MOODY'S INVESTORS SERVICE

CREDIT OPINION

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Update

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Pacific Mutual Holding Company

Update to credit analysis

Summary

Moody's A1/stable long-term insurance financial strength (IFS) ratings of Pacific Life Insurance Company (Pacific Life) and its subsidiary, Pacific Life & Annuity Company (PL&A), and the Baa1 senior debt rating of its parent Pacific LifeCorp, are based on the insurer's strong market position in the high-end life insurance market, excellent capitalization, risk management, broad product distribution and good profitability. Pacific Life's excellent business profile benefits from a top-tier market position in life insurance, annuities and structured settlements. The P-1 short-term insurance financial strength rating is based on the company's excellent liquidity, careful liability management and access to alternative funding sources, if necessary.

These strengths are offset by risks arising from the variable annuity (VA) business' sensitivity to capital market movements and the impact of periods of low interest rates on profitability. Other challenges include managing its exposure to Aviation Capital Group (ACG), its aircraft leasing subsidiary, which is twenty percent owned by Tokyo Century Corporation. The subsidiary has remained consistently profitable through challenging economic times and provides some earnings diversification, but exposes the company to potential pressures within the aircraft leasing business.





Source: Moody's Investors Service; Company Filings

Credit strengths

- » Established market positions in the high-end life insurance market;
- » Broad and balanced independent distribution;
- » Strong capitalization (NAIC RBC ratio was 688% (company action level)).

Credit challenges

- » Managing volatility in capital and earnings from capital market movements, particularly as it relates to its legacy variable annuity book;
- » Strong competition in core affluent business and professional life insurance markets;
- » Some long duration products that can be adversely impacted by prolonged low interest rates (e.g. structured settlements).

Outlook

The outlook for the ratings is stable, reflecting Pacific Life's strong market position in the high-end life insurance market, excellent capitalization and good diverse profitability. Going forward, items to watch include the impact of a low interest rate environment on earnings and volatility in RBC ratio from Pacific Life's VA products with guarantees.

Factors that could lead to an upgrade

- » Reduced capital and earnings sensitivity to capital market movements;
- » Increased emphasis on protection type products (such as whole life, universal life without any secondary guarantees and term insurance);
- » GAAP return on capital consistently > 8%;
- » Adjusted financial leverage below 20% and earnings coverage consistently above 8x.

Factors that could lead to a downgrade

- » NAIC company action level RBC ratio falls below 350% (688% company action level as of 31 December, 2017);
- » Adjusted financial leverage exceeds 30%;
- » GAAP return on capital < 4%;
- » Aviation Capital Group > 25% of statutory surplus.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

Key indicators table

Exhibit 2	

LANDILZ					
Pacific Mutual Holding Company [1][2]	2017	2016	2015	2014	2013
As Reported (U.S. Dollar Millions)					
Total Assets	157,877	143,298	137,279	137,048	129,921
Total Shareholders' Equity	13,704	11,140	10,108	10,231	8,973
Net income (loss) attributable to common shareholders	1,365	824	661	540	720
Total Revenue	9,510	9,169	8,642	7,073	8,106
Moody's Adjusted Ratios					
High Risk Assets % Shareholders' Equity	48.3%	47.8%	37.1%	37.5%	38.5%
Goodwill & Intangibles % Shareholders' Equity	38.7%	43.3%	49.6%	49.7%	50.3%
Shareholders' Equity % Total Assets	8.0%	7.5%	7.2%	7.3%	6.8%
Return on avg. capital (1 yr. avg ROC)	4.8%	6.5%	5.2%	4.4%	6.4%
Sharpe Ratio of ROC (5 yr. avg)	596.7%	580.7%	643.9%	651.4%	NA
Financial Leverage	12.9%	16.1%	18.1%	17.9%	19.8%
Total Leverage	14.9%	17.5%	19.7%	19.5%	21.6%
Earnings Coverage (1 yr.)	7.8x	8.3x	6.4x	5.2x	6.8x
Cash Flow Coverage (1 yr.)	19.6x	8.7x	6.6x	7.2x	5.6x
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[1] Information based on US GAAP financial statements as of Fiscal YE December 31.

[2] Certain items may have been relabeled and/or reclassified for global consistency.

Source: Moody's Investors Service, Company Filings

Profile

Pacific Life and its subsidiary PL&A are the primary operating subsidiaries of Pacific Life Corp. Pacific Life, its subsidiaries and its affiliated entities, provide life insurance products, individual annuities, mutual funds, life reinsurance and aircraft leasing. They also provide individuals, businesses, and pension plans with a variety of investment products and services.

