	\$ 8.7
2014			
Common equities	\$ 7.9	\$ (0.7)	\$ 7.2

¹Reflects a change in our intent to hold the securities to a recovery of their respective cost bases.

²Reflects impairments of renewable energy investments under which the future pretax cash flows are expected to be less than the carrying value of the assets.

See *Critical Accounting Policies, Other-Than-Temporary Impairment*, for a complete discussion on our analysis regarding our treatment of OTTI.

Fixed-Income Securities

The fixed-income portfolio is managed internally, with the exception of the ARX portfolio, which was managed externally during 2015, and includes fixed-maturity securities, short-term investments, and nonredeemable preferred stocks. The fixed-maturity securities and short-term investments, as reported on the balance sheets at December 31, were comprised of the following:

(\$ in millions)	2016		2015	
Investment-grade fixed maturities: ¹				
Short/intermediate term	\$18,883.7	95.3%	\$16,136.0	92.2%
Long term	49.6	0.2	109.3	0.6
Non-investment-grade fixed maturities: ^{1,2}				
Short/intermediate term	866.8	4.4	1,246.3	7.1
Long term	16.6	0.1	12.6	0.1
Total	\$19,816.7	100.0%	\$17,504.2	100.0%

¹Long term includes securities with expected liquidation dates of 10 years or greater. Asset-backed securities are reported at their weighted average maturity based upon their projected cash flows, with the cash flows expected in periods of 10 years or greater reported as part of the long-term category. All other securities that do not have a single expected maturity date are reported at average maturity.

²Non-investment-grade fixed-maturity securities are non-rated or have a credit quality rating of an equivalent BB+ or lower, classified by ratings from NRSROs. The non-investment-grade securities based upon NAIC ratings and our Group I modeling were \$434.9 million and \$687.6 million at December 31, 2016 and 2015, respectively.

A primary exposure for the fixed-income portfolio is interest rate risk, which includes the change in value resulting from movements in the underlying market rates of debt securities held. We manage this risk by maintaining the portfolio's duration (a measure of the portfolio's exposure to changes in interest rates) between 1.5 and 5 years. The duration of the fixed-income portfolio was 2.2 years at December 31, 2016, compared to 1.9 years at December 31, 2015, reflecting our preference for shorter duration positioning during times of low interest rates. The distribution of duration and convexity (i.e., a measure of the speed at which the duration of a security is expected to change based on a rise or fall in interest rates) is monitored on a regular basis.

The duration distribution of our fixed-income portfolio, represented by the interest rate sensitivity of the comparable benchmark U.S. Treasury Notes, was:

Duration Distribution	2016	2015
1 year	25.9%	28.4%
2 years	13.4	15.6
3 years	24.2	18.1
5 years	25.8	27.7
10 years	10.9	10.4
20 years	(0.2)	0.1
30 years	0	(0.3)
Total fixed-income portfolio	100.0%	100.0%

The negative duration in the 20-year and 30-year categories arises from the variable rate nature of the dividends on some of our preferred stocks. If not called at their call dates, the dividends on these securities will reset from a fixed rate to a floating rate, which could cause these securities to trade at a discount and, therefore, with a negative duration as the securities' valuation will likely rise if the floating rate moves higher.

Another primary exposure related to the fixed-income portfolio is credit risk. This risk is managed by maintaining an A+ minimum average portfolio credit quality rating, as defined by NRSROs, which was successfully maintained during both 2016 and 2015.

The credit quality distribution of the fixed-income portfolio was:

Rating	2016	2015
AAA	35.7%	37.2%
AA	19.1	14.2
A	15.3	15.3
BBB	24.3	24.7
Non-investment grade/non-rated ¹	5.6	8.6
Total fixed-income portfolio	100.0%	100.0%

¹The ratings in the table above are assigned by NRSROs. The non-investment grade fixed-income securities based upon our Group I classification represented 3.4% of the total fixed-income portfolio at December 31, 2016, compared to 3.8% at December 31, 2015.

The changes in credit quality profile from December 31, 2015 were the result of transactions in our portfolio that shifted the mix within the various credit categories.

Our portfolio is also exposed to concentration risk. Our investment constraints limit investment in a single issuer, other than U.S. Treasury Notes or a state's general obligation bonds, to 2.5% of shareholders' equity, while the single issuer guideline on preferred stocks and/or non-investment-grade debt is 1.25% of shareholders' equity. Additionally, the guideline applicable to any state's general obligation bonds is 6% of shareholders' equity. We also consider sector concentration a risk, and we frequently evaluate the portfolio's sector allocation with regard to internal requirements and external market factors. We consider concentration risk both overall and in the context of individual asset classes, including but not limited to common equities, residential and commercial mortgage-backed securities, municipal bonds, and high-yield bonds. At December 31, 2016 and 2015, we were within all of the constraints described above.

We monitor prepayment and extension risk, especially in our structured product and preferred stock portfolios. Prepayment risk includes the risk of early redemption of security principal that may need to be reinvested at less attractive rates. Extension risk includes the risk that a security will not be redeemed when anticipated, and that the security that is extended will have a lower yield than a security we might be able to obtain by reinvesting the expected redemption principal. Our holdings of different types of structured debt and preferred securities help manage these risks. During 2016, we did not experience significant prepayment or extension of principal relative to our cash flow expectations in the portfolio.

Liquidity risk is another risk factor we monitor. Our overall portfolio remains very liquid and we believe that it is sufficient to meet expected near-term liquidity requirements. The short-to-intermediate duration of our portfolio provides a source of

liquidity, as we expect approximately \$3.8 billion, or 27%, of principal repayment from our fixed-income portfolio, excluding U.S. Treasury Notes and short-term investments, during 2017. Cash from interest and dividend payments provides an additional source of recurring liquidity.

The duration of our U.S. government obligations, which are included in the fixed-income portfolio, was comprised of the following at December 31, 2016:

(\$ in millions)	Fair Value	Duration (years)
<hr/>		
U.S. Treasury Notes		
Less than two years	\$ 259.5	1.4
Two to five years	1,943.0	3.8
Five to ten years	667.6	6.8
<hr/>		
Total U.S. Treasury Notes	<u>\$2,870.1</u>	4.3

As of December 31, 2016, we had no interest rate swaps or treasury futures.

ASSET-BACKED SECURITIES

Included in the fixed-income portfolio are asset-backed securities, which were comprised of the following at December 31:

(\$ in millions)	Fair Value	Net Unrealized Gains (Losses)	% of Asset-Backed Securities	Duration (years)	Rating (at period end)
2016					
Residential mortgage-backed securities:					
Prime collateralized mortgage obligations	\$ 609.9	\$ (3.9)	10.0%	0.9	A
Alt-A collateralized mortgage obligations ¹	170.8	(0.4)	2.8	1.0	BBB-
Collateralized mortgage obligations	780.7	(4.3)	12.8	0.9	A-
Home equity (sub-prime bonds)	678.0	13.0	11.1	<0.1	BBB
Residential mortgage-backed securities	1,458.7	8.7	23.9	0.4	BBB+
Agency residential pass-through obligations	40.6	(0.6)	0.7	4.1	AAA
Commercial mortgage-backed securities:					
Commercial mortgage-backed securities	2,115.2	(13.7)	34.6	3.7	A-
Commercial mortgage-backed securities: interest only	138.2	0.2	2.3	2.4	AAA-
Commercial mortgage-backed securities	2,253.4	(13.5)	36.9	3.7	A
Other asset-backed securities:					
Automobile	1,074.9	(0.4)	17.6	0.8	AAA-
Credit card	435.3	(0.4)	7.1	0.5	AAA
Other ²	840.9	1.0	13.8	1.2	AA
Other asset-backed securities	2,351.1	0.2	38.5	0.9	AAA-
Total asset-backed securities	\$6,103.8	\$ (5.2)	100.0%	1.8	A+
2015					
Residential mortgage-backed securities:					
Prime collateralized mortgage obligations	\$ 583.2	\$ (3.1)	9.4%	0.9	A-
Alt-A collateralized mortgage obligations ¹	269.2	0.2	4.3	1.2	BBB
Collateralized mortgage obligations	852.4	(2.9)	13.7	1.0	A-
Home equity (sub-prime bonds)	874.3	4.4	14.0	<0.1	BBB-
Residential mortgage-backed securities	1,726.7	1.5	27.7	0.4	BBB
Agency residential pass-through obligations	89.3	(1.0)	1.4	4.8	AAA
Commercial mortgage-backed securities:					
Commercial mortgage-backed securities	2,476.7	(13.8)	39.7	3.4	A+
Commercial mortgage-backed securities: interest only	176.5	1.3	2.9	2.6	AAA-
Commercial mortgage-backed securities	2,653.2	(12.5)	42.6	3.3	A+
Other asset-backed securities:					
Automobile	925.4	(2.2)	14.8	1.0	AAA-
Credit card	140.0	(0.2)	2.2	0.5	AAA
Other ²	702.5	(1.3)	11.3	0.7	AA+
Other asset-backed securities	1,767.9	(3.7)	28.3	0.8	AAA-
Total asset-backed securities	\$6,237.1	\$(15.7)	100.0%	1.8	A+

¹Represents structured securities with primary residential loans as collateral for which documentation standards for loan approval were less stringent than conventional loans; the collateral loans are often referred to as low documentation or no documentation loans.

