

Athene Holding, Inc

To invest or not to invest?

It was December 2016, Brandon Snow, Chief Investment Officer at Cambridge Global Asset Management¹, and his team had just returned from a roadshow at the Ritz Carlton, in Boston. They had a Form S-1 Registration Statement in front of them and had an important decision to make: “Should we invest in this IPO”?

In cause was the IPO of Athene Holding, the Apollo-backed life insurer that “came out of nowhere” and became one of the largest fixed annuity providers in the United States. Apollo’s idea inspired many copycats and other alternative investment firms entered the insurance business - the model was gaining broader acceptance².

Athene Holding was created in the midst of the 2008 global financial crisis when insurance companies were faced with additional capital requirements and an all-time low interest rate environment. The company had evolved to a leading annuity provider and was pursuing an IPO to become more transparent to the eyes of regulators and rating agencies. Brandon was wondering if buying Athene Holding’s stock was the right decision.

The Insurance Industry after the Global Crisis

The Global crisis

Prior to the financial crisis, the US economy was booming, particularly the housing market which had been pushed by an extremely low interest rate environment between 2002 and 2005. The period after 2003 was an exceptionally strong one for the capital and mortgage markets until 2007 when the subprime mortgage market in the United States started to reveal signs of a bubble. Financial institutions were excessively exposed to the mortgage market through mortgage-backed securities, bundled loan portfolios, derivatives and credit default swaps thus, the crisis in the subprime mortgage market developed into a full-blown global crisis when Lehman Brothers collapsed in September 2008. The securitization, excessive appetite for risk and the low interest rates before the crisis were among the main catalysts of the crisis. The fall of Lehman Brothers was followed by a global economic downturn as well as a sharp decrease in

¹ Cambridge Global Asset Management was a division of CI Investments Inc. a subsidiary of CI Financial Corp., which was a Canadian financial services’ company who provided global asset management and wealth management services

² Ares Private Equity Group, Blackstone Group, Carlyle Group, Blackrock and Guggenheim Partners are examples of alternative investors that entered in the Annuity industry

the capital markets³ globally. (**Exhibit 1** shows S&P 500 and Dow Jones's stock price from 2007 through 2009 and TED spread's evolution in 2008)

Implications to insurance companies

Insurance companies had a great degree of exposure to capital markets⁴ through its investment portfolios however, in most of the cases, these companies sought diversification and focused on high-grade investments in order to effectively respond to major turbulences in the capital markets.

Even though insurers' assets were mainly investment-grade, the global financial crisis uncovered one of the biggest Wall Street scandals related to credit rating agencies. Some blamed the "3 big credit rating agencies"⁵ for being major catalysts of the mass adoption of the new and complex securities used to finance subprime mortgages by attributing "Triple-A" ratings to securities that were later on downgraded to "Junk".

This led some insurance companies and pension funds investing in "Junk-disguised" securities that, if not highly rated, would have never existed on such companies' balance sheets due to their strict bylaws regarding risky assets.

Below is detailed how each type of insurance provider was affected by the financial crisis:

Mortgage insurance companies

Mortgage insurance companies' exposure to the crisis was the highest among all types of insurances companies thus, such companies saw their assets depreciate the most among all insurers. Given that the crisis major catalyst was the residential mortgage market it is not surprising that by 2007/8 mortgage insurance's assets and capital surpluses achieved in the past were being wiped out extremely fast.

Life insurance companies

Even though Life insurance companies had less exposure to the housing market, their investment portfolio was hit hard due to a global depreciation of the equities. To make it worse, interest rates reached low time records and spreads on the equity markets spiked, increasing the cost of hedging strategies.

Large insurance financial groups

Large and complex insurance financial groups such as AIG were severely affected by the financial crisis due their strong affiliations to banks and its operations. Before the crisis, the operations of these large financial groups included writing complex credit protection products backing the euphoric mortgage lending at the time. When the market crashed, losses linked to these products were unbearable and led to the deterioration of their credit ratings and additional collateral requirements.