Detailed credit considerations

Moody's rates Pacific Life A1 for insurance financial strength, which is in line with the rating indicated by the Moody's insurance financial strength adjusted rating scorecard.

Insurance financial strength

The key factors currently influencing the rating and outlook are:

Market Position and Brand: Focus on the high-end life insurance market, but recent actions to grow in other markets

Moody's views Pacific Life's market position and brand as being very strong. The A adjusted score for the company's market position, which is in line with the unadjusted scorecard result, is supported by Pacific Life's strong, focused position in the high end life insurance market serving the very affluent and business markets. The company holds a leading market share in individual life insurance (especially variations of universal life), a strong position in the life retrocession market, and a strong market position in structured settlements and annuities. Pacific Life's market position is strong in the universal life, indexed universal life, variable universal life, and hybrid long-term care insurance segments. Also, Pacific Life is a top 20 U.S. life insurer as measured by assets and one of the largest organized as a mutual or mutual holding company. The adjusted rating for this factor also reflects Pacific Life's market position in the UK, where it sells life protection and longevity type products.

Pacific Life's acquisition of a term life insurance technology platform from Genworth Financial Inc. should allow Pacific Life to expand beyond its historically affluent and corporate customer base to the middle-market segment, which is largely an underserved insurance market.

Distribution: Primarily independent distribution network, but strong reputation with core partners

Pacific Life relies primarily upon a wide variety of third-parties such as independent agents, financial advisors, banks and registered representatives for its insurance product distribution. As a result, Pacific Life maintains less direct control over its distribution and could see relatively lower persistency and more volatile sales for its third-party sold products than those companies with more control

over their distribution systems. However, Pacific Life also benefits from a strong market breadth in most major channels other than career agents, resulting in an A score for diversity of distribution. Pacific Life also has had a very long standing relationships with many key independent distributors, and a reputation for excellent customer service that benefits the company in the market, increasing its sustainability in the independent channels.

Overall, Moody's views Pacific Life's distribution as consistent with A-rated insurance companies and we have left this factor at the unadjusted scorecard result of A.

Product Focus and Diversification: New sales distribution reduces overall product risk

Pacific Life has a very diverse set of product offerings in life and annuity markets, including fixed and variable products, as well as institutionally oriented products. Pacific Life's product diversification also benefits from Pacific Life Re, its life retro and reinsurance operations, and its ownership in ACG, its aircraft leasing company, which provides earnings and revenue diversification, but has a lower credit profile than the life insurance business. Pacific Life is particularly strong in serving the high net-worth life insurance market and benefits from very strong persistency on its products. The entry into the middle-market segment will help improve the overall product risk profile (primarily term life insurance products) and create opportunities to expands its customer base and cross-sell other insurance products.

Pacific Life benefits from a good balance between fixed and variable products, a partial result of its emphasis on risk management and diversification. Since virtually all of Pacific Life's life insurance business is of the non-participating variety, which limits its ability to share adverse experience with its policyholders and restricts upward movement for this rating factor, Moody's views Pacific Life's product focus and diversification as consistent with A-rated insurance companies and as a result we have left this factor at the unadjusted scorecard result of A.

Asset Quality: Good quality investment portfolio

Pacific Life's general account investment portfolio consists primarily of fixed-income securities and commercial mortgages. As of the end of 2017, Pacific Life's ratio of high risk assets as a percentage of shareholders' equity was 48%, consistent with a Aa sub-factor score. Below-investment grade debt is responsible for 38% of high risk assets, with the remainder split among equities, alternative investments and real estate. Pacific Life, as of year-end 2017, had approximately 51% of its total bonds rated in the Baa range, which is considerably higher than its peer and exposes the company to an increase in below-investment grade bonds (currently 5% of total bonds) and higher capital RBC charges if there is ratings migration.

The company's commercial mortgage loan (CML) (15% of invested assets) portfolio has greater exposure to lodging (14%), which is higher than most peers. Exposure to retail though CML stood at 21% as of year-end 2017, and is more focused on high-end rather than middle-market retail space.

Goodwill and other intangibles are equal to approximately 39% of shareholders' equity at year-end 2017, consistent with a Baa score. We believe deferred acquisition costs (DAC), which represents the vast majority of intangibles, to be of higher quality than goodwill, largely because of the greater likelihood that DAC will eventually be converted into tangible equity, as profits net of DAC amortization flow through income, given the strong policyholder persistency.

Overall, we view the asset quality to be the same as the unadjusted score and hence have left the factor unchanged.

