

# Pacific LifeCorp

## And Life Insurance Subsidiaries Full Rating Report

### Ratings

Security Class	Rating
Insurer Financial Strength	A+
Issuer Default Rating (IDR)	A-
Senior Unsecured Debt	BBB+

Note: See page 16, [Appendix B: Complete Ratings List](#), for a complete ratings list.

### Rating Outlook

Stable

### Financial Data

#### Pacific LifeCorp

(\$ Mil.)	9/30/2016
Shareholders' Equity	11,717
Total Debt	2,313 <sup>a</sup>
Net Income	504
Operating ROE (%)	7.4
RBC (%)	632 <sup>b</sup>

<sup>a</sup>Excludes nonrecourse borrowings.

<sup>b</sup>As of Dec. 31, 2015. Note: RBC ratio for Pacific Life Insurance Company. Source: GAAP and statutory company reports.

### Related Research

[Pacific LifeCorp — Ratings Navigator \(January 2017\)](#)

[Fitch Affirms Pacific Life's Ratings; Outlook Stable \(December 2016\)](#)

[2017 Outlook: U.S. Life Insurance \(Macroeconomic Headwinds Persist\) \(November 2016\)](#)

[North American Life Insurance Sector Update \(Macroeconomic Trends Remain Negative\) \(November 2016\)](#)

[Variable Annuity Risk Profile Improved; Tail Risk Remains \(Overview of Statutory Framework and Fitch's Analytical Framework for VAs\) \(October 2016\)](#)

[U.S. Life Insurers' Investment Portfolios \(Results of Fitch's Year-End 2015 Survey\) \(September 2016\)](#)

[U.S. Life Insurers' Mortgage Update \(Underwriting Standards Decline as Originations, Performance Remain Strong\) \(July 2016\)](#)

### Analysts

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### Key Rating Drivers

**Strong Business Profile:** Pacific LifeCorp, along with its insurance subsidiaries, collectively referred to as PLC, is one of the leading providers of individual life insurance and retirement savings products in the U.S. The company maintains a strong competitive position within the affluent market and benefits from an extensive distribution network. PLC has made meaningful progress in diversifying its revenues and earnings away from legacy variable annuities (VA).

**Very Strong Statutory Capital:** Fitch Ratings views the capitalization of Pacific Life Insurance Company (PLIC), PLC's key operating subsidiary, as very strong based on its RBC ratio of 632% and Prism capital model score of 'Very Strong' at year-end 2015. PLIC's total adjusted capital (TAC) increased 6% through the first nine months of 2016 to \$9 billion. PLC's financial leverage ratio remains moderate at 19% and total financing and commitments (TFC) ratio of 0.1x is high relative to peers, primarily driven by the capital intensive profile of its aircraft leasing subsidiary.

**Reduced RBC Volatility:** PLC diversified and derisked its product portfolio and strengthened its VA hedging program, which should diminish its capital impact from significant equity market deterioration. The company also reinsures a portion of its VA business to third-party reinsurers and a captive subsidiary and books a voluntary reserve to reduce RBC volatility.

**Earnings Volatility from Legacy VAs:** PLC's \$17 billion closed block of legacy VA business with living and death benefit riders, primarily written between 2006 and 2008, caused higher than expected GAAP and statutory earnings volatility. Fitch expects prospective returns to be less volatile due to greater earnings diversification and an enhanced hedging program; however, earnings will lag precrisis levels due to hedging costs and lower investment yields.

**Moderate Investment Risk:** Fitch views the overall quality of PLC's investment portfolio as generally good but notes the company's above average exposure to corporate bonds rated 'BBB' could have a material effect on earnings and capital in a severe credit market downturn. PLC's large commercial mortgage portfolio makes it susceptible to weakness in the real estate market although Fitch considers the exposure to be well managed.

**Macroeconomic Uncertainty:** Ongoing low interest rates and geopolitical uncertainty pose risks to Fitch's outlook for life insurers and could have a material negative effect on PLC's earnings and capital in a severe scenario.

### Rating Sensitivities

**Upgrade Triggers:** Key rating triggers that could lead to an upgrade include a decline in financial leverage below 20%, a decline in the TFC ratio below 1.0x, GAAP interest coverage near 10x and continued success in expanding product lines and reducing VA exposure.

**Downgrade Triggers:** Key rating triggers that could lead to a downgrade include deterioration in capitalization demonstrated by a Prism capital model score below 'Very Strong', significant earnings and capital volatility, such as a 10% or more drop in TAC, or an increase in financial leverage to or above 30%, or TFC above 1.4x. Losses or rapid growth at the aircraft leasing subsidiary, Aviation Capital Group (ACG), could result in a downgrade.

**Business Profile**

**Solid Market Position and Size/Scale**

- PLC is a top 20 U.S. life insurer.
- Diverse product offering.
- Broader mix of retirement products.
- Diversified distribution channels.

**PLC Is a Top 20 U.S. Life Insurer**

PLC ranks among the 20 largest life insurers in the U.S., measured in terms of admitted assets or capital and surplus. The company has a solid competitive position in the affluent and emerging affluent markets and will begin targeting middle markets. PLC is among the 15 largest annuity writers and is a top three writer of indexed universal life (IUL), universal life (UL), variable universal life (VUL) and structured settlements.

**Diverse Product Offering**

Prior to 2008, the company’s growth was largely driven by VA and universal life with no-lapse guarantee (ULNLG) product sales. Since then, PLC diversified its product portfolio by further reducing its exposure to legacy VAs with aggressive riders and increasing its emphasis on fixed annuities (FA), investment-only VAs (IOVA) and IUL products as well as growing its life reinsurance business. PLC de-emphasized or exited certain institutional products, such as guaranteed investment contracts (GICs) and funding agreements.

