Pacific LifeCorp

And Life Insurance Subsidiaries
Full Rating Report

Ratings

IDR	A
Senior Unsecured Debt	A–

Subsidiaries

Insurer Financial Strength	AA–

Note: See page 18, for a complete ratings list.

Rating Outlook
Stable

Financial Data
Pacific LifeCorp

($ Mil.)	12/31/18
Shareholders' Equity	13,072
Total Debt	2,315[a]
Net Income	916
Operating ROE (%)	6.8
RBC (%)	552[b]

[a]Excludes nonrecourse borrowings.
[b]RBC ratio for Pacific Life Insurance Company.
Source: Pacific LifeCorp GAAP and statutory reports.

Related Research
North American Life Insurers' Financial Leverage and Debt-Servicing Capacity (Little Movement in 2018) (May 2019)

Market Values Become More Volatile Relative to Credit Risk (May 2019)

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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).

Extremely Strong Statutory Capital: Fitch Ratings views the capitalization of Pacific Life Insurance Company (PLIC), PLC's key operating subsidiary, as extremely strong based on its RBC ratio of 552% and a Prism score of 'Extremely Strong' when last calculated at YE 2017. PLIC's total adjusted capital (TAC) increased 7% through YE 2018 to $10.7 billion. PLC's financial leverage ratio declined to 15%. However, PLC's total financing and commitments (TFC) ratio of 1.2x is high relative to peers, primarily driven by the capital-intensive profile of its aircraft leasing subsidiary.

Reduced RBC Volatility: PLC diversified and de-risked 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.

Strong Earnings: In 2018, PLC reported net income of $916 million, down from the $1.366 billion reported in 2017. However, 2017 results include a one-time benefit from tax reform of $609 million. Thus, 2018 results are up from 2017 net income of $757 million, excluding the tax benefit. The results reflect strong investment performance, higher interest rates and widened spreads, as well as increased fees and spreads partially offset by 4Q18 market volatility and some actuarial and assumption changes.

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.

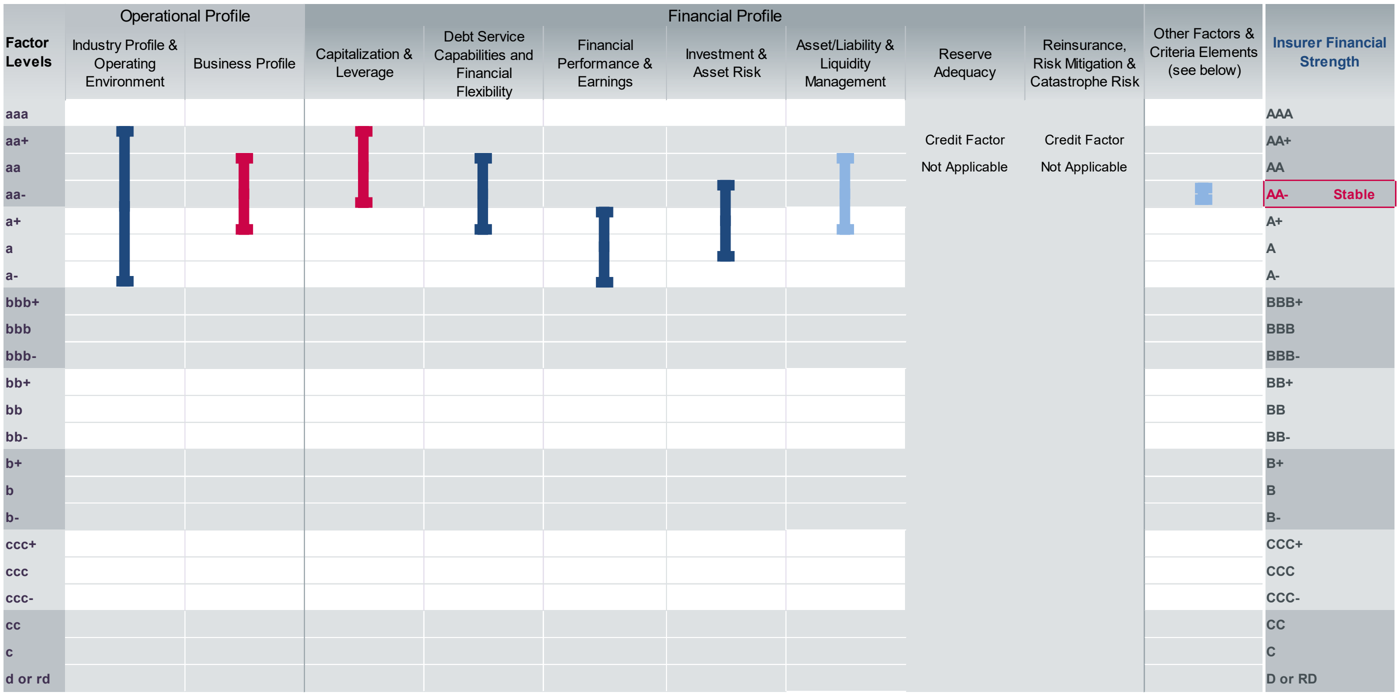
Macroeconomic Uncertainty: Ongoing low interest rates and geopolitical uncertainty pose risks to Fitch's outlook for life insurers and could have a material negative effect on PLC's earnings and capital in a severe scenario.