Capital Adequacy: Strong RBC ratio; RBC ratio can exhibit some volatility

Pacific Life has good capital adequacy, as measured by capital as a percentage of total assets of 8% as of year-end 2017, which is in line with Moody's expectation for an A-rated company. However, for U.S. firms we consider the NAIC company action level RBC ratio to be a more reliable measure of a U.S. insurer's capital adequacy. Pacific Life's NAIC RBC ratio was 688% (company action level) as of year-end 2017 was exceptional The company's total adjusted capital has remained strong and increased to over \$10 billion as of March 31, 2018. We do note that although Pacific Life has taken prudent risk management steps to protect capital in times of stress, its RBC ratio can still exhibit volatility in response to capital market movements. To that effect, the company has expanded its capital markets hedging program to better stabilize its reported statutory capital position even when equity markets have major moves.

We believe that Pacific Life is best positioned in the Aa range on this factor, given its high level of reported capital, partially offset by its sensitivity to equity markets. We have consequently raised this factor score to Aa from the unadjusted scorecard result of A.

Profitability: Increasingly diversified earnings, but some equity market and interest rate sensitivity

Moody's considers Pacific Life's profitability to be good and benefits from strong and consistent contribution from its various core segments. On a GAAP basis, the company reported a return on capital ratio of 4.8%, compared to 6.5% reported during the prior year-end. In part, Pacific Life's ROC is held back by the company's high levels of capital. Excluding the impact of tax reform, strong net income in 2017 was primarily driven by strong VA performance owing to rising equity markets, higher prepayment income, favorable investment results (lower impairments and higher realized gains) partially offset by one-time impact of ACG losses related to the sale of a portfolio of aircraft, costs associated with the tender and reissuance of debt and elevated mortality experience.

We do note that most of the earnings remain sensitive to equity market movement, particularly in the retirement solutions business (RSD), and going forward, the growing earnings diversification should result in reduced earnings volatility. Moody's believes that RSD's earnings will continue to be sensitive to equity market movements, but far less so than in the past, particularly as the older block of guarantees shrinks as the new business comes onto the books. Additionally, given the company's growing reinsurance business, we expect it to be susceptible to some volatility in mortality. Because we believe the company's earnings and regulatory capital will exhibit volatility during stressful economic periods, we have adjusted the score on this factor down to A from the unadjusted scorecard result of Aa.

Liquidity and Asset/Liability Management (ALM): Stable liability profile, but VA adds ALM risk

Moody's believes that Pacific Life has excellent liquidity to meet its near-term policyholder obligations based on the unadjusted scorecard metric, and this is supported by a stable liability profile of life insurance business. While the company may face some challenges from the low interest rate environment, especially in long duration lines such as structured settlements, newer structured settlement sales have been focused on shorter duration products which somewhat minimizes these challenges. Pacific Life's institutional products business is basically in runoff at this time and Moody's believes the company has ample liquidity to manage through a stressful liquidity scenario.

On ALM, appropriately managing the risks from a book of VAs containing embedded guarantees is a challenging task at best and requires the company to employ a hedging program to mitigate any market disruptions. These factors make interest rate and equity hedging more key, and make the company's ALM more challenging, and support a downward adjustment for the factor score to A from the unadjusted result of Aa.

Financial Flexibility: Low leverage and strong cash flow coverage

Pacific Life's adjusted financial leverage (13% as of year-end 2017) is consistent with Aa-rated insurers. We expect the company's financial leverage to remain relatively stable going forward, ignoring the impact of interest rates on AOCI. Total leverage, which was modestly higher at 15% as of year-end 2017, includes hybrid equity credit on the outstanding surplus notes. In October 2017, Pacific Life issued \$750 million of 50-year surplus notes. The proceeds of the surplus notes were used to repurchase existing notes.

Cash flow coverage has been a strength, and we expect it to remain strong in 2018 due to manageable holding company interest expenses (\$90 million) relative to the cash flow generation capacity of the operating company. Earnings coverage has also been strong at 7.8x as of year-end 2017, supported by strong earnings generation in 2017. As of December 31, 2017, the company held approximately over \$300 million in cash and liquid investments at the holdco relative to its anticipated annual interest expense of approximately \$40 million (at the holdco), net of interest income received from internal surplus notes issued by Pacific Life.

Given the company is organized in a mutual holding company structure, we believe that raising external equity is not a realistic alternative for the company. However, we still believe that a Aa rating for this factor is appropriate given the low financial leverage and strong cash flow coverage ratios as discussed above. As a result, we have left the adjusted score to be at the same level as the unadjusted score.