By August 2009, more than USD260 billion (**Exhibit 2**) were lost since the financial crisis started in 2007. The implications for the insurance sector were devastating and many companies filed for bankruptcy or got bailed-out due to its importance to the stabilization of the financial industry (e-g AIG). The credit rating outlook for US insurance companies changed from stable to negative, requiring insurers to hold more capital due to the increased risk. Additionally, as insurance

³ The Dow Jones index lost 18% in one week while the S&P 500 fell more than 20% over the same period

⁴ Mainly fixed income (Government and Corporate debt)

⁵ Standard & Poor's (S&P), Moody's and Fitch Group

companies were subject to mark-to-market valuations for some of their invested assets, the sharp fall in the valuation of their assets raised tremendous challenges in balance sheet management.

The opportunity for buying cheap liabilities

During the financial crisis, insurance providers sought to minimize costs and improving their financial position in order to increase the likelihood of surviving the defiant times ahead. The trends to avoid further losses were the following:

- Generalist insurance companies or large financial groups providing several different types of products decided to focus on their core products and looked for alternatives to non-core business lines
- Life-insurers with legacy liabilities written at high interest rate environments were struggling to meet fixed payment thus, were looking to divest blocks due to capital requirements
- Regulators implemented tighter legislation in order to prevent insurers to hold credit or liquidity risk on their balance sheets, leading insurers to explore reinsurance

Annuity providers

Annuity providers were focused on selling spread-driven retirement products such as variable annuities, fixed or fixed index annuities. These products were usually long-term oriented and promise future stream income to policy holders for the exchange of a premium at inception. Moreover, an annuity provider earned the spread between its investment return on the invested assets and the rate on its liabilities. (See **Exhibit 3** for a detailed explanation of a fixed annuities economics⁶).

When the crisis erupted, many companies providing retirement savings products had written annuity contracts prior to the crisis, promising policyholders fixed payments that would have to be met irrespective from the economic environment. By looking at those firms' liabilities and assets' profiles and, considering the low-interest environment after the crisis (**Exhibit 4**), it was perceptible that some firms would face challenges in earning any spreads on their investments.

In fact, many life insurers decided to write less annuity products due to lack of confidence in earning any spreads on invested assets. Furthermore, for some insurers, the burdens of the financial crisis were too high and the resulting capital demands forced some companies to downsize or exit the retirement market.

Nevertheless, the demand for guaranteed savings products had increased due to volatility in the financial markets, record low interest rates and an increasing retirement-age population⁷. This caused an imbalance between supply and demand for retirement products as carriers were writing less new business while the fundamentals drivers for retirement products were still in place. (**Exhibit 5** shows the retirement-age population outlook in the US).

⁶ Regarding fixed annuities. Fixed index annuities work in a similar way, but the interest credited to policyholders tracks the performance of an equity index, offering to its holders' equity-like upside

⁷ By 2010, US had a population of about 40 million people aged 65 or older and, according to the U.S. Census Bureau, the segment was expected to increase to 74 million people by 2030

Company Overview

Athene Inception

Alternative asset managers like the mogul Apollo Global Management LLC⁸ had been able to raise assets from sovereign wealth funds, pension funds and non-profit endowments. As a matter of fact, insurance was one of the few trillion-dollar industries yet to be tapped by alternative investors.

By 2008, Imran Siddiqui joined Apollo from Oakhill Capital Partners with the idea of building an insurance company and collecting fees from managing its investment portfolio. The idea pleased Apollo's managing partners Leon Black and Marc Rowan who envisioned creating a company resembling to Warren Buffet's insurance company Geico or reinsurance business GenRe. This way, Apollo would be able to collect premiums from policyholders to then invest them in fixed income instruments, distressed assets, credit funds and buyout funds that the company was famous for. In addition, funds collected from annuity holders were also inherently cheaper than the funds Apollo had been raising through typical banks and Limited Partners.