²Includes equipment leases, manufactured housing, and other types of structured debt.

The decrease in asset-backed securities since December 31, 2015, is primarily due to a combination of maturities and security sales in the commercial mortgage-backed sector and maturities in the residential mortgage-backed sector. During the latter half of 2016, we had the opportunity to add to our other asset-backed securities category. We added securities in each of the three segments that were of short duration, generally less than 1 year, and high credit quality. These securities provided us with additional yield over other short-term securities without adding significantly to either our duration or credit risk profile.

Collateralized Mortgage Obligations (CMO) The following table details the credit quality rating and fair value of our CMOs, along with the loan classification and a comparison of the fair value at December 31, 2016, to our original investment value (adjusted for returns of principal, amortization, and write-downs):

Collateralized Mortgage Obligations (at December 31, 2016)					
(\$ in millions) Rating ¹	Non-agency prime	Alt-A	Government/GSE ²	Total	% of Total
AAA	\$166.5	\$ 15.4	\$ 75.4	\$257.3	33.0%
AA	32.8	31.2	5.8	69.8	8.9
A	62.6	15.4	31.4	109.4	14.0
BBB	32.6	30.9	134.5	198.0	25.4
Non-investment grade	68.3	77.9	0	146.2	18.7
Total	\$362.8	\$170.8	\$247.1	\$780.7	100.0%
Increase (decrease) in value ³	(0.9)%	(0.2)%	(0.2)%	(0.5)%	

¹The credit quality ratings in the table above are assigned by NRSROs; when we assign the NAIC ratings for our CMOs, \$112.3 million of our non-investment grade securities are rated investment grade and classified as Group II and \$33.9 million, or 4.3% of our total CMOs, are not rated by the NAIC and are classified as Group I.

²The securities in this category are insured by a Government Sponsored Entity (GSE) and/or collateralized by mortgage loans insured by the Federal Housing Administration (FHA) or the U.S. Department of Veteran Affairs (VA).

³Excludes net holding period gains and losses on certain hybrid securities.

The majority of our CMO portfolio is composed of non-GSE/FHA/VA mortgage securities. In the largest part of this portfolio, we took advantage of the securitization structure to have an underlying bond split into senior and subordinated classes. We own the senior classes, which provide extra credit support to our position. Most of the additions to our CMO portfolio during the year were in securities backed by prime mortgages.

Home-Equity Securities The following table shows the credit quality rating of our home-equity securities, along with a comparison of the fair value at December 31, 2016, to our original investment value (adjusted for returns of principal, amortization, and write-downs):

Home-Equity Securities (at December 31, 2016)		
(\$ in millions) Rating ¹	Total	% of Total
AAA	\$ 30.7	4.5%
AA	18.9	2.8
A	258.9	38.2
BBB	68.3	10.1
Non-investment grade	301.2	44.4
Total	\$678.0	100.0%
Increase (decrease) in value	1.9 %	

¹The credit quality ratings in the table above are assigned by NRSROs; when we assign the NAIC ratings for our home-equity securities, \$248.1 million of our non-investment grade securities are rated investment grade and classified as Group II and \$53.1 million, or 7.8% of our total home-equity securities, are not rated by the NAIC and are classified as Group I.

Our home-equity loan-backed security portfolio decreased in value, primarily due to returns of principal throughout the year. While we continue to view this as an attractive segment of the market, we were unable to meaningfully add to this portfolio due to the overall shrinking secondary market of available securities. In addition, although still attractive, current pricing, due to the tightening of spreads, has diminished the return potential for this sector.

Commercial Mortgage-Backed Securities (CMBS) The following table details the credit quality rating and fair value of our CMBS bond and interest only (IO) portfolios:

Commercial Mortgage-Backed Securities (at December 31, 2016) ¹							
(\$ in millions) Category	AAA	AA	A	BBB	Non-Investment Grade	Total	% of Total
Multi-borrower	\$160.5	\$ 30.8	\$ 10.9	\$ 0	\$10.3	\$ 212.5	9.4%
Single-borrower	227.8	257.1	488.0	851.9	77.9	1,902.7	84.5
Total CMBS bonds	388.3	287.9	498.9	851.9	88.2	2,115.2	93.9
IO	136.9	0	0	0	1.3	138.2	6.1
Total fair value	\$525.2	\$287.9	\$498.9	\$851.9	\$89.5	\$2,253.4	100.0%
% of Total fair value	23.3%	12.8%	22.1%	37.8%	4.0%	100.0%	

¹The credit quality ratings in the table above are assigned by NRSROs; when we assign the NAIC ratings, all of our CMBS bonds are rated investment grade and classified as Group II, and all non-investment grade IO securities are classified as Group I.

We continue to focus on single-borrower CMBS because we believe these transactions provide an opportunity to select investments based on real estate and underwriting criteria that fit our preferred credit risk and duration profile. Our multi-borrower, fixed-rate CMBS portfolio is concentrated in vintages with conservative underwriting. During the year, we reduced our CMBS bond portfolio by \$361.6 million through security sales, principal payments, and maturities, which increased our allocation of single-borrower CMBS from 76.8% to 84.5% and reduced our allocation of multi-borrower CMBS from 16.5% to 9.4%. Duration increased from 3.4 to 3.7 years during the year. The average credit quality was A- at December 31, 2016, compared to A+ at December 31, 2015.

With the exception of \$134.3 million in Freddie Mac senior multi-family IOs, we have no multi-borrower deal IOs originated after 2006.

MUNICIPAL SECURITIES

Included in the fixed-income portfolio at December 31, 2016 and 2015, were \$2,502.6 million and \$2,721.4 million, respectively, of state and local government obligations. These securities had a duration of 3.0 years and an overall credit quality rating of AA (excluding the benefit of credit support from bond insurance) at December 31, 2016, compared to 3.2 years and AA at December 31, 2015. These securities had net unrealized losses of \$6.9 million at December 31, 2016, compared to net unrealized gains of \$43.8 million at December 31, 2015.

The following table details the credit quality rating of our municipal securities at December 31, 2016, without the benefit of credit or bond insurance:

Municipal Securities (at December 31, 2016)			
(millions) Rating	General Obligations	Revenue Bonds	Total
AAA	\$358.8	\$ 538.0	\$ 896.8
AA	390.8	868.3	1,259.1
A	1.6	336.9	338.5
BBB	5.4	2.8	8.2
Total	\$756.6	\$1,746.0	\$2,502.6

Included in revenue bonds were \$885.1 million of single family housing revenue bonds issued by state housing finance agencies, of which \$646.7 million were supported by individual mortgages held by the state housing finance agencies and \$238.4 million were supported by mortgage-backed securities. Of the programs supported by mortgage-backed securities, approximately 25% were collateralized by Fannie Mae and Freddie Mac mortgages; the remaining 75% were collateralized by Ginnie Mae loans, which are fully guaranteed by the U.S. government. Of the programs supported by individual mortgages held by the state housing finance agencies, the overall credit quality rating was AA+. Most of these mortgages were supported by FHA, VA, or private mortgage insurance providers.

The decrease in municipal securities since December 31, 2015 was primarily due to sales and maturity activity during the year, as well as decreased valuation as a result of rising interest rates.