Rating Sensitivities

Upgrade Sensitivities: Key rating triggers that could lead to an upgrade include a material change in business risk profile that indicates a risk appetite lower than the life insurance sector as a whole, a return on equity above 10%, financial leverage of 15% or less and a TFC ratio of 0.8x or below.

Downgrade Sensitivities: Key rating triggers that could lead to a downgrade include deterioration in capitalization demonstrated by a Prism capital model score below 'Very Strong' or a significant earnings and capital volatility, such as a 10% or more drop in TAC, an increase in financial leverage at or above 20% or a TFC ratio above 1.2x. Significant losses at the aircraft leasing subsidiary, Aviation Capital Group (ACG), could result in a downgrade.

Pacific LifeCorp (Aug. 7, 2019)



Other Factors & Criteria Elements				
Provisional Insurer Financial Strength				**AA-**
Non-Insurance Attributes	Positive	**Neutral**	Negative	+0
Corporate Governance & Management	**Effective**	Some Weakness	Ineffective	+0
Ownership	Positive	**Neutral**	Negative	+0
Transfer & Convertibility / Country Ceiling	Yes	**No**	AAA	+0
Insurer Financial Strength (IFS)			Final:	**AA-**
IFS Recovery Assumption	**Good**			-1
Issuer Default Rating (IDR)			Final:	**A+**

Bar Chart Legend:

Vertical Bars = Range of Rating Factor

Bar Colors = Relative Importance

- Higher Influence
- Moderate Influence
- Lower Influence

Bar Arrows = Rating Factor Outlook

- ⇧ Positive
- ⇩ Negative
- ⇳ Evolving
- ▭ Stable

ESG CONSIDERATIONS

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of 3 — ESG issues are credit neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity.

For more information on our ESG Relevance Scores, visit www.fitchratings.com/esg.

Related Criteria

Exposure Draft: Insurance Rating Criteria (September 2019)

Insurance Rating Criteria, January 2019

Business Profile

Overall Favorable Business Profile

Favorable Competitive Positioning and Diversification Offset Moderate Risk

PLC is a well-diversified company, with substantial size and competitive positioning, all attributes Fitch views as "favorable" (i.e. consistent with the 'AA' rating category). These favorable attributes are partially offset by a "moderate" (i.e. consistent with the 'A' rating category) business risk profile. Fitch believes PLC's business risk profile is improving as more volatile product lines are replaced with less volatile products. Overall, Fitch considers PLC's business profile to be favorable.

Favorable Competitive Positioning and Operating Scale

PLC has a substantive business franchise with many competitive advantages. The company ranks among the 20 largest U.S. life insurers, measured in terms of admitted assets or surplus. PLC's YE 2018 total assets exceed $135 billion while surplus exceed $9 billion. PLC is a top 10 U.S. annuity writer, scoring in the top 10 for VAs and fixed annuities (FAs). PLC is also a top-10 writer of individual life insurance. The company has a solid competitive position in the affluent and emerging affluent markets, and is establishing a presence in the middle market.

Moderate, but Improving, Business Risk Profile

Fitch considers PLC's risk appetite to be on par with the industry as a whole. In recent years, the company changed its focus to more established, less volatile, lines of business.