PLC’s life insurance sales are predominantly made up of UL, including IUL and VUL. ULNLG sales account for approximately 2% of total life sales. The company introduced a single-premium UL policy with long-term care benefits. The company further enhanced its shift toward mortality risk with the purchase of Manulife Financial Corporation’s life retrocession business in 2011 and a RGA Reinsurance Company transaction to assume \$200 billion of in-force individual life reinsured risk in 2014.

Pacific Life Re Limited (PLR), a wholly owned subsidiary of PLC, reinsures mortality, morbidity and longevity risks primarily in Europe, Asia and Australia.

**Broader Mix of Retirement Products**

PLC rebalanced its product mix and VA sales amount to 34% of total Retirement Solutions Division sales as of Sept. 30, 2016 compared with 93% in 2007. FAs, including fixed indexed annuities, mutual funds, structured settlements and pension risk transfer have a much larger contribution to sales than in the past. Additionally, the risk profile of VA sales improved over this period, with IOVAs making up more than half of total VA sales. Additionally, PLC discontinued aggressive VA guarantee riders, reduced features and increased fees aimed at managing changes in both volatility and interest rates. Almost two-thirds of new business is IOVA.

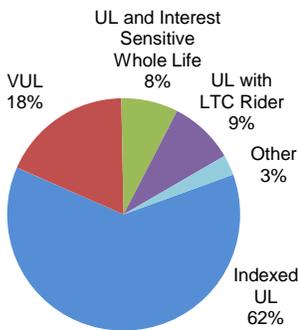
**Diversified Distribution Channels**

PLC focuses on diverse third party, independent distribution channels as opposed to captive distribution. While the independent channels require less fixed cost, the basis for competition is product design and compensation, which can be competitive areas. PLC has a long track

**Life Insurance Division**

**Sales Mix**

(Nine Months Ended Sept. 30, 2016)

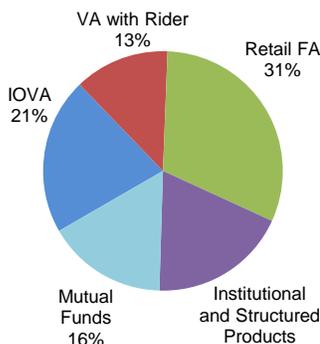


VUL – Variable universal life.  
UL – Universal life. LTC – Long-term care.  
Source: PLC, Fitch.

**Retirement Solutions**

**Division Sales Mix**

(Nine Months Ended Sept. 30, 2016)



IOVA – Investment-only variable annuity.  
VA – Variable annuity. FA – Fixed annuity.  
Source: PLC, Fitch.

**Related Criteria**

Insurance Rating Methodology  
(September 2016)

## Corporate Governance

Corporate governance and management are deemed adequate and neutral to the rating. PLC complies with the NAIC Model Audit Rule and manages SEC independence and transparency standards. Deloitte & Touche is PLC's auditor. PLC's board members are elected by policyowners. Eleven of the 13 members of the board are considered independent.

record with many of these organizations, and this continues to provide stability as the company executes its product strategy.

In June 2016, PLC completed an acquisition of the term life new business platform from Genworth Financial. The technology and operational capabilities related to this transaction will allow PLC to target the broader consumer market and move toward the objective of growing its protection business.

## Ratings Range Based on Business Profile

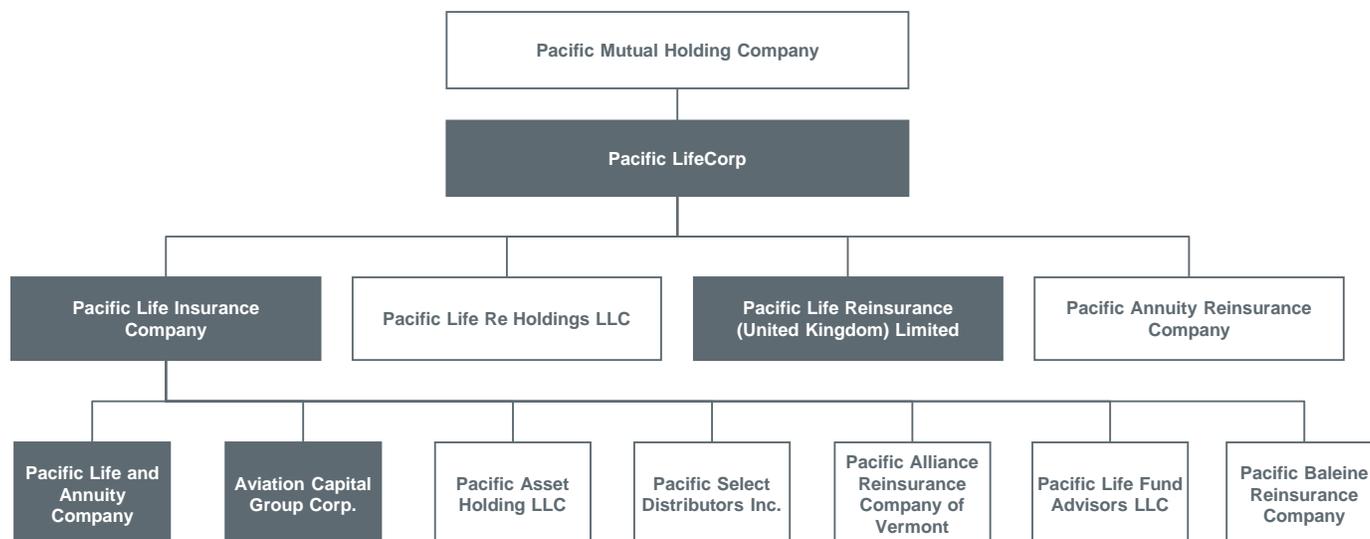
IFS Rating Category	AAA	AA	A	BBB	<BBB
Very Strong Business Profile	← [Bar from AA to <BBB] →				
Strong Business Profile		← [Bar from A to <BBB] →			
Moderate Business Profile			← [Bar from BBB to <BBB] →		
Weak Business Profile				← [Bar from <BBB to <BBB] →	

## Ownership Is Neutral to Rating

PLC is an intermediate holding company formed in 1997 as the result of the conversion of PLIC to a mutual holding company structure. PLC is owned by Pacific Mutual Holding Company, a mutual holding company formed as a part of the conversion. Pacific Mutual Holding Company must always own at least 51% of PLC, and PLC must always own 100% of PLIC.