CORPORATE SECURITIES

Included in our fixed-income securities at December 31, 2016 and 2015, were \$4,550.9 million and \$3,691.6 million, respectively, of corporate securities. These securities had a duration of 2.7 years and 3.5 years at December 31, 2016 and 2015, respectively, and an overall credit quality rating of BBB at both December 31, 2016 and 2015. These securities had net unrealized losses of \$7.0 million and \$21.7 million at December 31, 2016 and 2015, respectively.

We increased our allocation to corporate securities throughout 2016. We were able to add a significant amount of shorter maturity corporate bonds at attractive valuations as money market reform caused a decrease in demand for these bonds during the second half of 2016.

The table below shows the exposure break-down by sector and rating at year-end:

(millions) Sector	AAA	AA	A	BBB	Non-Investment Grade/ Non-Rated	Total
Consumer	\$ 0	\$ 0	\$411.0	\$1,582.7	\$ 90.2	\$2,083.9
Industrial	0	0	137.9	793.7	58.9	990.5
Communications	0	0	81.2	210.9	29.4	321.5
Financial Services	57.5	62.4	241.4	301.2	78.6	741.1
Agency	0.5	1.0	0	0	0	1.5
Technology	0	6.0	24.5	108.9	0.9	140.3
Basic Materials	0	0	0	55.7	9.8	65.5
Energy	0	34.1	95.4	77.1	0	206.6
Total	\$58.0	\$103.5	\$991.4	\$3,130.2	\$267.8	\$4,550.9

At December 31, 2016, we held \$731.5 million of U.S. dollar-denominated corporate bonds issued by companies that are domiciled, or whose parent companies are domiciled, in the U.K. (\$185.4 million) and other European countries (\$546.1 million), primarily in the consumer, financial, and communications industries. Between the Brexit vote and the end of 2016, our U.K. holdings have not experienced any significant negative price movement. We had no direct exposure to southern European-domiciled companies at December 31, 2016.

PREFERRED STOCKS – REDEEMABLE AND NONREDEEMABLE

We hold both redeemable (i.e., mandatory redemption dates) and nonredeemable (i.e., perpetual with call dates) preferred stocks. At December 31, 2016, we held \$191.9 million in redeemable preferred stocks and \$853.5 million in nonredeemable preferred stocks, compared to \$234.3 million and \$782.6 million, respectively, at December 31, 2015. Our preferred stock portfolio had net unrealized gains of \$122.4 million and \$81.4 million at December 31, 2016 and 2015, respectively.

Preferred returns were strong in 2016. Because of their higher risk, preferred stocks offer a higher yield than the majority of the fixed-income portfolio. We continue to view preferred stocks as an attractive sector. However, we took advantage of higher valuations to reduce some of our positions during the year.

Approximately 78% of our preferred stock securities are fixed-rate securities, and 22% are floating-rate securities. All of our preferred securities have call or mandatory redemption features. All of our fixed-rate securities will convert to floating-rate dividend payments if not called at their initial call date, providing some protection against extension risk in the event the issuer elects not to call such securities at their initial call date.

Our preferred stock portfolio had a duration of 2.4 years at December 31, 2016, compared to 2.1 years at December 31, 2015. The interest rate duration of our preferred securities is calculated to reflect the call, floor, and floating rate features. Although a preferred security may remain outstanding if not called, its interest rate duration will reflect the variable nature of the dividend. The overall credit quality rating was BBB- at both December 31, 2016 and December 31, 2015. Our

non-investment-grade preferred stocks were primarily with issuers that maintain investment-grade senior debt ratings. The table below shows the exposure break-down by sector and rating at year-end:

Preferred Stocks (at December 31, 2016)

(millions) Sector	A	BBB	Non-Investment Grade/ Non- Rated	Total
Financial services				
U.S. banks	\$ 71.4	\$391.8	\$235.1	\$ 698.3
Foreign banks	0	0	10.5	10.5
Insurance	0	40.5	39.0	79.5
Other financial institutions	58.6	35.2	30.9	124.7
Total financial services	130.0	467.5	315.5	913.0
Industrials	0	61.8	39.7	101.5
Utilities	0	30.9	0	30.9
Total	\$130.0	\$560.2	\$355.2	\$1,045.4

We also face the risk that dividend payments on our preferred stock holdings could be deferred for one or more periods or skipped entirely. As of December 31, 2016, all of our preferred securities continued to pay their dividends in full and on time. Approximately 79% of our preferred stock securities pay dividends that have tax preferential characteristics, while the balance pay dividends that are fully taxable.

At December 31, 2016, we held \$10.5 million of U.S. dollar-denominated nonredeemable preferred stocks issued by financial institutions that are domiciled, or whose parent companies are domiciled, in European countries. We had no direct exposure to U.K. and southern European-domiciled companies at December 31, 2016.

Common Equities

Common equities, as reported on the balance sheets at December 31, were comprised of the following:

(\$ in millions)	2016		2015	
Indexed common stocks	\$2,676.2	95.1%	\$2,532.3	95.5%
Managed common stocks	135.8	4.8	117.9	4.4
Total common stocks	2,812.0	99.9	2,650.2	99.9
Other risk investments	0.4	0.1	0.3	0.1
Total common equities	\$2,812.4	100.0%	\$2,650.5	100.0%

In our indexed common stock portfolio, our individual holdings are selected based on their contribution to the correlation with the Russell 1000 Index. For both periods reported in the table above, the GAAP basis total return was within the desired tracking error when compared to the index. We held 835 out of 999, or 84%, of the common stocks comprising the index at December 31, 2016, which made up 94% of the total market capitalization of the index. During the fourth quarter of 2016, we reallocated about \$150 million from our indexed portfolio into our fixed-income portfolio.

The actively managed common stock portfolio is managed by an external investment manager. At December 31, 2016, the fair value of the actively managed portfolio was \$135.8 million, compared to a cost basis of \$102.0 million.

Other risk investments include private equity investments and limited partnership interests in private equity and mezzanine investment funds, which have no off-balance-sheet exposure or contingent obligations.

The following is a summary of our indexed common stock portfolio holdings by sector compared to the Russell 1000 Index composition:

Sector	Equity Portfolio Allocation at December 31, 2016	Russell 1000 Allocation at December 31, 2016	Russell 1000 Sector Return in 2016
Consumer discretionary	13.9%	14.6%	6.3%
Consumer staples	7.3	8.3	5.5
Financial services	19.7	20.4	16.5
Health care	12.6	12.6	(2.9)
Materials and processing	3.5	3.7	20.0
Other energy	7.5	7.2	25.9
Producer durable	10.0	10.6	19.4
Technology	17.9	16.9	14.1
Utilities	5.5	5.7	20.4
Other equity	2.1	NA	NA
Total common stocks	100.0%	100.0%	12.0%

NA = Not Applicable

Derivative Instruments

We use interest rate swaps and treasury futures to manage the fixed-income portfolio. We did not have any interest rate swaps or treasury futures at December 31, 2016. We closed interest rate swaps with a notional value of \$750 million and treasury futures with a notional value of \$135 million during 2016. At both December 31, 2015 and 2014, we held \$750 million notional value swaps. We closed treasury futures with a notional value of \$691 million during 2015; we did not have any treasury futures during 2014. We recorded a net realized loss of \$19.0 million on our closed interest rate swap positions during 2016, compared to net realized losses of \$23.4 million and \$64.6 million recorded on our open swap positions as of December 31, 2015 and 2014, respectively. We recorded net realized gains of \$0.3 million and \$2.5 million on our treasury futures during 2016 and 2015, respectively.

See *Note 2 – Investments* for further discussion on our derivative instruments.

V. CRITICAL ACCOUNTING POLICIES

Progressive is required to make certain estimates and assumptions when preparing its financial statements and accompanying notes in conformity with GAAP. Actual results could differ from those estimates in a variety of areas. The three areas that we view as most critical with respect to the application of estimates and assumptions are the establishment of our loss reserves, the method of determining impairments in our investment portfolio, and our analysis of goodwill for impairment.

A. Loss and LAE Reserves

Loss and loss adjustment expense (LAE) reserves represent our best estimate of our ultimate liability for losses and LAE relating to events that occurred prior to the end of any given accounting period but have not yet been paid. At December 31, 2016, we had \$9.6 billion of net loss and LAE reserves, which included \$7.7 billion of case reserves and \$1.9 billion of incurred but not recorded (IBNR) reserves. Personal auto liability and commercial auto liability reserves represent approximately 95% of our total carried net reserves. For this reason, the following discussion focuses on our vehicle businesses.