In order to materialize the vision, Apollo Global Management LLC challenged James Belardi, previously president of SunAmerica Life Insurance Company, and Chip Gillis, former head of Bear Stearns' Insurance Solutions Group to lead the insurance company later named Athene Holding Ltd. Athene's founders detected the need for a well-capitalized company with an experienced executive team (**Exhibit 6**) to fill the gap left by struggling retirement products' providers. They also realized the demand for retirement savings product was increasing while carriers were writing less new products or exploring reinsurance due to unfavorable market conditions. In addition, the illiquid nature of annuities' liabilities was highly appreciated by Apollo who had the capabilities to source unique and high-quality investments just by moving down the liquidity spectrum. The premises for the company were in place and Athene had a great opportunity to enter the life insurance market.

The company started by acquiring cheap liabilities from struggling peers in order to quickly take substantial market share in the retail annuity business. From 2009 through the nine months ended in 2016, Athene had grown to \$71.6 bn in invested assets, \$87.0 bn of total assets and \$70.9 reserve liabilities, establishing itself as one of the largest players in the U.S. fixed annuity industry. At the time, the company had grown to 1,360 employees from just 255 employees in 2012. The risk management team had 30 employees itself. (**Exhibit 7** contains Athene's 2013-3Q2016 main financials).

Athene Holding Ltd. was based in Bermuda and its US subsidiaries' headquarters were located in Iowa, United States. Although the company's activities were mainly held in the US, the company ceded 80 per cent of retail annuity liabilities and the totality of its institutional liabilities to Bermuda, shifting the risk to its Bermuda based life reinsurer Athene Life Re Ltd. To support the intragroup reinsurance agreements, ALRe held most of Athene's statutory capital⁹. With that configuration, Athene was able to guarantee its operations were not held in the US thus, the

⁸ Founded in 1990, Apollo Global Management LLC, known as Apollo, was an American leading global investment manager. Apollo was founded by former Drexel Burman Lerner employees on the verge of its collapse in February 1990. The company's most notable founders include Leon Black, Joshua Harris and Marc Rowan who are currently Apollo's managing partners. The firm was originally founded to invest in distressed companies but by 2005 evolved into three core areas: Private Equity, Credit and Real State.

⁹ 77% of Athene's \$7.4bn consolidated statutory capital as of December 31, 2015

company was subject to Bermuda capital requirements and tax policies for most of its activities. (See **Exhibit 8** for Athene's corporate structure).

Athene had been providing retirement services and, through its subsidiaries, issued, reinsured and acquired retirements savings products. Throughout the years company decided to focus on two core products – Fixed Annuities and Fixed Index Annuities which had been representing over 80% of its liabilities. (**Exhibit 9** shows Athene's liabilities as of 30 September 2016).

Athene Asset Management

Athene Asset Management (AAM), indirect subsidiary of Apollo Global Management, was created by Apollo with the purpose of providing portfolio and asset management services to Athene. AAM was also led by Jim Belardi, Athene's CEO, who owned 5% of the asset management firm. The goal was to outsource asset management from Apollo and separate investment activities from the insurance business.

As of 30 September 2016, AAM had more than 100¹⁰ professionals exclusively dedicated to managing and investing 100% of Athene's portfolio. Moreover, the company invested roughly 75-80% of Athene's portfolio with its own investment team and hired several Apollo entities to sub-advice specific assets that required unique sourcing and underwriting capabilities for the remaining portfolio. Historically, the sub-advisory asset classes have been represented from 20-25% of Athene's invested assets and included investments in fixed maturity securities, namely yield oriented non-investment grade debt, RMBS, CLOs, ABS, CMBS; and Apollo's own fund investments such as credit and private equity funds.