Fitch believes a mutual ownership structure has fewer conflicts in owner and creditor interest and has generally allowed management to hold more conservative levels of capital. During the financial crisis, mutual insurers generally benefited from having a stronger capital buffer than stock insurers more focused on growth and return targets.

## Simplified Organizational Chart



■ Rated by Fitch.  
Source: Company filings.

**Sovereign- and Country-Related Constraints**

Fitch rates the local currency sovereign obligations of the United States of America at 'AAA' with a Stable Outlook, and the country ceiling is similarly 'AAA'. The local currency sovereign rating expresses the maximum limit for local currency ratings of most, but not all, issuers in a given country. At current levels, the ratings of U.S. insurance organizations and other corporate issuers are not likely to be constrained by sovereign or macroeconomic risks.

**Industry Profile and Operating Environment**

**Strong Balance Sheet Characteristics Mitigate Low Rates**

A majority of U.S. life insurers in Fitch's rated universe have Insurer Financial Strength (IFS) ratings in the 'AA' and 'A' categories and Stable Rating Outlooks. This reflects very strong balance sheet fundamentals and generally stable operating performance. Balance sheets reflect very strong capital and liquidity, reasonable financial leverage and high-quality investment portfolios. The industry's profitability benefited in recent years from improved asset-based fee income associated with higher asset levels, partially offset by lower interest margins and one-time reserve charges due to continued low interest rates.

Our negative sector outlook for the U.S. life insurance industry is based on concern over macroeconomic challenges and uncertainties. These factors are expected to negatively affect underlying fundamental trends in the industry.

Key risk factors include persistently low interest rates, asset risk tied to investment leverage, exposure to VA living benefit guarantees, and uncertainty tied to macroeconomic conditions and the regulatory environment. Continued low interest rates present a negative scenario for all life insurers due to the industry exposure to interest-sensitive products and investment concentration in fixed-income securities. While new business repricing, product redesign and enhanced hedging strategies reduced the risk associated with the industry's large VA exposure, industry earnings and capital remain exposed to financial market volatility and uncertain policyholder behavior.

Cyclical improvement in the U.S. economy, strong recovery in equity markets and a benign credit environment combined to mitigate the effects of prolonged low interest rates in recent years. Under Fitch's base case scenario, the U.S. macroeconomic environment is expected to modestly improve in 2017, which should allow life insurers to maintain strong balance sheet fundamentals and report modest deterioration in financial performance. Credit-related investment losses are expected to increase somewhat in 2017 but remain below long-term averages.

Uncertainty in aspects of U.S. policy in light of the recent presidential election is expected to persist for some period. The new administration spoke of easing regulation, including the Dodd-Frank Wall Street Reform and Consumer Protection Act, which could be positive for the industry.

**Ratings Range Based on Industry Profile/Operating Environment**

IFS Rating Category	AAA	AA	A	BBB	<BBB
Senior Debt Rating Category	AA	A	BBB	BB	<BB
Life Insurance	←	█	→		
Annuities	←	█	→		
Accident and Health		←	█	→	
Composite	←	█	→		

## Peer Comparison

(%, Year-End 2015)	Insurer Financial Strength	RBC	TAC (\$ Mil.)	Asset Leverage (x)	Operating Leverage (x)	Risky Assets/ TAC	Financial Leverage Ratio	Pretax Return on Total Assets Post-Dividend	Operating Return on TAC
Pacific Life	A+	632	8,475	14	6	42	20	0.6	7.7
AIG (Life Operations)	A+	502	16,652	16	10	120	18	1.3	15.0
Lincoln National	A+	487	8,411	27	11	64	25	0.4	9.9
Minnesota Life	AA	513	3,017	12	5	50	4	0.6	5.4
Principal	AA-	430	5,412	29	10.5	118	29	0.8	17.9
Prudential	AA-	486	15,388	31	9	78	29	0.9	21.1

TAC – Total adjusted capital. Note: Asset leverage consists of statutory assets divided by TAC. Operating leverage consists of statutory liabilities divided by TAC.  
Source: SNL Financial, Fitch.

## Peer Analysis

## PLC Fits Well in the 'A+' Category

PLC generally compares favorably with other life and asset accumulation writers in the 'A+' category. The company's capitalization, as defined by RBC and leverage metrics, compare favorably against peers. Historically, PLIC's reported RBC exhibited more volatility than peers due to its decision to retain a vast majority of VA risk while most VA writers reinsured all VA riders to captives. Currently, PLIC cedes a small percentage of an existing VA block and new business to a captive and uses a voluntary reserve and dynamic hedging program to reduce RBC volatility. PLC's profitability trails stock peers, who are more return-focused, but exceeds mutual peers. Notably, PLC's product profile is riskier than most mutual life insurers in Fitch's universe. The company has less asset risk than peers but it has a concentrated exposure to a 'BBB-' credit through its ownership of ACG.