We do not review our loss reserves for the vehicle businesses on a macro level and, therefore, do not derive a companywide range of reserves to compare to a standard deviation. Instead, we review a large majority of our reserves by product/state combination on a quarterly time frame, with the remaining reserves generally reviewed on a semiannual basis. A change in our scheduled reviews of a particular subset of the business depends on the size of the subset or emerging issues relating to the product or state. By reviewing the reserves at such a detailed level, we have the ability to identify and measure variances in the trends by state, product, and line coverage that otherwise would not be seen on a consolidated basis. We believe our comprehensive process of reviewing at a subsegment level provides us more meaningful estimates of our aggregate loss reserves.

In analyzing the ultimate accident year loss and LAE experience, our actuarial staff reviews in detail, at the subsegment level, frequency (number of losses per earned car year), severity (dollars of loss per each claim), and average premium (dollars of premium per earned car year) of loss, as well as the frequency and severity of our LAE costs. The loss ratio, a primary measure of loss experience, is equal to the product of frequency times severity divided by the average premium. The average premium for personal and commercial auto businesses is not estimated. The actual frequency experienced will vary depending on the change in mix of class of drivers insured by Progressive, but the frequency projections for these lines of business are generally stable in the short term, because a large majority of the parties involved in an accident report their claims within a short time period after the occurrence. The severity experienced by Progressive is much more difficult to estimate, especially for injury claims, since severity is affected by changes in underlying costs, such as medical costs, jury verdicts, and regulatory changes. In addition, severity will vary relative to the change in our mix of business by limit.

Assumptions regarding needed reserve levels made by the actuarial staff take into consideration influences on available historical data that reduce the predictiveness of our projected future loss costs. Internal considerations that are process-related, which generally result from changes in our claims organization's activities, include claim closure rates, the number of claims that are closed without payment, and the level of the claims representatives' estimates of the needed case reserve for each claim. These changes and their effect on the historical data are studied at the state level versus on a larger, less indicative, countrywide basis.

External items considered include the litigation atmosphere, state-by-state changes in medical costs, and the availability of services to resolve claims. These also are better understood at the state level versus at a more macro, countrywide level.

The manner in which we consider and analyze the multitude of influences on the historical data, as well as how loss reserves affect our financial results, is discussed in more detail in our *Report on Loss Reserving Practices*, which was filed on August 12, 2016 via Form 8-K. There have been no significant changes to our reserving practices since this report was filed.

At December 31, 2016, Progressive had \$11.4 billion of carried gross reserves and \$9.6 billion of net reserves (net of reinsurance recoverables on unpaid losses). Our net reserve balance implicitly assumes that the loss and LAE severity for accident year 2016 over accident year 2015 would be 3.0% higher for personal auto liability and 9.9% higher for commercial auto liability. As discussed above, the severity estimates are influenced by many variables that are difficult to precisely quantify and which influence the final amount of claims settlement. That, coupled with changes in internal claims practices, the legal environment, and state regulatory requirements, requires significant judgment in the estimate of the needed reserves to be carried.

The following table highlights what the effect would be to our carried loss and LAE reserves, on a net basis, as of December 31, 2016, if during 2017 we were to experience the indicated change in our estimate of severity for the 2016 accident year (i.e., claims that occurred in 2016):

(millions)	Estimated Changes in Severity for Accident Year 2016				
	-4%	-2%	As Reported	+2%	+4%
Personal auto liability	\$7,008.6	\$7,188.6	\$7,368.6	\$7,548.6	\$7,728.6
Commercial auto liability	1,707.2	1,733.2	1,759.2	1,785.2	1,811.2
Other ¹	439.2	439.2	439.2	439.2	439.2
Total	\$9,155.0	\$9,361.0	\$9,567.0	\$9,773.0	\$9,979.0

¹Includes reserves for personal and commercial auto physical damage claims and our non-auto lines of business; no change in estimates is presented due to the immaterial level of these reserves.

Note: Every percentage point change in our estimate of severity for the 2016 accident year would affect our personal auto liability reserves by \$90.0 million and our commercial auto reserves by \$13.0 million.

Our 2016 year-end loss and LAE reserve balance also includes claims from prior years. Claims that occurred in 2016, 2015, and 2014, in the aggregate, accounted for approximately 93% of our reserve balance. If during 2017 we were to experience the indicated change in our estimate of severity for the total of the prior three accident years (i.e., 2016, 2015, and 2014), the effect to our year-end 2016 reserve balances would be as follows:

(millions)	Estimated Changes in Severity for Accident Years 2016, 2015, and 2014				
	-4%	-2%	As Reported	+2%	+4%
Personal auto liability	\$6,389.4	\$6,879.0	\$7,368.6	\$ 7,858.2	\$ 8,347.8
Commercial auto liability	1,630.8	1,695.0	1,759.2	1,823.4	1,887.6
Other ¹	439.2	439.2	439.2	439.2	439.2
Total	\$8,459.4	\$9,013.2	\$9,567.0	\$10,120.8	\$10,674.6

¹Includes reserves for personal and commercial auto physical damage claims and our non-auto lines of business; no change in estimates is presented due to the immaterial level of these reserves.

Note: Every percentage point change in our estimate of severity for the 2016, 2015, and 2014 accident years would affect our personal auto liability reserves by \$244.8 million and our commercial auto reserves by \$32.1 million.

Our best estimate of the appropriate amount for our reserves as of year-end 2016 is included in our financial statements for the year. Our goal is to ensure that total reserves are adequate to cover all loss costs, while sustaining minimal variation from the time reserves are initially established until losses are fully developed. At the point in time when reserves are set, we have no way of knowing whether our reserve estimates will prove to be high or low, or whether one of the alternative scenarios discussed above is “reasonably likely” to occur. The above tables show the potential favorable or unfavorable development we will realize if our estimates miss by 2% or 4%.

B. Other-Than-Temporary Impairment (OTTI)

Realized losses may include write-downs of securities held in our investment portfolios determined to have had other-than-temporary declines in fair value. We routinely monitor our investment portfolio for pricing changes that might indicate potential impairments and perform detailed reviews of securities with unrealized losses. In such cases, changes in fair value are evaluated to determine the extent to which such changes are attributable to: (i) fundamental factors specific to the issuer, such as financial conditions, business prospects, or other factors; (ii) market-related factors, such as interest rates or equity market declines (e.g., negative return at either a sector index level or at the broader market level); or (iii) credit-related losses, where the present value of cash flows expected to be collected is lower than the amortized cost basis of the security.

Fixed-income securities and common equities with declines attributable to issuer-specific fundamentals are reviewed to identify available evidence, circumstances, and influences to estimate the potential for, and timing of, recovery of the investment’s impairment. An OTTI loss is deemed to have occurred when the potential for recovery does not satisfy the criteria set forth in the current accounting guidance.

For fixed-income investments with unrealized losses due to market- or sector-related declines, the losses are not deemed to qualify as other-than-temporary if we do not have the intent to sell the investments, and it is more likely that we will not be required to sell the investments prior to the periods of time that we anticipate to be necessary for the investments to recover their cost bases. In general, our policy for common equity securities with market- or sector-related declines is to recognize impairment losses on individual securities with losses we cannot reasonably conclude will recover in the near term under historical conditions when: (i) we are able to objectively determine that the loss is other-than-temporary, or (ii) the security has been in such a loss position for three consecutive quarters.

When a security in our fixed-maturity portfolio has an unrealized loss and we intend to sell the security, or it is more likely than not that we will be required to sell the security, we write down the security to its current fair value and recognize the entire unrealized loss through the comprehensive income statement as a realized loss. If a fixed-maturity security has an unrealized loss and it is more likely than not that we will hold the debt security until recovery (which could be maturity), then we determine if any of the decline in value is due to a credit loss (i.e., where the present value of cash flows expected to be collected is lower than the amortized cost basis of the security) and, if so, we will recognize that portion of the impairment in net income as part of the comprehensive income statement as a realized loss; any remaining unrealized loss on the security is considered to be due to other factors (e.g., interest rate and credit spread movements) and is reflected in other comprehensive income as part of shareholders' equity, along with unrealized gains or losses on securities that are not deemed to be other-than-temporarily impaired.