Athene Asset Management was contractually bonded¹¹ to Athene and had a fee scheme in which it received 40 bps on all assets managed directly. Over the sub-advised assets, Athene paid Apollo and its affiliates for providing sub-advisory services and acting as General Partner on the investments made by the company. The fees on these arrangements were 40 bps for AUM under \$10bn and 35 bps for AUM in excess of \$10 bn, in addition to the 40 bps gross management fee. By the end of 3Q2016, Athene had \$71.6 bn AUM of which roughly 80% were managed directly by AAM and the remainder 20% fell under the sub-advisory category.

Since 2013, Athene had been of extreme importance to Apollo and accounted for a big share of all assets managed by the Private Equity company. (**Exhibit 10** shows Apollo's 2013-Q32016 revenues and AUM by business segment and a description of each business segment).

“Apollo does not need Athene to be successful, but it certainly helps” said Doug Butler, research director at Rockland Trust.

¹⁰ As of 31 December 2012, AAM had 40 employees

¹¹ Athene had certain limitations to terminate the contract however, if the board of directors determined the amount of fees paid to AAM was unfair/excessive in relation to its performance or when compared to other asset managers, the BOD could terminate the contract and AAM had the right to lower its fees and match other offers

Company Evolution

Inorganic Growth

Athene's first steps into the annuity industry was the reinsurance of \$1.6 billion fixed annuities from American Equity Life Insurance Company in 2009 via its reinsurance entity based in Bermuda, Athene Life Re Ltd. ("ALRe"). The following year, Athene licensed Athene Life Insurance Company ("ALIC").

The company had little activity until 2011 when it revamped its inorganic growth and acquired Liberty Life Insurance Company (LLIC), adding \$2.8bn of fixed and indexed annuities to its balance sheet. With the acquisition, Athene guaranteed insurance licenses in 49 states and Washington D.C. Furthermore, still during 2011, Athene reinsured all of LLIC life & health business and Transamerica's fixed annuities and funding agreements, which accounted for roughly \$2bn and \$3.1bn, respectively.

In December of 2012, Athene completed the acquisition of Presidential Life Corporation and life subsidiary at a discount to book value of 52% adding another \$4.3 billion assets and announced the acquisition of Aviva USA Corporation and its subsidiaries. As of 31 December 2012, less than three years after being founded, Athene had roughly \$14bn invested assets.

Aviva USA Acquisition

Aviva PLC was the second largest UK insurer and one of Europe's main providers of life and general insurance products. In 2013, Aviva had over 34 million customers worldwide and held operations in the USA through its subsidiary, Aviva USA.

Aviva USA, headquartered in Les Moines, Iowa, was a leading provider of indexed annuities and had more than 900 thousand customers and 1,500 employees. The company was rebranded Aviva USA after the acquisition of AmerUs Group Co in 2006 and, as of the second quarter 2013, Aviva USA was the 11th largest¹² seller of fixed annuities in the US.

Aviva as many other large insurance groups was still struggling since the financial crisis and decided to focus on its core activities in the UK and shed liabilities in non-core segments and geographies. Following the departure of previous CEO Andrew Moss, Aviva implemented a restructuring plan to shed non-strategic assets as the new European insurance rules¹³ required companies to hold additional capital against assets.

*"The sale of Aviva USA is an important step forward in the delivery of our strategic plan. It considerably strengthens Aviva's financial position, increases group liquidity and improves our economic capital surplus whilst also reducing its volatility"*¹⁴ said Aviva chairman John McFarlane.

¹² LIMRA database

¹³ Solvency II Directive 2009

¹⁴ Aviva to sell Aviva USA for US\$1.8 billion. (2012, December 21). Retrieved from <https://www.aviva.com/newsroom/news-releases/2012/12/aviva-to-sell-aviva-usa-for-us18-billion-17068/>

Contrarily, Athene was largely capitalized and looked to Aviva as the perfect opportunity to grow its balance sheet with cheap liabilities. Moreover, the large discount on the transaction implied that Athene would be able to pay down Aviva's cost of liabilities in the annuities acquired and increase the projected net spread of the products by reinvesting the assets into higher yield products.