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 reducing its exposure to legacy VAs with more feature-rich guarantee riders and increasing its emphasis on FAs, investment-only VAs (IOVA) and indexed universal life (IUL) products, as well as growing its life reinsurance business.

PLC's life insurance sales are now predominantly indexed UL, followed by variable UL and life insurance with long-term care benefits. ULNLG sales account for approximately 1% of total life sales. The company further enhanced its shift toward mortality risk with the purchase of Manulife Financial Corporation's life retrocession business in 2011 and an RGA Reinsurance Company transaction to assume $200 billion of in-force individual life reinsured risk in 2014.

Diversification Is Favorable

Fitch believes PLC is well diversified by business line, geography and distribution channel. Following the rebalancing of its product mix, VA sales amounted to 26% of total Retirement Solutions Division sales in 2018 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. Further, PLC discontinued feature-rich VA guarantee riders and increased fees aimed at managing changes in both volatility and interest rates. Almost two-thirds of new business is IOVA.

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

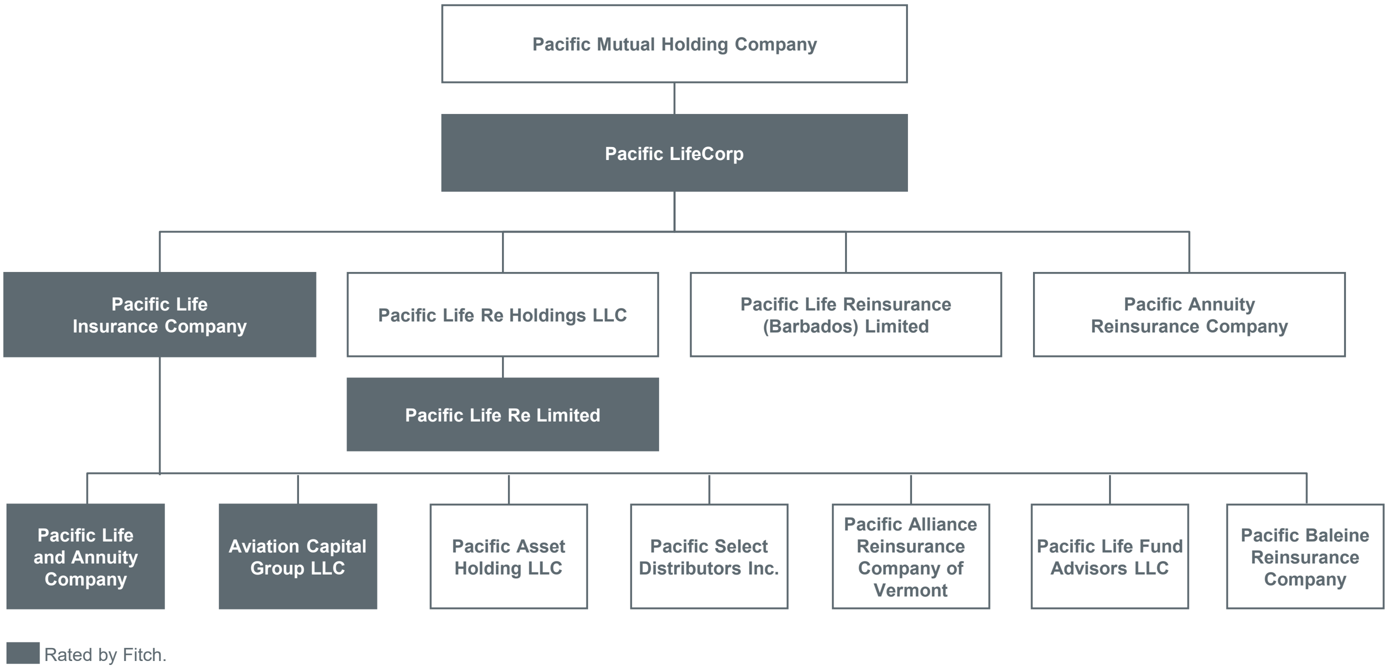
In addition to direct sales of products in the U.S. market, Pacific Life Re Limited (PLR), a wholly owned subsidiary of PLC, reinsures mortality, morbidity and longevity risks primarily in Europe, Asia and Australia.