## Capitalization and Leverage

(\$ Mil., Year End as of Dec. 31)	2012	2013	2014	2015	9/30/16	Fitch's Expectation
Total Adjusted Capital	6,934	7,068	7,835	8,475	9,022	Assuming stable equity markets, PLIC's RBC ratio is expected to remain near 600%. Financial leverage is expected to decrease modestly in the near to intermediate term due to growth in shareholders' equity. TFC is expected to remain near 1x in the near term.
RBC (%)	596	673	677	632	N.A.	
Asset Leverage (x)	15.3	16.2	15.1	14.0	13.7	
Operating Leverage (x)	6.3	6.6	6.3	6.3	6.3	
Financial Leverage (%)	22	22	21	20	19	

N.A. – Not available. TFC – Total financing and commitments. Note: Financial leverage is calculated on a consolidated GAAP basis.  
Source: SNL Financial, Fitch.

### Statutory Capital Is Very Strong, but TFC Ratio Is High

- Very strong statutory capitalization, reduced RBC volatility.
- Financial leverage is consistent with the rating category.
- ACG drives high TFC ratio.

### Very Strong Statutory Capitalization, Reduced RBC Volatility

The statutory capitalization of PLC's insurance subsidiaries exceeds expectations for the rating level. As of Sept. 30, 2016, the company's TAC totaled \$9 billion, representing a five-year CAGR of 7.5%. This was primarily driven by improved operating results and unrealized investment gains. The company's Prism capital model score was 'Very Strong' at year-end 2015.

PLC has taken steps over the years to reduce capital volatility associated with its VA business. In 2012, PLC established Pacific Annuity Reinsurance Company (PARC), a captive subsidiary, to reinsure PLIC's base VA contracts and contract guarantees. In 2013, PLIC changed the valuation basis/method for VA statutory reserves to include a voluntary reserve component. The use of the captive insurer and voluntary reserve, along with its dynamic hedging program, reduced PLIC's RBC volatility.

### Financial Leverage Is Consistent with the Rating Category

Fitch views PLC's financial leverage as consistent with rating expectations. Of the \$2.3 billion of financial debt outstanding, \$771 million was issued by PLIC in the form of surplus notes. As of Sept. 30, 2016, the ratio of surplus notes to TAC was 9%, below Fitch's tolerance of 15%. As a result, the ratings on the surplus notes reflect standard notching.

### ACG Drives High TFC Ratio

Fitch views PLC's TFC as high relative to peers, primarily driven by the capital intensive profile of ACG. PLC's TFC ratio was 1.0x as of Sept. 30, 2016 and 0.4x, excluding ACG, since ACG debt is nonrecourse to PLC. PLIC's statutory carrying value of ACG was \$1.8 billion at year-end 2015. Fitch views ACG's aircraft leasing business as well managed and related risks are captured in PLC's ratings. However, ACG could have difficulty meeting obligations if the environment for aircraft lease finance companies deteriorates significantly or future funding proves more difficult.

The TFC ratio includes \$1.3 billion of financing instruments outstanding for Pacific Alliance Reinsurance Company of Vermont (PAR Vermont), Pacific Life Reinsurance (United Kingdom) Limited and Pacific Baleine Reinsurance Company (Pacific Baleine).

Total financing and commitments is a nonrisk-based leverage measure expanding on traditional measures of financial leverage to include all forms of debt, including match-funded and other operational debt, and debt supporting long-term capital needs as well as liquidity and working-capital needs. During periods of market disruptions, and lost access to capital markets funding, such operational and off-balance sheet commitments, can become a direct source of vulnerability to an organization.

**Debt Service Capabilities and Financial Flexibility**

(\$ Mil., Year End as of Dec. 31)	2012	2013	2014	2015	9/30/16	Fitch's Expectation
Total Interest Expense	360	440	415	443	352	GAAP interest coverage will be in the 6x–8x range.
Adjusted Interest Expense	154	149	149	152	108	Statutory interest coverage will remain above the median ratio guideline of 3x for a company rated 'A'.
GAAP Interest Coverage (x)	6.2	6.6	7.5	6.7	N.A.	
Maximum Statutory Dividend Capacity	199	774	515	668	608	
Statutory Interest Coverage (x)	3.0	8.4	5.6	7.2	N.A.	

N.A. – Not available. Note: GAAP interest coverage consists of pretax operating earnings before interest divided by adjusted interest expense. Statutory interest coverage consists of maximum statutory dividend capacity divided by adjusted interest expense, less interest paid on surplus notes. Adjusted interest expense excludes interest on operating debt, match-funded and Aviation Capital Group debt.  
Source: PLC financial statements, Fitch.

**Strong Coverage and Adequate Financial Flexibility**

- Interest coverage in line with rating expectations.
- Adequate financial flexibility, limited refinancing risk.
- Back-up liquidity available.

**PLC Long-Term Financial Debt Maturities**

(\$ Mil., As of Sept. 30, 2016)	
2017	—
2018	—
2019	—
2020	448
2021+	1,865
<b>Total</b>	<b>2,313</b>

Source: Company reports, Fitch.

**Interest Coverage in Line with Rating Expectations**

PLC's GAAP interest coverage is adequate, for the rating level, in the 6x–8x range. Based on statutory dividend rules, PLIC's maximum dividend capacity without regulatory approval in 2016 is \$608 million, which Fitch considers to be a very strong source of debt-servicing capability. As of Sept. 30, 2016, no ordinary cash dividends were paid by PLIC.

Additionally, PLC targets holding company cash levels equivalent to at least 2x interest expense, which Fitch views favorably.

**Adequate Financial Flexibility, Limited Refinancing Risk**

Given PLC's ownership structure, Fitch views PLC's future financial flexibility as somewhat constrained given the limited access to external equity capital. The company demonstrated the ability to access debt markets through its issuance of surplus notes and senior debt.

PLC has no near term refinance risk with the majority of its debt maturing after 2030. The company's next debt maturity is \$448 million in 2020.