The transaction involved Aviva USA Corporation and its subsidiaries, including Aviva Life and Annuity Company and Aviva Life and Annuity Company of New York. It was finalized in October 2013, for a purchase price of \$1.55bn compared to a book value of \$2.7bn, implying a 43% discount. The Aviva USA annuity and life insurance operations acquisition added \$35bn in fixed annuity products to Athene's balance sheet which represented Athene's final step to becoming a leader in the fixed annuity space. Following the deal's close, the annuity provider had approximately \$60bn in assets, making Athene one of the main fixed annuity companies in the US.

“Our acquisition of Aviva USA is a transformative event that significantly increases the scale of Athene's fixed annuity business and we are excited about our prospects for further profitable growth. Aviva's operational capabilities and talented workforce will enable Athene to solidify our position as a market-leading provider of retirement solutions to policyholders and distributors. At the same time, we will offer attractive opportunities for employees and create greater value for our shareholders”, said Jim Belardi¹⁵, Athene's CEO.

Organic Growth

Athene managed to grow substantially in just a few years and positioned itself as one of the main players in the US Annuities Sales, particularly in the Fixed-Annuity sphere. Furthermore, as of the IPO filing, Athene had roughly \$71.6bn invested assets and \$70.9bn in reserve liabilities, well over the amount at end of 2012 when Athene had only \$14bn invested assets.

Even though Athene's growth was predominantly achieved through acquisitions, its organic channels proved to be capable of acquiring new business and recorded outstanding results. The annuity provider amassed \$6.9bn of new assets through retail and reinsurance during the first 9 months of 2016, representing a 169% increase in relation to the equivalent period in 2015. Athene demonstrated an impressive growth in FIA sales and by the end of the third quarter of 2016, the company ranked 3rd in FIA sales with sales above \$3.2bn, representing 6.85% of the industry total \$46.9bn. Additionally, Athene ranked 7th in overall Fixed Annuities sales¹⁶. The company saw its ratings improving in 2015¹⁷ which was considered to be the major catalyst for Athene's impressive sales growth. The management team expected that its retail and reinsurance channels would continue to benefit from those improvements in the future. See **Exhibit 11a** for Athene's Q42015-Q32016 deposits by Product and **Exhibit 11a** for Athene's Q42015-Q32016 deposits by product.

¹⁵ Athene Holding Ltd. Completes Acquisition of Aviva USA. (2013, October 2). Retrieved from <https://www.businesswire.com/news/home/20131002006528/en/Athene-Holding-Ltd.-Completes-Acquisition-Aviva-USA>

¹⁶ LIMRA Secure Retirement Institute US Individual Annuity Sales Report Q32016

¹⁷ Fitch Ratings, S&P Ratings and A.M. Best improved Athene USA's subsidiaries ratings to A-

Although most of Athene's assets were acquired, since 2013 the company had new deposits of over \$15bn, meaning at least 20% of invested assets were written by Athene in a post-crisis environment. As for the assets written before the crisis, during high interest rate environments, Athene had acquired them at massive discounts, offsetting the higher promised payments to those policyholders.

Since Aviva US acquisition, Athene's organic sales were responsible for almost all of the company's growth in invested assets. Athene was able to grow quickly and cheap inorganically and build a base large enough to place the company as one of the leading carriers in fixed annuities. This was particularly important as the competition for acquisitions was then fiercer than it was during the crisis when capital was scarce. AAM assumed it would keep tracking inorganic opportunities but reinforced the importance of having a solid organic channel. Athene demonstrated commitment in prioritizing profitability in detriment of size and said it would never set market share targets in order to prevent imprudent growth.

Investment Strategy

Athene's strategy had been constant throughout the years and AAM was able to identify and capitalize on opportunistic asset dislocations in the industry. AAM was a return focused asset manager with a long-term oriented vision that was suitable for Athene's need for constant earnings. With its portfolio manager, Athene was able to capture excess spread by taking more complexity and liquidity risk rather than assuming excessive credit risk. Furthermore, AAM had an experienced risk management team who focused on downside protection and stress testing under negative scenarios, allowing Athene to avoid binary outcomes on its investments.