Ownership

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



Source: Pacific LifeCorp.

Capitalization and Leverage

(Year End as of Dec. 31)	2014	2015	2016	2017	2018
Total Adjusted Capital ($ Mil.)	7,835	8,475	9,246	9,930	10,661
RBC (%)	677	632	680	688	552
Asset Leverage (x)	15	14	13	14	13
Operating Leverage (x)	6	6	6	6	7
Financial Leverage (%)	21	20	19	16	15

Fitch's Expectation

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.

TFC – Total financing and commitments. Note: Financial leverage is calculated on a consolidated GAAP basis.
Source: Fitch Ratings, S&P Global Market Intelligence.

Statutory Capital Is Very Strong, but TFC Ratio Is High

PLC's insurance subsidiaries are very strongly capitalized on a statutory basis. Financial leverage is consistent with the rating category. However, ACG drives a very high consolidated TFC ratio.

The total financing and commitments ratio 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.

Very Strong Statutory Capitalization, Reduced RBC Volatility

The statutory capitalization of PLC's insurance subsidiaries exceeds expectations for the rating level. As of Dec. 31, 2018, the company reported TAC of $10.7 billion, representing a five-year CAGR of 8.6%. This was primarily driven by improved operating results and unrealized investment gains. The company's Prism capital model score was 'Extremely Strong' when last calculated at YE 2017.

PLC took 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, $1.3 billion was issued by PLIC in the form of surplus notes. As of Dec. 31, 2018, the ratio of surplus notes to TAC was 12%, 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 ratio as high relative to peers, primarily driven by the capital-intensive profile of ACG. PLC's TFC ratio was 1.2x as of Dec. 31, 2018, but would be 0.6x, excluding ACG (ACG debt is nonrecourse to PLC). PLIC's statutory carrying value of ACG was $1.85 billion at YE 2018. 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 $1.575 billion of financing instruments outstanding for Pacific Alliance Reinsurance Company of Vermont (PAR Vermont), Pacific Life Re Limited and Pacific Baleine Reinsurance Company.

Debt Service Capabilities and Financial Flexibility

($ Mil., Year End as of Dec. 31)	2014	2015	2016	2017	2018	Fitch's Expectation
Total Interest Expense	415	443	461	605	513	GAAP interest coverage will be in the 8x–10x range. Statutory interest coverage will remain above the median ratio guideline for a company rated 'AA–'.
Adjusted Interest Expense	149	152	153	140	125	
GAAP Interest Coverage (x)	7.5	6.7	9.4	9.1	9.6	
Maximum Statutory Dividend Capacity	668	608	803	784	927	
Statutory Interest Coverage (x)	5.6	7.2	8.7	9.1	14.7	

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 loss on debt extinguishment and interest on operating debt, match-funded and Aviation Capital Group debt.
Source: Fitch Ratings, Pacific LifeCorp financial statements.

Strong Coverage and Adequate Financial Flexibility

PLC's interest coverage is in line with expectations. The company has adequate financial flexibility and limited refinancing risk. Backup liquidity is in place.

Interest Coverage in Line with Rating Expectations

PLC's GAAP interest coverage is strong for the current rating level, in the 9x–10x range. Based on statutory dividend rules, PLIC's maximum dividend capacity without regulatory approval in 2019 is $927 million, which Fitch considers to be a very strong source of debt-servicing capability. As of March 31, 2019, 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 $56 million in 2020.

Backup Liquidity Available

Other liquidity sources include PLC's $600 million revolving credit facility in place through June 2023. PLIC maintains a $700 million CP program, which is backed by a $400 million bank line of credit maturing in June 2023. As of Dec. 31, 2018, there were no outstanding borrowings under these facilities. The insurance companies have access to funding from the Federal Home Loan Banks (FHLB) of both Topeka and San Francisco, which depend on the value of the qualifying collateral. As of Dec. 31, 2018, the company had $68 million of funding agreements issued with the FHLB of Topeka and no debt outstanding with the FHLB of San Francisco.

Debt Maturities

($ Mil., as of Dec. 31, 2018)	
2019	0
2020	56
2021 or Later	2,259
Total	**2,315**

Source: Fitch Ratings, Pacific LifeCorp.