**Back-Up Liquidity Available**

Other liquidity sources include PLC's \$600 million revolving credit facility, in place through May 2021. PLIC maintains a \$700 million CP program, which is backed by a \$400 million bank line of credit maturing in May 2021. As of Sept. 30, 2016, there are no outstanding borrowings under these facilities. The insurance companies have access to funding from the Federal Home Loan Banks (FHLBs) of both Topeka and San Francisco, which depend on the value of the qualifying collateral. As of Sept. 30, 2016, there was no debt outstanding with either FHLB of Topeka or San Francisco.

## Financial Performance and Earnings

(\$ Mil., Year End as of Dec. 31)	2012	2013	2014	2015	9/30/16	Fitch's Expectation
Pretax Gain from Operations	851	598	780	709	755	Fitch expects volatility in operating results in the short term. In the longer term, operating return on TAC is forecast to remain in the 8%–11% range and ROE on a GAAP basis is forecast to be in the 7%–9% range.
Net Income	1,046	532	653	536	614	
Pretax Return on Total Assets Post-Dividend (%)	0.8	0.5	0.7	0.6	0.8	
Operating Return on TAC (%)	12.7	7.5	9.2	7.7	9.2	
Growth in Revenue Before Realized Gains (%)	9.4	13.6	1.0	8.1	(4.6)	

TAC – Total adjusted capital. Note: Statutory accounting principles. Combined Pacific Life Insurance Company and Pacific Life & Annuity Company.  
Source: SNL Financial, Fitch.

### Less Volatile Earnings Profile

- Product diversification reduces earnings volatility.
- Sizable, but shrinking, legacy VA block.
- Regulations dampen sales.

### Product Diversification Reduces Earnings Volatility

Fitch views PLC's earnings profile as moderate and in line with rating guidelines at the current level. The company's earnings remain exposed to market volatility and low interest rates remain a modest drag on returns. However, business growth in less market-sensitive products and businesses, including ACG and PLR, in addition to enhanced hedging strategies reduced earnings volatility. Fitch expects earnings levels to be constrained by hedging costs and lower investment yields. GAAP ROE is expected to remain in the 7%–9% range in the intermediate term. Through the first nine months of 2016, PLC reported GAAP operating ROE of 7%.

Longer term, Fitch expects PLC's policyholder account balances to become more balanced between interest rate, mortality and equity market risk. PLC remains focused on growing protection risk through primary insurance or reinsurance and increasing fee-based revenue by growing its asset management business.

### Sizable, but Shrinking, Legacy VA Block

PLIC had approximately \$52 billion in VA net account value as of June 30, 2016. Approximately 63% of PLIC's account value had a guaranteed minimum death benefit (GMDB) plus some form of living benefit, the majority being a guaranteed minimum withdrawal benefit (GMWB). PLC's large VA exposure contributed to GAAP and statutory earnings volatility during prior years, due to reserve increases associated with equity market volatility and declining interest rates. Fitch believes risk mitigation practices will limit losses in a severe scenario.

### Regulations Dampen Sales

Consistent with industry peers, VA sales declined during the first nine months of 2016 and are expected to remain suppressed in the near term, primarily due to uncertainty related to U.S. Department of Labor (DOL) regulation. This was somewhat offset by higher fixed annuity sales, primarily consisting of fixed indexed annuities, which may be adversely affected by DOL regulation.

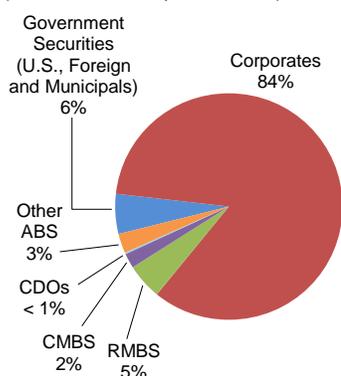
The company's life product sales declined in the first nine months of 2016, led by lower IUL sales resulting from a change in the way the product is illustrated in accordance with Actuarial Guideline (AG) 49. PLC introduced a new IUL product in May 2016, which is gaining traction.

## Investment and Asset Risk

(\$ Mil., Year End as of Dec. 31)	2012	2013	2014	2015	9/30/16	Fitch's Expectation
Cash and Invested Assets	48,432	51,338	55,469	59,771	63,509	No significant changes are expected in PLC's investment portfolio. Credit-related losses are forecast to remain below long-term averages. PLC's investment yield volatility is due to derivative accounting for hedges on variable annuity risks.
Below Investment Grade Bonds/TAC (%)	38	24	22	23	25	
Risky Assets Ratio (%)	57	42	49	42	N.A.	
Investment Yield (%)	3.7	4.0	4.5	4.6	4.2	
Average NAIC Rating on Bonds	1.7	1.6	1.6	1.6	1.6	

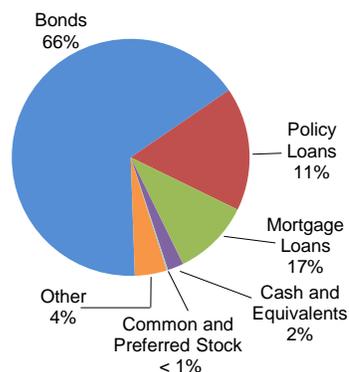
TAC – Total adjusted capital. N.A. – Not available. Note: Statutory accounting principles. Combined Pacific Life Insurance Company and Pacific Life & Annuity Company.  
Source: SNL Financial, Fitch.

### Fixed-Income Portfolio (\$46 Bil. as of Sept. 30, 2016)



RMBS – Residential mortgage-backed securities. CMBS – Commercial mortgage-backed securities. CDO – Collateralized debt obligation. ABS – Asset-backed securities. Note: GAAP fair value. Figures do not total 100% due to rounding. Source: PLC financial statements.