"Athene is the ideal entity to hold highly rated, safe but less liquid credit investments," said Leon Black¹⁸.

As of September 30, 2016, Athene's invested portfolio available for sale (AFS)¹⁹ was composed of 93.1% of NAIC²⁰ 1 or 2 assets nevertheless, its composition was extremely different from typical life insurance companies. Athene benefited with its strategic partnership with Apollo to source illiquid assets such as corporate private debt, mortgage loans and more structured, highly complex assets. (**Exhibit 12a** shows Athene investment portfolio as of 30 September 2016 and **Exhibit 12b** shows the typical insurance investment portfolio).

The company held a substantial amount of difficult to understand products that were overlooked by other insurance companies due to their lack of knowledge and experience with complexity. From 2009 to 2016, Apollo detected and capitalized on many dislocations in the industry that allowed Athene to earn wide spreads on certain assets such as RMBS, CLOs, direct investments and Leveraged CMBS. Shortly after the credit crisis, Athene managed to purchase high quality cash flowing assets at distressed prices. (See **Exhibit 13** for an overview of Athene's historical investment decisions).

¹⁸ Private equity: Apollo's charge to the top. (2014, March 10). Retrieved from <https://www.ft.com/content/dd3c8c42-a825-11e3-8ce1-00144feab7de>

¹⁹ AFS amounted up to \$53,236 bn as of 30 September 2016. Non-AFS were mainly mortgage loans (hotels, retail, office buildings) and alternative investments (funds, strategic investments)

²⁰ NAIC 1 is equivalent to AAA/AA/A and NAIC 2 is equivalent to BBB

For instance, Athene was an early investor in distressed non-agency RMBS in 2009 and 2010, prior to the strong recovery of that market in later years. The company acquired a significant portion of such assets at discount to par and by 2010, this asset class represented 23.0% of Athene's investment portfolio with 90% NAIC 1 designations²¹. (**Exhibit 14** shows the 2007-15 evolution of RMBS prices).

However, as the financial crisis passed by, market dislocations and abnormal spreads started to vanish. The Apollo-backed insurer faced with the disappearance of spreads in CUSIP²² securities as well as increased competition for acquisitions, understood the need for direct origination in the future and invested in companies with direct origination platforms. In 2013, Athene invested in MidCap, a provider of revolving and term debt facilities to middle-market firms in North America and Europe, and in A-A Mortgage (AmeriHome), a mortgage lender and servicer. Through these two partnerships, Athene developed an important network with many players in the private markets that large companies had limited access.

Ability to manage spreads

Athene's net investment income had been increasing steadily since 2013, mainly driven by successful reinvestments of the acquired firms' assets into higher yielding strategies sourced by AAM. As an example, Athene reinvested a meaningful portion of the portfolio acquired in the Aviva USA transaction, in which, the company was able to increase the net investment earned rates from 3.5% in 2013 to 4.12% in December 2015. Similarly, during the same period, Athene's net investment income²³ had grown from \$1.73bn to \$2.60bn.

While Athene's net investment income increased 68.8% from 2013 to 2016²⁴ comparable players showed limited growth in their net investment income over the same period. (**Exhibit 15** contains some of Athene's peers 2013-3Q2016 main financials).

Retirement services providers' earnings were inherently associated with the company's ability to manage the spread between the net investment income and the cost of crediting on deferred annuities²⁵. Additionally, life insurers tended to have extremely high asset leverages, meaning small spread enhancements resulted in major increases in the return on equity. For instance, Athene's business model required a 7%-10% Capital/Reserve ratio which translated into 10x-14x asset leverage.