The following table stratifies the gross unrealized losses in our fixed-income and common equity portfolios at December 31, 2016, by the duration in a loss position and magnitude of the loss as a percentage of the cost of the security:

(millions)	Fair Value	Total Gross Unrealized Losses	Decline of Investment Value			
			>15%	>25%	>35%	>45%
Fixed income:						
Unrealized loss for less than 12 months	\$ 9,607.6	\$105.0	\$ 0	\$ 0	\$0	\$0
Unrealized loss for 12 months or greater	1,546.2	32.7	2.0	0	0	0
Total	\$11,153.8	\$137.7	\$2.0	\$ 0	\$0	\$0
Common equity:						
Unrealized loss for less than 12 months	\$ 19.7	\$ 1.7	\$0.7	\$0.1	\$0	\$0
Unrealized loss for 12 months or greater	2.4	0.4	0	0	0	0
Total	\$ 22.1	\$ 2.1	\$0.7	\$0.1	\$0	\$0

We completed a thorough review of the existing securities in these loss categories and determined that, applying the procedures and criteria discussed above, these securities were not other-than-temporarily impaired. We do not intend to sell these securities. We also determined that it is more likely that we will not be required to sell these securities, for the periods of time necessary to recover the respective cost bases of these securities, and that there are no additional credit-related impairments on our debt securities.

Since total unrealized losses are already a component of other comprehensive income and included in shareholders' equity, any recognition of these losses as additional OTTI losses would have no effect on our comprehensive income, book value, or reported investment total return.

C. Goodwill

Substantially all of our goodwill relates to the April 1, 2015, acquisition of a controlling interest in ARX. We test our goodwill balance for impairment at the reporting unit level annually as of October 1, or more frequently if indicators of impairment exist. Below our reportable segment level, we have identified reporting units that are expected to receive the future economic benefits created through this acquisition. These reporting units represent the lowest operational level of our business for which management regularly reviews discrete financial operating results.

To test for impairment, we may elect to perform a qualitative or quantitative analysis, based on our judgment of the relevant qualitative factors that exist at the time we perform the valuation, including the consideration of the length of time lapsed since the previous quantitative assessment. For 2016, we elected to performed a quantitative analysis to test for impairment of the goodwill allocated to our Agency auto and ARX reporting units.

The quantitative goodwill impairment assessment consists of a two-step analysis, if necessary. The first step is to compare the fair value of a reporting unit to its carrying value, which includes the amount of goodwill allocated to the unit. We use discounted cash flow models to determine the fair value of a reporting unit. The assumptions used in these models are consistent with those we believe hypothetical marketplace participants would use. If the fair value of the reporting unit is less than its carrying value, the second step of the impairment test must be performed in order to determine whether impairment loss exists. The second step compares the implied fair value of the reporting unit's goodwill with the carrying amount of that goodwill. If the carrying amount of the reporting unit's goodwill exceeds its implied fair value, an impairment charge must be recognized in an amount equal to that excess.

As of the evaluation date, we concluded that there were no indicators of impairment to goodwill in either of our reporting units. We believe the amount of goodwill recorded is recoverable for both our Agency auto and ARX reporting units; however, this does not provide assurance that goodwill will not be impaired in future periods. For additional information on goodwill, see *Note 16 – Goodwill and Intangible Assets*.

Safe Harbor Statement Under the Private Securities Litigation Reform Act of 1995: *Investors are cautioned that certain statements in this report not based upon historical fact are forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. These statements often use words such as “estimate,” “expect,” “intend,” “plan,” “believe,” and other words and terms of similar meaning, or are tied to future periods, in connection with a discussion of future operating or financial performance. Forward-looking statements are based on current expectations and projections about future events, and are subject to certain risks, assumptions and uncertainties that could cause actual events and results to differ materially from those discussed herein. These risks and uncertainties include, without limitation, uncertainties related to estimates, assumptions, and projections generally; inflation and changes in general economic conditions (including changes in interest rates and financial markets); the possible failure of one or more governmental, corporate, or other entities to make scheduled debt payments or satisfy other obligations; the potential or actual downgrading by one or more rating agencies of our securities or governmental, corporate, or other securities we hold; the financial condition of, and other issues relating to the strength of and liquidity available to, issuers of securities held in our investment portfolios and other companies with which we have ongoing business relationships, including reinsurers and other counterparties to certain financial transactions; the accuracy and adequacy of our pricing, loss reserving, and claims methodologies; the competitiveness of our pricing and the effectiveness of our initiatives to attract and retain more customers; initiatives by competitors and the effectiveness of our response; our ability to obtain regulatory approval for the introduction of products to new jurisdictions, for requested rate changes and the timing thereof and for any proposed acquisitions; the effectiveness of our brand strategy and advertising campaigns relative to those of competitors; legislative and regulatory developments at the state and federal levels, including, but not limited to, matters relating to vehicle and homeowners insurance, health care reform and tax law changes; the outcome of disputes relating to intellectual property rights; the outcome of litigation or governmental investigations that may be pending or filed against us; severe weather conditions and other catastrophe events; the effectiveness of our reinsurance programs; changes in vehicle usage and driving patterns, which may be influenced by oil and gas prices; changes in residential occupancy patterns and the effects of the emerging “sharing economy”; advancements in vehicle or home technology or safety features, such as accident and loss prevention technologies or the development of autonomous or partially autonomous vehicles; our ability to accurately recognize and appropriately respond in a timely manner to changes in loss frequency and severity trends; technological advances; acts of war and terrorist activities; our ability to maintain the uninterrupted operation of our facilities, systems (including information technology systems), and business functions, and safeguard personal and sensitive information in our possession; our continued access to and functionality of third-party systems that are critical to our business; restrictions on our subsidiaries’ ability to pay dividends to The Progressive Corporation; possible impairment of our goodwill or intangible assets if future results do not adequately support either, or both, of these items; court decisions, new theories of insurer liability or interpretations of insurance policy provisions and other trends in litigation; changes in health care and auto and property repair costs; and other matters described from time to time in our releases and publications, and in our periodic reports and other documents filed with the United States Securities and Exchange Commission. In addition, investors should be aware that generally accepted accounting principles prescribe when a company may reserve for particular risks, including litigation exposures. Accordingly, results for a given reporting period could be significantly affected if and when a reserve is established for one or more contingencies. Also, our regular reserve reviews may result in adjustments of varying magnitude as additional information regarding claims activity becomes known. Reported results, therefore, may be volatile in certain accounting periods.*

Supplemental Information

The Progressive Corporation and Subsidiaries

Quarterly Financial and Common Share Data

(unaudited)

(millions – except per share amounts)

Quarter	Total Revenues	Net Income	Net Income Attributable to Progressive ²	Per Share ³	Stock Price ¹			Rate of Return ⁴	Dividends Declared Per Share ⁵
					High	Low	Close		
2016									
1	\$ 5,557.5	\$ 258.7	\$ 258.2	\$0.44	\$35.27	\$29.32	\$35.14		\$ 0
2	5,819.3	194.9	190.9	0.33	35.54	31.14	33.50		0
3	5,935.0	205.5	198.7	0.34	34.29	30.54	31.50		0
4	6,129.6	398.1	383.2	0.66	35.95	30.66	35.50		0.6808
	\$23,441.4	\$1,057.2	\$1,031.0	\$1.76	\$35.95	\$29.32	\$35.50	14.7%	\$0.6808
2015									
1	\$ 4,895.3	\$ 295.6	\$ 295.6	\$0.50	\$27.90	\$25.23	\$27.20		\$ 0
2	5,283.3	368.5	363.3	0.62	28.50	26.44	27.83		0
3	5,273.8	286.5	278.3	0.47	31.70	27.23	30.64		0
4	5,401.4	349.9	330.4	0.56	33.95	30.09	31.80		0.8882
	\$20,853.8	\$1,300.5	\$1,267.6	\$2.15	\$33.95	\$25.23	\$31.80	20.9%	\$0.8882
2014									
1	\$ 4,707.6	\$ 321.3	\$ 321.3	\$0.54	\$27.30	\$22.53	\$24.22		\$ 0
2	4,741.5	293.4	293.4	0.49	26.03	23.40	25.36		0
3	4,766.1	296.1	296.1	0.50	25.63	23.20	25.28		0
4	5,176.2	370.2	370.2	0.63	27.52	24.16	26.99		0.6862
	\$19,391.4	\$1,281.0	\$1,281.0	\$2.15	\$27.52	\$22.53	\$26.99	5.3%	\$0.6862

¹Prices are as reported on the consolidated transaction reporting system. Progressive's common shares are listed on the New York Stock Exchange under the symbol PGR.