Financial Performance and Earnings

($ Mil., Year End as of Dec. 31)	2014	2015	2016	2017	2018	Fitch's Expectation
Pretax Gain from Operations	780	709	1,009	893	735	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	653	536	852	1,207	888	
Pretax Return on Total Assets Post-Dividend (%)	0.68	0.60	0.83	0.69	0.54	
Operating Return on TAC (%)	9.2	7.7	9.2	8.3	9.2	
Growth in Revenue Before Realized Gains (%)	1.0	8.1	-3.5	11.6	19.7	

TAC – Total adjusted capital. Note: Statutory accounting principles. Combined Pacific Life Insurance Company and Pacific Life & Annuity Company.
Source: Fitch Ratings, S&P Global Market Intelligence.

Less Volatile Earnings Profile

PLC's product diversification reduces earnings volatility. The company has a sizable, but shrinking, legacy VA block of business.

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, reduces earnings volatility. Fitch expects earnings levels to be constrained by hedging costs and lower investment yields. GAAP ROE is expected to remain in the 6%–8% range in the intermediate term. For 2018, PLC reported a GAAP operating ROE of 6.8%.

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 $48 billion in VA net account value as of Dec. 31, 2018. Approximately 56% of PLIC's account value had a guaranteed minimum death benefit plus some form of living benefit, the majority being a guaranteed minimum withdrawal benefit. 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.

Investment and Asset Risk

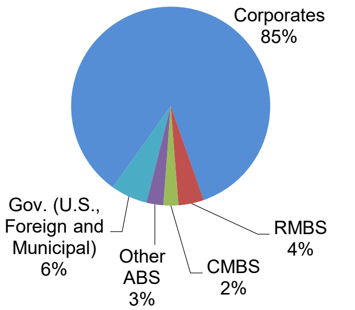
(Year End as of Dec. 31)	2014	2015	2016	2017	2018	Fitch's Expectation
Cash and Invested Assets ($ Mil.)	55,469	59,771	64,882	71,206	79,291	No significant changes are expected in PLC's investment portfolio. Credit-related losses are forecast to remain below long-term averages. PLC's investment yield volatility is due to derivative accounting for hedges on variable annuity risks.
Below-Investment-Grade Bonds/TAC (%)	22	23	25	24	22	
Risky Assets Ratio (%)	48	41	40	65	69	
Investment Yield (%)	4.50	4.63	4.18	4.58	3.98	
Average NAIC Rating on Bonds	1.6	1.6	1.6	1.7	1.7	

TAC – Total adjusted capital. Note: Statutory accounting principles. Combined Pacific Life Insurance Company and Pacific Life & Annuity Company.
Source: Fitch Ratings, S&P Global Market Intelligence.

Moderate Investment Risk

PLC has a high-quality corporate bond portfolio and below-average risky assets. PLC's commercial mortgages and real estate investments are performing well.

Fixed-Income Portfolio
(Totaled $53 Bil. as of Dec. 31, 2018)



RMBS – Residential mortgage-backed securities. CMBS – Commercial mortgage-backed securities. ABS – Asset-backed securities. Note: GAAP fair value.
Source: Pacific LifeCorp financial statements.

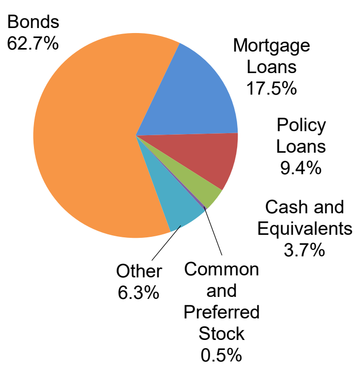
High-Quality Corporate Bond Portfolio

PLC's bond portfolio is heavily weighted toward corporates with a modest 4% of the portfolio below investment grade. 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 9% 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 ratio of 52% and a weighted average debt service coverage ratio of approximately 2x as of Dec. 31, 2018. 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.

Investment Portfolio
(Totaled $85 Bil. as of Dec. 31, 2018)



Note: GAAP fair value.
Source: Pacific LifeCorp financial statements.