Exhibit 4



Financial Flexibility

Source: Moody's Investors Service; Company Filings

Liquidity analysis

Pacific Life has a \$700 million commercial paper program. These unsecured notes rank pari passu with Pacific Life's other unsubordinated indebtedness. Pacific Life had no commercial paper outstanding as of year-end 2017.

Pacific Life's \$400 million and \$600 million bank revolving credit facilities mature on May 12, 2021. There were no amounts outstanding as of March 31, 2018, and the facilities contain no material adverse change clauses.

Interest expense at Pacific LifeCorp is anticipated to be approximately \$90 million in 2018, and will be serviced by cash available at Pacific LifeCorp and Pacific Life's statutory dividend capacity (\$784 million available in 2018 without requiring special regulatory approval). We note that the interest expense is offset by \$52 million in internal surplus notes issued by Pacific Life to Pacific LifeCorp. In 2017, the insurance company did not pay dividends to Pacific LifeCorp.

The company's next debt maturity of \$56 million comes due in February 2020.

Support and structural considerations

The spread between Pacific LifeCorp's senior debt rating and the IFS ratings of Pacific Life is three notches, consistent with Moody's typical notching spread for simple U.S. insurance holding company structures. Pacific Life also has surplus notes outstanding with a rating of A3, which is consistent with Moody's standard practice of notching a life insurer's surplus note rating two notches below the insurance financial strength rating of the insurer issuing the surplus note.

Methodology and scorecard

Financial Strength Rating Scorecard [1][2]	Aaa	Aa	Α	Baa	Ba	В	Caa	Score	Adj Score
Business Profile								A	A
Market Position and Brand (15%)								A	A
- Relative Market Share Ratio			Х						
Distribution (10%)								A	A
- Distribution Control			Х						
- Diversity of Distribution			Х						
Product Focus and Diversification (10%)								A	A
- Product Risk			Х						
- Life Insurance Product Diversification			Х						
Financial Profile								Aa	A
Asset Quality (10%)								A	A
- High Risk Assets % Shareholders' Equity		48.3%							
- Goodwill & Intangibles % Shareholders' Equity			38.7%						
Capital Adequacy (15%)								A	Aa
- Shareholders' Equity % Total Assets			8.0%						
Profitability (15%)								Aa	A
- Return on Capital (5 yr. avg)			5.5%						
- Sharpe Ratio of ROC (5 yr. avg)	596.7%								
Liquidity and Asset/Liability Management (10%)								Aa	A
- Liquid Assets % Liquid Liabilities		Х							
Financial Flexibility (15%)								Aa	Aa
- Financial Leverage	12.9%								
- Total Leverage	14.9%								
- Earnings Coverage (5 yr. avg)			6.9x						
- Cash Flow Coverage (5 yr. avg)	9.5x								
Operating Environment								Aaa - A	Aaa - A
Aggregate Profile								A1	A1
[1] information based on us gaap financial statements as of fiscal ve december 31									

 [1] information based on us gaap financial statements as of fiscal ye december 31.
[2] the scorecard rating is an important component of the company's published rating, reflecting the stand-alone financial strength before other considerations (discussed above) are incorporated into the analysis.

Source: Moody's Investors Service, Company Filings

Moody's related publications

Sector Research

- » Decoding impact of genetic testing: riskier for life insurers than health insurers, June 2018
- » Long-term care risk remains a top credit concern for sector after supplemental review, June 2018
- » Higher equity markets, low defaults and gradual rates drive 2018 profitability, June 2018
- » Cleaning house: legacy business divestures pick up speed, May 2018
- » Solid industry capital; RBC ratios will decline under new tax law, May 2018

Outlook

» Life Insurance - US: 2018 outlook stable as insurers adapt to low rates and capitalization is strong, November 2017

Methodology

» Life Insurers, May 2018

Ratings

Exhibit 6				
Category	Moody's Rating			
PACIFIC LIFECORP				
Rating Outlook	STA			
Senior Unsecured	Baa1			
PACIFIC LIFE INSURANCE COMPANY				
Rating Outlook	STA			
Insurance Financial Strength	A1			
ST Insurance Financial Strength	P-1			
Surplus Notes	A3 (hyb)			
Commercial Paper	P-1			
PACIFIC LIFE & ANNUITY COMPANY				
Rating Outlook	STA			
Insurance Financial Strength	A1			
PACIFIC LIFE FUNDING, LLC				
Rating Outlook	STA			
Source: Moody's Investors Service				

Source: Moody's Investors Service

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