For the Retirement Services segment, Athene targeted an annual investment margin of 2-3%, which was achieved year after year. Between October 2015 and October 2016, Athene was able to increase its net investment earned rate²⁶ (NIER) by 14bps while the company still had over a 50bps buffer to its guaranteed minimum crediting rate that would be of extreme importance in the case of adverse conditions hitting the industry. (**Exhibit 16a** shows the Retirement Services

²¹ RMBS represented 15% of Athene's portfolio with 97.2% NAIC 1 and 2 as of 30 Septemeber,2016

²² North American registered financial securities

²³ Net investment income is always presented as net of fees paid to AAM/Apollo

²⁴ Annualized net investment income during the first nine months of 2016

²⁵ Cost of crediting on deferred annuities is measured in relation to the average account value of deferred annuities

²⁶ Net investment income divided by average invested assets

segment 2015 operating income breakdown and **Exhibit 16b** shows the Retirement Services quarterly investment margin from 3Q15 to 3Q16).

On the Alternatives assets²⁷, Athene achieved an average net investment earned rate (net of fees) of 12,13% over the period of 2013 through the nine months ended of 2016. These results were mainly fueled by the impressive 28,01% NIER achieved on Alternatives in 2013 after the IPOs of two Athene's underlying investments. Oppositely, the typical life insurance company alternative allocation was less diversified than Athene's and focused on equity investments²⁸ rather than cash-flow generating assets. **Exhibit 17** shows Athene's Alternative portfolio as of 30 September 2016.

Since inception, the life insurer had been able to grow extremely fast without neglecting profitability. While most life insurers were targeting returns on equity around 10%, Athene targeted mid-teens for sources of organic growth and higher returns for sources of acquisitions. One could read in the prospectus:

“If we are unable to source liabilities with our desired return profile in one of our channels, we generally will not sacrifice profitability solely for the sake of increasing market share and instead we will typically focus on our other channels to identify growth opportunities that meet our preferred risk and return profile.”

Capital Position

Athene's core operations, namely any US and Bermuda operations issuing and reinsuring retirement savings products and institutional products, were reported out of one reportable segment, “Retirements Services”. Additionally, the company reported other operations in “Corporate and Other”. Such operations included corporate allocated expenses, M&A costs, debt costs, integration and restructuring costs, stock-based compensation and intersegment eliminations. The segment also functioned as a support for “Retirement Services” future growth and held \$1.5bn capital in excess readily deployable. Athene intended to keep the excess capital to boost further organic growth or M&A as well as to contribute to rating improvements in the future.

Moreover, Athene had been debt-free since inception and held an undrawn \$1bn credit facility aimed to provide an additional liquidity cushion during unexpected adverse economic environments. As of September 2016, and assuming a debt to capital ratio of 20%, Athene had a debt capacity of over 1.5bn that could foment further growth. Altogether, the company could deploy \$2-3bn²⁹ and still maintain a large enough capital buffer that, combined with the credit facility, would allow Athene overcoming challenging economic conditions.

²⁷ \$3.36bn as of 30 September 2016

²⁸ Mainly Private Equity and Hedge Funds

²⁹ Life insurers have capital requirements of around 8%, meaning \$1bn deployed would acquire an account of around \$12.5bn

Market Opportunity

As of the IPO, after Athene was established as one of the leaders in the fixed annuity industry, market dislocations and M&A opportunities were scarcer however, there were still tremendous growth opportunities given the industry's size and fundamental drivers.

The number of individuals reaching retirement age was increasing and was expected to experience unprecedented growth over the next three decades (See **EXHIBIT 3**). Additionally, it was estimated³⁰ that approximately half of US individuals over 55 years old had no retirement savings. The need for tax-efficient savings products was evident and Athene believed many Americans were looking to FIAs as perfect solutions to address the need for retirement plans. FIA sales have increased the most among all types of annuities since 2012. The annuity industry was experiencing a clear shift in products as demand for variable annuities had been declining steadily while fixed and fixed index annuities experienced growth in sales. In less than 5 years, variable annuities went from representing 67% of the annuity industry in 2012 to only 46% in September 2016. Contrarily, FIAs sales experienced a CAGR of 16.5% since 2012 and almost doubled its market share in annuity sales, accounting for 27% of total sales through the 9 months ended in 2016. (See **Exhibit 18** for the evolution of U.S Annuity sales from 2013 to 2016³¹).