### Investment Portfolio (\$70 Bil. as of Sept. 30, 2016)



Note: GAAP fair value. Figures do not total 100% due to rounding. Source: PLC financial statements.

### Moderate Investment Risk

- High-quality corporate bond portfolio.
- Commercial mortgages and real estate investments performing well.
- Below-average risky assets.

### High-Quality Corporate Bond Portfolio

PLC's bond portfolio is heavily weighted toward corporates with a modest 5% of the portfolio below investment grade (BIG). PLC's above-average exposure to corporate bonds rated 'BBB' make it susceptible to credit migration in a market downturn. Fitch believes the corporate portfolio is well diversified between sectors. Structured securities make up a modest 7% of invested assets and are generally of high quality and seniority.

### Commercial Mortgages and Real Estate Investments Performing Well

PLC's investment strategy for commercial mortgage loans and real estate emphasizes niche property types exhibiting stable fundamental characteristics and allow PLC to employ conservative underwriting standards. As a result of this strategy, PLC's capital losses as a percentage of mortgage assets remain lower than the industry. Credit metrics are good with an average loan-to-value of 51% and a weighted average debt service coverage ratio of approximately 2x as of June 30, 2016. Fitch believes the portfolio is well managed and diversified by property type. PLC's largest exposures within the commercial mortgage portfolio are apartment and office buildings and retail. This asset class is increasingly competitive, as insurers attempt to augment low-yielding bonds.

### Below-Average Risky Assets

PLC's risky asset ratio is nearly half of the life insurance industry, reflecting below-average exposure to equities, BIG bonds and Schedule BA assets, including private equity investments and hedge funds. The company's investment strategy largely reflects asset-liability management considerations.

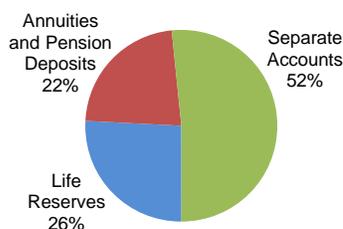
**Asset/Liability and Liquidity Management**

(%, Year End as of Dec. 31)	2011	2012	2013	2014	2015	Fitch's Expectation
Liquidity Ratio	82	73	68	78	72	PLC's liquidity metrics will remain strong and operating cash flow coverage will remain extremely strong. PLC's ratio of public bonds to total bonds will remain below the industry average.
Operating Cash Flow Coverage (x)	1.3	1.3	1.4	1.5	1.5	
Public Bonds/Total Bonds	65	61	62	64	61	
Total Adjusted Liabilities and Deposits (\$ Mil.)	93,939	98,920	107,331	110,315	110,459	

Note: Statutory accounting principles. Combined Pacific Life Insurance Company and Pacific Life & Annuity Company.  
Source: SNL Financial, Fitch.

**Adjusted Liabilities and Deposits**

(As of Dec. 31, 2015)



Note: Statutory accounting principles. Consolidated Pacific Life Insurance Company and Pacific Life & Annuity Company.  
Source: SNL Financial, Fitch.

**Asset/Liability and Liquidity Management Are Strong**

- Robust VA hedging program.
- VA block partially reinsured.
- Use of Vermont captives for bulk of ULNLG business.
- Favorable cash flow testing results.
- Minimal disintermediation risk.

**Robust VA Hedging Program**

Fitch views positively the company's strengthened VA hedging program, which should lessen the capital impact and smooth GAAP net income if equity markets experience significant deterioration. Under AG43, the company's current hedging program qualifies as a "clearly defined hedging strategy." The company has a VA delta dynamic hedging program to reduce GAAP earnings volatility, while at the same time protecting statutory surplus. PLC uses total return swaps and equity put options. The company mitigates VA interest rate effects on GAAP earnings by adopting fair value accounting for its 30-year U.S. treasury portfolio, resulting in mark-to-market accounting. Fitch believes PLC's derivative counterparty risk is low since all transactions are exchange-traded or with counterparties rated 'A' or better.

**VA Block Partially Reinsured**

Living and death benefit riders on VA contracts issued between Jan. 1, 2007 and March 31, 2009 were partially covered by up to 45% coinsurance. In 2012, PLIC ceded 5% of its existing VA business to PARC and continues to cede 5% of its new VA business through combined modified coinsurance for base contracts and coinsurance for all guarantees. Coinsurance reinsurance was established as "a funds withheld structure." Currently, 14% of the company's VA rider guarantees and 9% of the base contracts are covered under reinsurance, concentrated in issue years 2007 and 2008. In second-quarter 2015, PLC began reinsuring 50% of new VA sales with GMWB riders. The reinsurance covers only the rider risk and is effective for two years.

**Use of Vermont Captives for Bulk of ULNLG Business**

ULNLG is subject to rigorous reserving levels mandated by AG38, also known as regulation AXXX. PLIC uses wholly owned subsidiaries, PAR Vermont and Pacific Baleine, to reinsure certain reserves related to the ULNLG business and takes reserve credits that enhance the company's capital position. Statutory reserves ceded to PAR Vermont are supported by an LOC facility, which is nonrecourse to PLC. In November 2011, PAR Vermont entered into a 20-year LOC agreement for up to \$843 million, replacing the prior short-term LOC arrangement thereby reducing the company's refinancing and liquidity risk.

As of Dec. 31, 2015, \$680 million was issued. Statutory reserves ceded to Pacific Baleine are supported by a promissory note facility, which is credit enhanced by a third-party reinsurer, and held in a reinsurance trust for the benefit of PLIC. The agreement allows for the issuance of up to \$400 million and expires in December 2038. As of Dec. 30, 2015, \$159 million was issued.