Below-Average Risky Assets

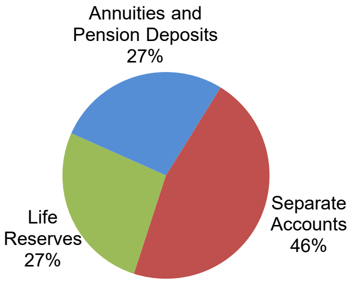
PLC's risky asset ratio is nearly half of the life insurance industry, reflecting below-average exposure to equities; below-investment-grade bonds; and Schedule BA assets, including private equity investments and hedge funds. Fitch believes the 2018 risky asset ratio overstates PLC's risky assets because PLC's ownership of ACG was transferred to a limited liability company in 2017. As a result, ACG now appears in the statutory financial statements as a Schedule BA asset instead of a Schedule D asset. This change adds 17 points to the risky asset ratio, which would be 52% if the change had not occurred. The company's investment strategy largely reflects asset/liability management considerations.

Asset/Liability and Liquidity Management

(%, Year End as of Dec. 31)	2014	2015	2016	2017	2018	Fitch's Expectation
Liquidity Ratio	77.6	71.6	69.6	66.6	64.7	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)	1.5	1.5	1.6	1.6	1.7	
Public Bonds/Total Bonds	63.9	61.4	62.6	62.1	60.4	
Total Adjusted Liabilities and Deposits ($ Mil.)	110,315	110,459	115,431	125,312	124.923	

Note: Statutory accounting principles. Combined Pacific Life Insurance Company and Pacific Life & Annuity Company.
Source: Fitch Ratings, S&P Global Market Intelligence.

Adjusted Liabilities and Deposits
(As of Dec. 31, 2018)



Note: Statutory accounting principles. Consolidated Pacific Life Insurance Company and Pacific Life & Annuity Company.
Source: Fitch Ratings, S&P Global Market Intelligence.

Asset/Liability and Liquidity Management Are Very Strong

The company has a robust VA hedging program in place and has partially reinsured its VA exposure. Vermont captive insurers are used for the bulk of the company's ULNLG business. Cash flow testing results have been favorable. There is minimal disintermediation risk.

Robust VA Hedging Program

Fitch positively views 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, equity index futures 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, and by using interest rate swaps. 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, 11% of the company's VA rider guarantees and 7% of the base contracts are covered under reinsurance, concentrated in issue years 2007 and 2008.

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 a 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, 2018, $794 million was issued.

Statutory reserves ceded to Pacific Baleine are supported by a 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 $1.6 billion. As of Dec. 30, 2018, $361 million was issued.

Favorable Cash Flow Testing Results

Fitch views PLC's asset/liability management practices to be strong. For 2018, cash flow testing, both insurance operating companies passed all "New York 7" interest rate scenarios. As of Dec. 31, 2018, the company's net duration mismatch in aggregate was just under one year, within its target limit of less than 1.5 years.

Minimal Disintermediation Risk

Historically, the primary source of PLC's disintermediation risk was related to its institutional products, which was reduced significantly over the past decade. PLC's outstanding balance of funding agreement-backed note programs declined to $178 million as of Dec. 31, 2018 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 in recent years. As of Dec. 31, 2018, the market-to-book value ratio was 99%. 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 83% of the company's general account 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 Non-Insurance Operations/Exposure

($ Mil., Year End as of Dec. 31)	2014	2015	2016	2017	2018	Fitch's Expectation
Total Revenue	824	859	963	950	1,048	Fitch expects leverage to remain below 3.0x over the long term.
Total Outstanding Debt	5,407	5,710	5,204	5,901	7,030	
Total Equity	1,736	1,826	1,908	2,956	3,225	

Source: Fitch Ratings, Aviation Capital Group.

ACG Generates Stable Earnings; Increases PLC's TFC Ratio

ACG has been consistently profitable and generated stable cash flows. However, PLC's investment creates a concentrated exposure to a lower-rated credit. ACG is reliant on the capital market, but improved its 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, managed and committed portfolio of 485 aircraft as of Dec. 31, 2018. 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 standalone credit profile of 'BBB–'. PLIC's current 75.5% 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. In December 2017, TC Skyward Aviation U.S., Inc., a Delaware corporation and direct subsidiary of Tokyo Century Corporation, a Japanese corporation, purchased a 20% member interest in ACG. At the request of ACG and subject to certain conditions, TC Skyward also agreed to provide up to $600 million of additional equity capital to ACG through December 2020 in exchange for additional member interest in ACG. TC Skyward's member interest was subsequently increased to 24.5%. PLC publicly stated it intends to retain a majority equity stake in ACG, and ACG will remain an important component within PLC's diversified portfolio of businesses.