²Prior to the April 1, 2015 acquisition of a controlling interest in ARX, net income attributable to Progressive was equivalent to net income.

³Based on net income attributable to Progressive. The sum may not equal the total because the average equivalent shares differ in the quarterly and annual periods.

⁴Represents annual rate of return, assuming dividend reinvestment.

⁵Progressive maintains an annual variable dividend policy under which a dividend is typically declared each December and paid early the following year.

The Progressive Corporation and Subsidiaries
Ten Year Summary – Selected Financial Information
(unaudited)

(millions – except ratios, policies in force, per share amounts, and number of people employed)	2016	2015	2014	2013	2012
Net premiums written	\$23,353.5	\$20,564.0	\$18,654.6	\$17,339.7	\$16,372.7
Growth	14%	10%	8%	6%	8%
Net premiums earned	\$22,474.0	\$19,899.1	\$18,398.5	\$17,103.4	\$16,018.0
Growth	13%	8%	8%	7%	7%
Policies in force (thousands):					
Personal Lines	14,656.8	13,764.7	13,261.9	13,056.4	12,735.3
Growth	6%	4%	2%	3%	4%
Commercial Lines	607.9	555.8	514.7	514.6	519.6
Growth	9%	8%	0%	(1)%	2%
Property ¹	1,201.9	1,076.5	—	—	—
Growth ¹	12%	NM	—	—	—
Total revenues	\$23,441.4	\$20,853.8	\$19,391.4	\$18,170.9	\$17,083.9
Underwriting margins: ²					
Personal Lines	4.7%	6.5%	6.7%	6.6%	4.4%
Commercial Lines	6.4%	15.9%	17.2%	6.5%	5.2%
Property ¹	3.8%	10.1%	—	—	—
Total underwriting operations	4.9%	7.5%	7.7%	6.5%	4.4%
Net income (loss) attributable to Progressive	\$ 1,031.0	\$ 1,267.6	\$ 1,281.0	\$ 1,165.4	\$ 902.3
Per share ³	1.76	2.15	2.15	1.93	1.48
Average equivalent shares ³	585.0	589.2	594.8	603.6	607.8
Comprehensive income (loss) attributable to Progressive	\$ 1,164.0	\$ 1,044.9	\$ 1,352.4	\$ 1,246.1	\$ 1,080.8
Total assets	\$33,427.5	\$29,819.3	\$25,787.6	\$24,408.2	\$22,694.7
Debt outstanding	3,148.2	2,707.9	2,164.7	1,860.9	2,063.1
Redeemable noncontrolling interest	483.7	464.9	—	—	—
Total shareholders' equity	7,957.1	7,289.4	6,928.6	6,189.5	6,007.0
Statutory surplus	8,560.0	7,575.5	6,442.8	5,991.0	5,605.2
Common shares outstanding	579.9	583.6	587.8	595.8	604.6
Common share price:					
High	\$ 35.95	\$ 33.95	\$ 27.52	\$ 28.54	\$ 23.41
Low	29.32	25.23	22.53	21.36	19.01
Close (at December 31)	35.50	31.80	26.99	27.27	21.10
Market capitalization	\$20,586.5	\$18,558.5	\$15,864.7	\$16,247.5	\$12,757.1
Book value per common share	13.72	12.49	11.79	10.39	9.94
Ratios:					
Return on average shareholders' equity:					
Net income (loss) attributable to Progressive	13.2%	17.2%	19.1%	17.7%	14.5%
Comprehensive income (loss) attributable to Progressive	14.9%	14.2%	20.1%	19.0%	17.4%
Debt to total capital ⁴	28.3%	27.1%	23.8%	23.1%	25.6%
Price to earnings	20.2	14.8	12.6	14.1	14.3
Price to book	2.6	2.5	2.3	2.6	2.1
Earnings to fixed charges	10.7x	14.2x	16.4x	14.7x	11.0x
Net premiums written to statutory surplus	2.7	2.7	2.9	2.9	2.9
Statutory combined ratio	94.8	91.8	92.1	93.4	95.2
Dividends declared per share ⁵	\$ 0.6808	\$ 0.8882	\$ 0.6862	\$ 1.4929	\$ 1.2845
Number of people employed ¹	31,721	28,580	26,501	26,145	25,889

¹We began reporting our Property business as a segment on April 1, 2015, when we acquired a controlling interest in ARX; therefore, year-over-year growth in policies in force for 2015 is not meaningful (NM).

The number of people employed in 2016 and 2015 includes 692 and 620 ARX employees, respectively.

²Underwriting margins are calculated as pretax underwriting profit (loss), as defined in *Note 10 – Segment Information*, as a percentage of net premiums earned.

³Amounts reflect basic earnings per share and basic average equivalent shares for 2008 since we reported a net loss; all other periods are presented on a diluted basis.

(millions – except ratios, policies in force, per share amounts, and number of people employed)

	2011	2010	2009	2008	2007
Net premiums written	\$15,146.6	\$14,476.8	\$14,002.9	\$13,604.3	\$13,772.5
Growth	5%	3%	3%	(1)%	(3)%
Net premiums earned	\$14,902.8	\$14,314.8	\$14,012.8	\$13,631.4	\$13,877.4
Growth	4%	2%	3%	(2)%	(2)%
Policies in force (thousands):					
Personal Lines	12,283.8	11,702.7	10,940.6	10,464.9	10,115.6
Growth	5%	7%	5%	3%	4%
Commercial Lines	509.1	510.4	512.8	539.4	539.2
Growth	0%	0%	(5)%	0%	7%
Property ¹	—	—	—	—	—
Growth	—	—	—	—	—
Total revenues	\$15,774.6	\$15,215.5	\$14,791.1	\$13,049.0	\$14,902.9
Underwriting margins: ²					
Personal Lines	6.8%	7.0%	7.6%	5.4%	7.0%
Commercial Lines	9.1%	12.5%	14.2%	5.3%	10.1%
Property ¹	—	—	—	—	—
Total underwriting operations	7.0%	7.6%	8.4%	5.4%	7.4%
Net income (loss) attributable to Progressive	\$ 1,015.5	\$ 1,068.3	\$ 1,057.5	\$ (70.0)	\$ 1,182.5
Per share ³	1.59	1.61	1.57	(0.10)	1.65
Average equivalent shares ³	636.9	663.3	672.2	668.0	718.5
Comprehensive income (loss) attributable to Progressive	\$ 924.3	\$ 1,398.8	\$ 1,752.2	\$ (614.7)	\$ 1,071.0
Total assets	\$21,844.8	\$21,150.3	\$20,049.3	\$18,250.5	\$18,843.1
Debt outstanding	2,442.1	1,958.2	2,177.2	2,175.5	2,173.9
Redeemable noncontrolling interest	—	—	—	—	—
Total shareholders' equity	5,806.7	6,048.9	5,748.6	4,215.3	4,935.5
Statutory surplus	5,269.2	5,073.0	4,953.6	4,470.6	4,587.3
Common shares outstanding	613.0	662.4	672.6	676.5	680.2
Common share price:					
High	\$ 22.08	\$ 22.13	\$ 18.10	\$ 21.31	\$ 25.16
Low	16.88	16.18	9.76	10.29	17.26
Close (at December 31)	19.51	19.87	17.99	14.81	19.16
Market capitalization	\$11,959.6	\$13,161.9	\$12,100.1	\$10,019.0	\$13,032.6
Book value per common share	9.47	9.13	8.55	6.23	7.26
Ratios:					
Return on average shareholders' equity:					
Net income (loss) attributable to Progressive	16.5%	17.1%	21.4%	(1.5)%	19.5%
Comprehensive income (loss) attributable to Progressive	15.0%	22.3%	35.5%	(13.3)%	17.7%
Debt to total capital ⁴	29.6%	24.5%	27.5%	34.0%	30.6%
Price to earnings	12.3	12.3	11.5	NA	11.6
Price to book	2.1	2.2	2.1	2.4	2.6
Earnings to fixed charges	11.6x	11.9x	11.3x	NA	13.5x
Net premiums written to statutory surplus	2.9	2.9	2.8	3.0	3.0
Statutory combined ratio	92.9	92.5	91.6	94.6	92.7
Dividends declared per share ⁵	\$ 0.4072	\$ 1.3987	\$ 0.1613	\$ 0	\$ 2.1450
Number of people employed ¹	25,007	24,638	24,661	25,929	26,851

⁴Ratio reflects debt as a percent of debt plus shareholders' equity; redeemable noncontrolling interest is not part of this calculation.