#### ***Favorable Cash Flow Testing Results***

Fitch views PLC's asset/liability management practices to be strong. For 2015 cash flow testing, both insurance operating companies passed all "New York 7" interest rate scenarios. As of June 30, 2016, the company's net duration mismatch in aggregate was negative 1.3 years, within its target limit of less than 1.5 years.

#### ***Minimal Disintermediation Risk***

Historically, the primary source of disintermediation risk for Pacific Life was related to PLC's institutional products, which the company has almost completely wound down. PLC's outstanding balance of funding agreement-backed note programs declined to \$295 million as of Dec. 31, 2015 from \$6 billion as of Dec. 31, 2008.

PLC's synthetic GIC portfolio of \$22 billion (notional) is among the largest in Fitch's rated universe. PLC raised wrap fees, improved contractual terms and instituted more conservative investment guidelines. As of Dec. 31, 2015, the market-to-book value ratio was 101%. A sharp, sudden increase in interest rates could negatively affect this portfolio.

Fitch believes PLC's fixed products are well protected against product withdrawal risks due to contract provisions, duration and cash flow matching, and disciplined investment processes. Approximately 80% of the company's total annuity reserves and deposit liabilities are subject to market value adjustments, surrender charges equal to or above 5%, or not subject to discretionary withdrawal, discouraging surrender and protecting PLC from liquidity risks.

## Key Noninsurance Operations/Exposure

(\$ Mil., Year End as of Dec. 31)	2012	2013	2014	2015	9/30/16	Fitch's Expectation
Total Revenue	684	797	824	859	701	Operating performance could improve moderately in the near to medium term. Leverage will remain around 3.0x–3.5x in the near term, lower than historical levels of 4.0x–4.5x.
Total Outstanding Debt	5,435	5,677	5,499	5,788	5,070	
Total Equity	1,290	1,492	1,736	1,826	1,882	

Source: Aviation Capital Group, Fitch.

### ACG Generates Stable Earnings; Increases PLC's TFC Ratio

- Consistent profitability and stable cash flows.
- Concentrated exposure to 'BBB-' credit.
- Reliance on capital markets, improved funding profile.

#### *Consistent Profitability and Stable Cash Flows*

PLC's aircraft leasing subsidiary, ACG, is considered among the top five aircraft lessors in the world with an owned and managed portfolio of 265 aircraft as of June 30, 2016. The company has a strong track record of generating stable operating earnings and cash flows and is the primary contributor of non-insurance earnings.

#### *Concentrated Exposure to 'BBB-' Credit*

Fitch views PLIC's ownership of ACG as a concentrated exposure to an entity with a stand-alone credit profile of 'BBB-'. PLIC's current 100% ownership of ACG's equity represents a meaningful portion of the insurance company's equity base. Ownership of an aircraft leasing business provides more active control of assets than a passive investment in aircraft securitizations. The investment provides valuable tax benefits to PLC. The current ratings on both ACG and PLC implicitly assume PLC would provide a modest level of support if necessary.

#### *Reliance on Capital Markets, Improved Funding Profile*

The aircraft leasing business is capital-intensive and ACG relies on access to capital markets for attractive financing. Fitch views ACG as having sufficient available cash on hand and availability under various funding facilities to meet upcoming debt maturities and new aircraft funding commitments. PLC announced it is considering a partial public listing of ACG, primarily intended to give ACG access to additional capital to execute its growth strategy. While the magnitude of the offering remains unknown, PLC publicly stated it intends to retain a majority equity stake in ACG after the IPO and ACG will remain an important component within PLC's diversified portfolio of businesses.

ACG continues to make significant progress in diversifying its funding profile and broadening capital markets access across various funding sources. ACG's unsecured debt grew to approximately 77% of total funding. Due to its predominantly unsecured funding profile, ACG has a significant pool of available unencumbered assets, providing material support to the unsecured noteholders and is viewed positively by Fitch as it provides additional balance sheet flexibility in times of market stress.

## Pacific LifeCorp Debt

(\$ Mil., As of Sept. 30, 2016)

### Insurance Debt

9.250% Surplus Notes Due June 15, 2039	621
7.900% Surplus Notes Due Dec. 30, 2023	150
6.000% Senior Notes Due Feb. 10, 2020	448
6.600% Senior Notes Due Sept. 15, 2033	600
5.125% Senior Notes Due Jan. 30, 2043	494
<b>Total Insurance Debt</b>	<b>2,313</b>

### Non-Insurance Debt

Debt Recourse Only to ACG	4,348
ACG Revolving Credit Facility	785
Other	1,883
<b>Total Non-Insurance Debt</b>	<b>7,016</b>
<b>Total Debt</b>	<b>9,329</b>

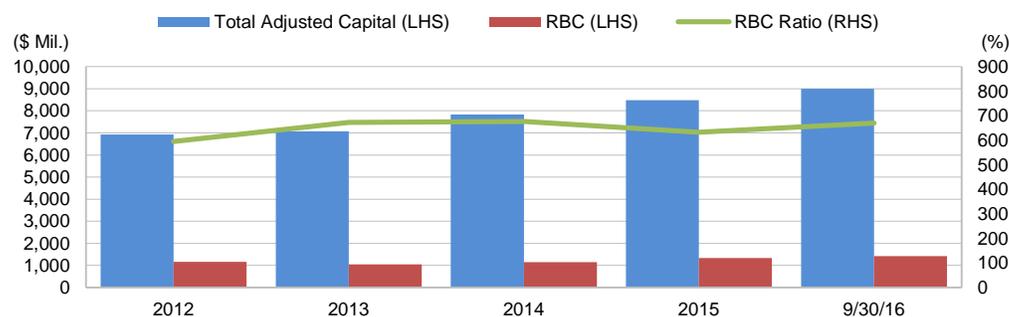
Reported Shareholders' Equity	11,717
Accumulated Other Comprehensive Income	1,859
<b>Adjusted Shareholders' Equity</b>	<b>9,858</b>
Minority Interest	110
<b>Total Equity</b>	<b>9,968</b>
<b>Insurance Capital</b>	<b>12,281</b>
<b>Total Capital</b>	<b>19,297</b>

<b>Total Debt/Total Capital – Insurance (%)</b>	<b>19</b>
<b>Total Debt/Total Capital (%)</b>	<b>48</b>

ACG – Aviation Capital Group.  
Source: Company reports, Fitch.