ACG made significant progress in diversifying its funding profile and broadening capital markets access across various funding sources. At YE 2018, ACG's unsecured debt was approximately 62% of total funding while equity funding was 31%. 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.

Appendix A: Industry Profile and Operating Environment

This section discusses the U.S. life insurance sector. Most insurers in this sector have Insurer Financial Strength (IFS) ratings in the ‘AA’ and ‘A’ categories. These ratings reflect the sector’s very strong balance sheet profile and stable financial performance, which has benefited from cyclical economic improvement, higher interest rates and benign credit environment.

Regulatory Oversight

Fitch views U.S. insurance regulation as very developed, relatively transparent and effective. Insurance regulation is conducted at the state level and focused on protecting policyholders and promoting insurance company solvency. State insurance departments have broad regulatory authority over insurers domiciled in their state with respect to standards of solvency, financial reporting, investments, market conduct, and licensing for insurers domiciled in their state, among other things.

Financial reporting requirements are considered robust and transparent based on accounting practices and procedures prescribed or permitted by the state insurance departments. Regulatory capital standards and monitoring/examination processes are robust.

Technical Sophistication of Insurance Market; Diversity and Breadth

The U.S. life insurance sector is very sophisticated technically, with diverse and very deep product offerings. Fitch’s view reflects the industry’s well-established underwriting and pricing practices, investment capabilities and analysis, and improving enterprise risk management capabilities.

Competitive Profile

The U.S. life insurance sector is highly competitive. Life insurers compete based on a number of factors, including product features, service, scale, price, financial strength, brand name, and investment and distribution capabilities. There are significant scale advantages in the life insurance business, which favors well-established competitors over new market entrants.

The adoption of more sophisticated systems and data analytic capabilities is reshaping the life insurance business model, reducing barriers to entry and changing the competitive landscape. For existing players, this trend represents both a business opportunity and a competitive threat that will emerge over time. For new market participants, this trend represents an opportunity to disrupt certain aspects of the life insurance value chain.

Financial Markets Development

The U.S. has the largest and most developed financial markets in the world. The markets are very deep, robust and highly liquid, which provides insurers the ability to maintain diversified asset portfolios, manage interest rate and credit risk exposures, and invest new cash flows with favorable trade execution. While the U.S. financial markets exhibit enormous strength in almost all economic environments, they experienced stress during extreme conditions.

Country Risk

Insurers’ ratings are unconstrained by sovereign risk issues as Fitch maintains a ‘AAA’ country rating with a Stable Outlook on the U.S. The rating is supported by structural strengths, including the size of the economy, high per capita income, strong institutions, dynamic business environment and the world’s pre-eminent reserve currency. Partially offsetting these are concerns tied to government spending and financing activity, particularly growth in government deficits and the ability to meet long-term obligations, such as retirement and healthcare entitlements.

Appendix B: Peer Analysis

PLC Fits Well in the 'AA–' Category

PLC fits well with other life and asset accumulation writers in the 'AA–' category. The company's capitalization, as defined by RBC and leverage metrics, is significantly stronger than 'A+' 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, which are more return-focused, but exceeds mutual peers. PLC's product profile is somewhat 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.

Peer Comparison

(%, YE 2018)	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	AA-	552	10,661	13	7	69	15	0.5	9
AIG (Life Operations)	A+	389	12,832	22	14	133	N.A.	0.8	10
Lincoln National	A+	452	9,541	27	12	49	26	0.1	0.1
Principal	AA–	416	6,434	29	11	78	24	0.6	17
Prudential	AA–	417	20,903	28	8	66	27	0.2	7
Minnesota Life	AA	480	3,032	16	7	55	20	-0.2	-3.3

TAC – Total adjusted capital. N.A. – Not applicable. Note: Asset leverage consists of statutory assets divided by TAC. Operating leverage consists of statutory liabilities divided by TAC.
Source: Fitch Ratings, S&P Global Market Intelligence.