⁵Represents dividends pursuant to our annual variable dividend policy, plus special cash dividends of \$1.00 per common share in 2013, 2012, and 2010, and \$2.00 per common share in 2007. In 2008, comprehensive income was less than after-tax underwriting income; therefore, no dividend was declared in accordance with this policy.

NA = Not applicable due to the net loss reported for 2008.

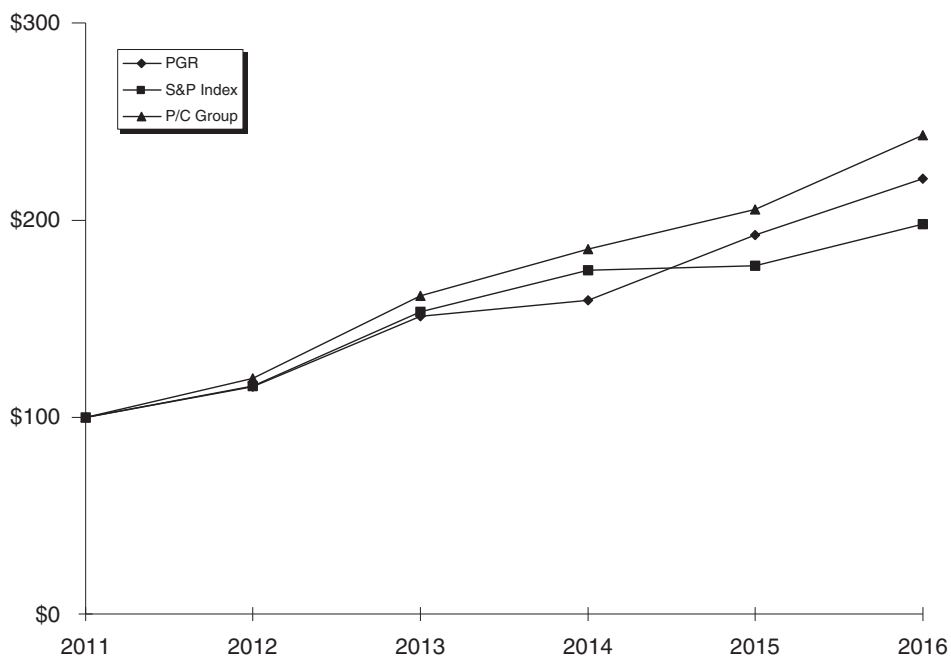
The Progressive Corporation and Subsidiaries

Performance Graph

(unaudited)

The following performance graph compares the performance of Progressive’s Common Shares (“PGR”) to the Standard & Poor’s Index (“S&P Index”) and the Value Line Property/Casualty Industry Group (“P/C Group”) for the last five years.

Cumulative Five-Year Total Return*
PGR, S&P Index, P/C Group (Performance Results through 12/31/16)



(Assumes \$100 was invested at the close of trading on December 31, 2011)

	2012	2013	2014	2015	2016
PGR	\$115.51	\$151.17	\$159.26	\$192.61	\$221.00
S&P Index	116.00	153.57	174.60	177.04	198.16
P/C Group ¹	119.90	161.72	185.24	205.66	243.22

* Assumes reinvestment of dividends

¹ Per Value Line Publishing LLC

Quantitative Market Risk Disclosures

(unaudited)

Quantitative market risk disclosures are only presented for market risk categories when risk is considered material. Materiality is determined based on the fair value of the financial instruments at December 31, 2016, and the potential for near-term losses from reasonably possible near-term changes in market rates or prices. We had no trading financial instruments at December 31, 2016 and 2015. See *Management's Discussion and Analysis of Financial Condition and Results of Operations* for our discussion of the qualitative information about market risk.

OTHER-THAN-TRADING FINANCIAL INSTRUMENTS

Financial instruments subject to interest rate risk were:

(millions)	Fair Value				
	-200 bps Change ¹	-100 bps Change ¹	Actual	+100 bps Change	+200 bps Change
U.S. government obligations	\$ 3,104.6	\$ 2,996.1	\$ 2,870.1	\$ 2,750.7	\$ 2,638.2
State and local government obligations	2,643.7	2,573.1	2,502.6	2,434.2	2,370.7
Foreign government obligations	24.8	24.7	24.5	24.4	24.2
Asset-backed securities	6,337.8	6,230.4	6,103.8	5,987.7	5,869.5
Corporate securities	4,718.4	4,674.2	4,550.9	4,429.4	4,312.9
Nonredeemable preferred stocks	896.6	877.7	853.5	830.0	808.4
Redeemable preferred stocks ²	188.5	190.7	191.9	192.3	192.5
Short-term investments	3,572.9	3,572.9	3,572.9	3,572.9	3,572.9
Total at December 31, 2016	\$21,487.3	\$21,139.8	\$20,670.2	\$20,221.6	\$19,789.3
Total at December 31, 2015	\$18,839.1	\$18,629.1	\$18,286.8	\$17,944.2	\$17,621.7

¹The amounts reflect an interest rate of 1 basis point (bps) when the hypothetical decline in interest rates would have pushed yields to a negative level.

²The redeemable preferred stocks have a negative return in the -100 bps and -200 bps scenarios due to the floating rate nature of a majority of the securities resulting in a duration of -0.9 for that portfolio.

Exposure to risk is represented in terms of changes in fair value due to selected hypothetical movements in market rates. Bonds and preferred stocks are individually priced to yield to the worst case scenario, which includes any issuer-specific features, such as a call option. Asset-backed securities and state and local government housing securities are priced assuming deal specific prepayment scenarios, considering the deal structure, prepayment penalties, yield maintenance agreements, and the underlying collateral.

Financial instruments subject to equity market risk were:

(millions)	Fair Value		
	-10%	Actual	+10%
Common equities at December 31, 2016	\$2,524.4	\$2,812.4	\$3,100.4
Common equities at December 31, 2015	\$2,387.7	\$2,650.5	\$2,913.3

The model represents the estimated value of our common equity portfolio given a +/-10% change in the market, based on the common stock portfolio's weighted average beta of 1.02 for 2016 and 0.99 for 2015. The beta is derived from recent historical experience, using the S&P 500 as the market surrogate. The historical relationship of the common stock portfolio's beta to the S&P 500 is not necessarily indicative of future correlation, as individual company or industry factors may affect price movements. Betas are not available for all securities. In such cases, the change in fair value reflects a direct +/-10% change; the portion of our securities without betas is 0.1%.