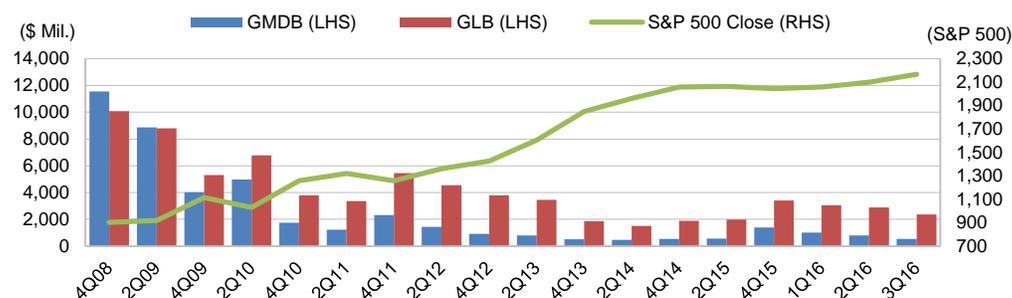
## Appendix A: Additional Financial Exhibits

### Statutory Capital and Risk-Based Capital Trends



RBC – Risk-based capital.  
Source: Company reports.

### Net Amount at Risk for Variable Annuity Riders



GMDB – Guaranteed minimum death benefits. GLB – Guaranteed life benefits.  
Source: Company reports and Bloomberg.

## Other Ratings Considerations

Below is a summary of additional ratings considerations of a “technical” nature that are also part of Fitch’s ratings criteria.

### Group Insurer Financial Strength Rating Approach

Fitch’s rating on Pacific Life & Annuity Company (PL&A) is based on the relationship with PLIC, and reflects Fitch’s view that PL&A is a core operating company within the organization. The two entities share common management, resources and branding.

PLC owns London-based PLR. To help support PLR, a guarantee agreement exists between PLR and PLC. In the agreement, obligations of PLR align with the senior unsecured obligations of PLC. A second guarantee agreement was put in place between PLIC and PLR in March 2010 that would only be triggered in the event of nonperformance by both PLR and PLC. PLR’s ratings are tied to PLIC’s ratings based on this support agreement.

### Notching

For notching purposes, the regulatory environment of the U.S. is assessed by Fitch as being Effective, and classified as following a Ring-Fencing approach.

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## Notching Summary

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#### IFS Ratings

A baseline recovery assumption of Good applies to the IFS rating, and standard notching was used from the IFS “anchor” rating to the operating company IDR.

#### Holding Company IDR

Standard notching was applied between the insurance operating company and holding company IDRs for a ring-fenced regulatory environment. No adjustments were made for financial leverage, coverage or significant holding company liquidity.

#### Holding Company Debt

A baseline recovery assumption of Below Average and nonperformance risk of Minimal were applied to the senior unsecured debt. Standard notching relative to the holding company IDR was used.

#### Hybrids

Since PLIC’s financial leverage ratio is below 15%, its surplus notes were notched down by one from the IDR of the insurance company on an assumption of Below Average recoveries (one notch), and Minimal Nonperformance Risk (zero notches). Regulators have historically appeared hesitant to impose deferrals on these instruments except under relatively severe stress.

IFS – Insurer Financial Strength. IDR – Issuer Default Rating.

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## Short-Term Ratings

PLIC’s short-term Issuer Default Rating (IDR) of ‘F1’ is based on the company’s long-term IDR of ‘A’.

**Hybrids — Equity/Debt Treatment**

**Hybrids Treatment**

Hybrid	Amount (\$ Mil.)	CAR Fitch (%)	CAR Regulatory Override (%)	FLR Debt (%)
<b>Pacific Life Insurance Co.</b>				
Surplus Notes	771	0	100	100

CAR – Capitalization ratio. FLR – Financial leverage ratio. Note: The CAR percentage shows a portion of the hybrid value included as available capital, both before (Fitch %) and the regulatory override. For FRL, percentage shows a portion of the hybrid value included as debt in numerator of leverage ratio.

**Exceptions to Criteria/Ratings Limitations**

None

## Appendix B: Complete Ratings List

### Ratings

Issuer	Security Class	Rating
Pacific LifeCorp	Long-Term Issuer Default Rating	A-
Pacific LifeCorp	Senior Unsecured Debt	BBB+
Pacific Life Funding, LLC	Funding Agreement-backed Note Program	A+
Pacific Life Global Funding	Funding Agreement-backed Note Program	A+
Pacific Life Insurance Company	Long-Term Issuer Default Rating	A
Pacific Life Insurance Company	Short-Term Issuer Default Rating	F1
Pacific Life Insurance Company	Commercial Paper	F1
Pacific Life Insurance Company	Subordinated Debt	A-
Pacific Life Insurance Company	Insurer Financial Strength	A+
Pacific Life & Annuity Company	Insurer Financial Strength	A+
Pacific Life Re Limited	Insurer Financial Strength	A+
Aviation Capital Group	Long-Term Issuer Default Rating	BBB
Aviation Capital Group	Senior Unsecured Debt	BBB

Source: Fitch.

The ratings above were solicited by, or on behalf of, the issuer, and therefore, Fitch has been compensated for the provision of the ratings.

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