Appendix C: Additional Financial Exhibits

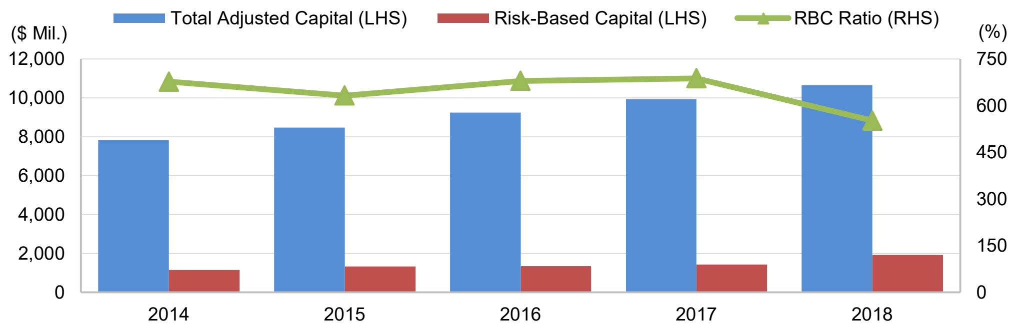
Pacific LifeCorp

($ Mil., as of Dec. 31, 2018)

Insurance Debt	
7.900% Surplus Notes due Dec. 30, 2023	134
9.250% Surplus Notes due June 15, 2039	385
4.300% Surplus Notes due June 15, 2067	749
6.600% Senior Notes due Sept. 15, 2033	586
6.000% Senior Notes due Feb. 10, 2020	56
5.125% Senior Notes due Jan. 30, 2043	405
Total Insurance Debt	**2,315**
Non-Insurance Debt	
Debt Recourse Only to ACG	5,031
ACG Revolving Credit Facility	235
ACG VIE	693
Other	2,796
Total Financial Services Debt	**8,755**
Total Debt	**11,070**
Reported Shareholders' Equity	12,885
Accumulated Other Comprehensive Income (Primarily SFAS 115 and SFAS 133)	1,757
Adjusted Shareholders' Equity	11,128
Minority Interest	816
Total Capital	**23,014**
Insurance Capital	14,259
Total Debt/Total Capital (%)	48
Total Insurance Debt/ Total Capital (%)	16

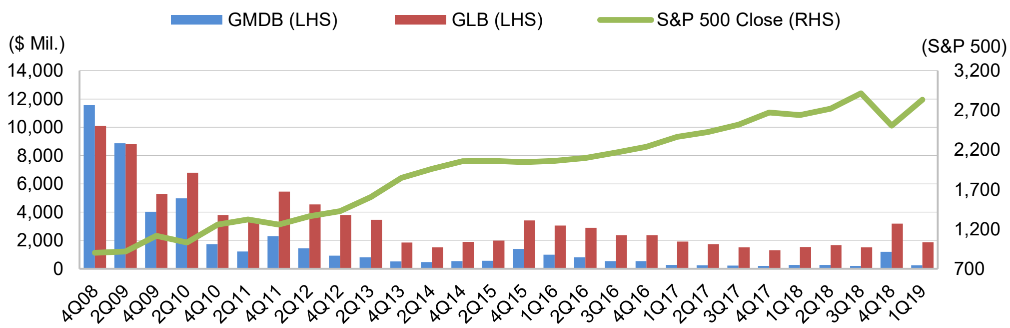
ACG – Aviation Capital Group.
VIE – Variable interest entity.
Source: Fitch Ratings, Pacific LifeCorp.

Statutory Capital and Risk-Based Capital Trends



Source: Fitch Ratings, Pacific LifeCorp.

Net Amount at Risk for Variable Annuity Riders



GMDB – Guaranteed minimum death benefit. GLB – Guaranteed living benefit.
Source: Fitch Ratings, Pacific LifeCorp.

Appendix D: Other Ratings Considerations

Below is a summary of additional ratings considerations that are part of Fitch's ratings criteria.

Group IFS 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.

Notching Summary

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 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.

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 Reg. Override %	FLR Debt %
Pacific Life Insurance Co.				
Surplus Notes	1,268	0	100	100

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

Corporate Governance and Management

Corporate governance and management are adequate and neutral to the rating.

Transfer and Convertibility Risk (Country Ceiling)

None.

Criteria Variations

None.

Appendix E: Complete Ratings List

Ratings

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

Source: Fitch Ratings.

The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below.