The Progressive Corporation and Subsidiaries
Net Premiums Written by State
(unaudited)

(\$ in millions)	2016		2015		2014		2013		2012	
Florida	\$ 3,305.1	14.1%	\$ 2,839.6	13.8%	\$ 2,399.0	12.9%	\$ 2,188.1	12.6%	\$ 2,000.1	12.2%
Texas	2,226.8	9.5	1,941.5	9.4	1,664.6	8.9	1,560.7	9.0	1,536.6	9.4
California	1,284.8	5.5	1,173.6	5.7	1,080.6	5.8	996.0	5.7	954.4	5.8
New York	1,279.4	5.5	1,095.6	5.3	1,000.7	5.4	882.8	5.1	782.3	4.8
Michigan	971.3	4.2	812.5	4.0	659.6	3.5	539.5	3.1	488.5	3.0
Georgia	939.4	4.0	813.2	4.0	774.0	4.1	771.6	4.5	757.1	4.6
Ohio	905.2	3.9	820.8	4.0	807.7	4.3	757.4	4.4	725.8	4.4
New Jersey	902.8	3.9	820.2	4.0	754.6	4.0	697.4	4.0	600.1	3.7
Pennsylvania	895.8	3.8	787.3	3.8	718.6	3.9	663.8	3.8	644.2	3.9
Louisiana	694.7	3.0	614.9	3.0	552.5	3.0	540.1	3.1	515.9	3.2
All other	9,948.2	42.6	8,844.8	43.0	8,242.7	44.2	7,742.3	44.7	7,367.7	45.0
Total	\$23,353.5	100.0%	\$20,564.0	100.0%	\$18,654.6	100.0%	\$17,339.7	100.0%	\$16,372.7	100.0%

Principal Office

The Progressive Corporation
 6300 Wilson Mills Road
 Mayfield Village, Ohio 44143
 440-461-5000
 progressive.com

24-Hour Insurance Quotes, Claims Reporting, and Customer Service

	Personal autos, motorcycles, and recreational vehicles	Commercial autos/trucks
To receive a quote	1-800-PROGRESSIVE (1-800-776-4737) progressive.com	1-888-806-9598 progressivecommercial.com
To report a claim	1-800-PROGRESSIVE (1-800-776-4737) progressive.com ¹	1-800-PROGRESSIVE (1-800-776-4737)
For customer service:		
If you bought your policy through an independent agent or broker	1-800-925-2886 (1-800-300-3693 in California) progressiveagent.com	1-800-444-4487 progressivecommercial.com
If you bought your policy directly through Progressive online or by phone	1-800-PROGRESSIVE (1-800-776-4737) progressive.com	1-800-895-2886 progressivecommercial.com
Homeowners – to receive a quote, report a claim, or speak to a customer service representative, please call 1-800-PROGRESSIVE or visit progressive.com and your inquiry will be routed to the appropriate contact center.		
In addition, iPhone® and Android® users can download the Progressive App to start a quote, report a claim, or service a policy.		

¹Claims reporting via the website is currently only available for personal auto policies.

Annual Meeting The Annual Meeting of Shareholders will be held at the offices of The Progressive Corporation, Studio 96, 6671 Beta Drive, Mayfield Village, Ohio 44143 on May 12, 2017, at 10 a.m. eastern time. There were 2,152 shareholders of record on December 31, 2016.

Common Shares and Dividends The Progressive Corporation's common shares are traded on the New York Stock Exchange (symbol PGR). Progressive currently has an annual variable dividend policy. We expect the Board to declare the next annual variable dividend, subject to policy limitations, in December 2017, with a record date in early 2018 and payment shortly thereafter. A complete description of our annual variable dividend policy can be found at: progressive.com/dividend.

Shareholder/Investor Relations Progressive does not maintain a mailing list for distribution of shareholders' reports. To view Progressive's publicly filed documents, shareholders can access our website: progressive.com/sec. To view our earnings and other releases, access: progressive.com/investors.

For financial-related information or to request copies of Progressive's publicly filed documents free of charge, write to: The Progressive Corporation, Investor Relations, 6300 Wilson Mills Road, Box W33, Mayfield Village, Ohio 44143, email: investor_relations@progressive.com, or call: 440-395-2222.

For all other company information, call: 440-461-5000 or access our website at: progressive.com/contactus.

Transfer Agent and Registrar

Registered Shareholders: If you have questions or changes to your account and your Progressive shares are registered in your name, write to: American Stock Transfer & Trust Company, Attn: Operations Center, 6201 15th Avenue, Brooklyn, NY 11219; phone: 1-866-709-7695; email: info@amstock.com; or visit their website at: amstock.com (after March 6, 2017, email: info@astfinancial.com; or visit their website at: astfinancial.com).

Beneficial Shareholders: If your Progressive shares are held in a brokerage or other financial institution account, contact your broker or financial institution directly regarding questions or changes to your account.

Contact Non-Management Directors Interested parties have the ability to contact the non-management directors as a group by sending a written communication clearly addressed to the non-management directors to either of the following:

Lawton W. Fitt, Lead Independent Director, The Progressive Corporation, email: lead_director@progressive.com; or

Daniel P. Mascaro, Secretary, The Progressive Corporation, 6300 Wilson Mills Road, Mayfield Village, Ohio 44143 or email: secretary@progressive.com.

The recipient will forward communications so received to the non-management directors.

Accounting Complaint Procedure Any employee or other interested party with a complaint or concern regarding accounting, internal accounting controls, or auditing matters relating to Progressive may report such complaint or concern directly to the Chairman of the Audit Committee, as follows: Patrick H. Nettles, Ph.D., Chairman of the Audit Committee, patrick_nettnes@progressive.com.

Any such complaint or concern also may be reported anonymously over the following toll-free Alert Line: 1-800-683-3604 or online at: www.progressivealertline.com. Progressive will not retaliate against any individual by reason of his or her having made such a complaint or reported such a concern in good faith. View the complete procedures at: progressive.com/governance.

Whistleblower Protections Progressive will not retaliate against any officer or employee of Progressive because of any lawful act done by the officer or employee to provide information or otherwise assist in investigations regarding conduct that the officer or employee reasonably believes to be a violation of federal securities laws or of any rule or regulation of the Securities and Exchange Commission. View the complete Whistleblower Protections at: progressive.com/governance.

Corporate Governance Progressive's Corporate Governance Guidelines and Board Committee Charters are available at: progressive.com/governance.

Counsel Baker & Hostetler LLP, Cleveland, Ohio

Charitable Contributions We contribute annually to: (i) The Insurance Institute for Highway Safety to further its work in reducing the human trauma and economic costs of auto accidents; and (ii) The Progressive Insurance Foundation, which provides matching funds to eligible 501(c)(3) charitable organizations to which Progressive employees, other than ARX employees, contribute.

Social Responsibility Progressive uses an interactive online format to communicate our social responsibility efforts. This report can be found at: progressive.com/socialresponsibility.

Online Annual Report and Proxy Statement Our 2016 Annual Report to Shareholders can be found at: progressive.com/annualreport.

Our 2017 Proxy Statement and 2016 Annual Report to Shareholders, in a PDF format, can be found at: progressiveproxy.com.

Directors

Stuart B. Burgdoerfer^{1,6}
Executive Vice President and
Chief Financial Officer,
L Brands, Inc.
(retailing)

Charles A. Davis^{4,5,6}
Chief Executive Officer,
Stone Point Capital LLC
(private equity investing)

Roger N. Farah^{3,5,6}
Executive Director,
Tory Burch LLC
(retailing)

Lawton W. Fitt^{2,4,5,6}
Lead Independent Director,
Retired Partner,
Goldman Sachs Group
(financial services)

Susan Patricia Griffith²
President and Chief Executive Officer,
The Progressive Corporation

Jeffrey D. Kelly^{1,6}
Retired Chief Operating Officer and
Chief Financial Officer,
RenaissanceRe Holdings Ltd.
(reinsurance services)

Corporate Officers

Susan Patricia Griffith
President
and Chief Executive Officer

John P. Sauerland
Vice President
and Chief Financial Officer

Daniel P. Mascaro
Vice President, Secretary,
and Chief Legal Officer

Jeffrey W. Basch
Vice President
and Chief Accounting Officer

Patrick S. Brennan
Treasurer

Mariann Wojtkun Marshall
Assistant Secretary

Glenn M. Renwick
Executive Chairman of the Board

Patrick H. Nettles, Ph.D.^{1,6}
Executive Chairman,
Ciena Corporation
(telecommunications)

Glenn M. Renwick²
Executive Chairman of the Board,
The Progressive Corporation

Bradley T. Sheares, Ph.D.^{3,6}
Former Chief Executive Officer,
Reliant Pharmaceuticals, Inc.
(pharmaceuticals)

Barbara R. Snyder^{1,6}
President,
Case Western Reserve University
(higher education)

Other Executive Officers

John F. Auer
President and Chief Executive Officer,
ARX Holding Corp.

John A. Barbagallo
Commercial Lines President

Steven A. Broz
Chief Information Officer

Patrick K. Callahan
Personal Lines President

M. Jeffrey Charney
Chief Marketing Officer

William M. Cody
Chief Investment Officer

John Murphy
Customer Relationship Management
President

Lori Niederst
Chief Human Resource Officer

Michael D. Sieger
Claims President

¹ Audit Committee Member

² Executive Committee Member

³ Compensation Committee Member

⁴ Investment and Capital Committee
Member

⁵ Nominating and Governance
Committee Member

⁶ Independent Director