Since inception, Athene did not pay any dividend and claimed it would continue to retain all the available funds and profit in the foreseeable future to fuel further growth and support the company's operations. Even though competition for M&A was increasing, Athene detected that some companies were still struggling to meet target ROEs and that the implementation of new regulations³² regarding fiduciary obligations could force additional players out of the retirement savings market. As a result of such environment, Athene was expecting growth opportunities through reinsurance or acquisitions of blocks of business divested by troubled companies.

By Q3 2016, 29% of Athene's invested assets were floating rate, meaning a higher interest rate environment would increase the company's bottom line. Additionally, it would allow the company to increase crediting rates, turning its products more desirable.

Controversies and Regulators' Role

The relationship between the asset manager and the annuity provider had been publicly criticized due to Apollo's allegedly excessive fees received for investing and overseeing Athene's portfolio.

*"This is characteristic of many private equity firms pushing limits, here into incestuous financial relationships, with the general goal of increasing aggregate fees to the firm,"*³³ said Lawrence Cunningham, a corporate governance professor at George Washington University.

Athene's Board of Directors, acknowledging worries about governance decided to reduce management fees paid to AAM and, included in the prospectus a revised agreement with AAM

³⁰ Report published by the Government Accountability Office in 2015

³¹ Values verified at the end of Q3 2016, annualized

³² U.S. Department of Labor's ("DOL") fiduciary rule required retirement advisers to place clients' best interest first by providing impartial plan advice which would expose firms to extra compliance requirements

³³ As Apollo's Cash Cow Plans IPO, Questions Linger on Ties. (n.d.). Retrieved from <https://www.bloombergquint.com/markets/as-apollo-s-cash-cow-plans-ipo-questions-linger-on-close-ties>

to incentivise prudent growth – starting in 2017, AAM would take a cut of 10 bps on AUM over the value reported at the end of 2016.

Furthermore, Regulators played an important role on insurance transactions due to its complexity, importance to the financial industry equilibrium and how they affected millions of American’s retirement savings plans. Transactions involving Athene required even stricter³⁴ scrutiny by the regulators and the main reason behind it was the company’s backer – Apollo Global Management. Critics, including Athene’s competitors often pointed to the nature of private equity firms and their propensity to hold investments with a short-term vision. Moreover, private equity companies’ typical strategies were considered incompatible with the life insurance industry as they contended a mismatch for long-term products like annuities.³⁵

“Private-equity firms may not be long-term players in the insurance industry and their short-term focus may result in an incentive to increase investment risk and leverage in order to boost short-term returns,” and “This type of business model isn’t necessarily a natural fit for the insurance business, where a failure can put policyholders at significant risk”. Said Benjamin Lawskey, New York Department of Financial Services Superintendent.³⁶

Athene USA President Grant Kvalheim³⁷ denied allegations that Athene had a short-term business model due to its private equity ownership, claiming Athene’s capital was long-term in nature:

“When people talk about ‘private equity’ ownership, the implication is that it is money coming from a private equity fund that has a time fuse on it,” he said. “There is not a single dollar invested in Athene that has a time fuse on it or comes out of a fund with a time fuse on it. That’s always been the case in Athene’s history. The equity that is in Athene is permanent capital. The same way the equity in any other insurance company is permanent capital. We are in it for the long haul.”

Ownership Structure

Athene had two classes of voting shares outstanding, Class A common shares and Class B common shares. In terms of economic value, both classes were equivalent, meaning the dollar value of a class A and class B share was the same however, they were distinct in terms of voting power. Moreover, Class A shares accounted for 55% of the voting power while Class B accounted for the remaining 45% of the voting rights. Class B shares were exclusively detained by members of the Apollo Group, including funds managed by the group thus, Apollo was the ultimate beneficiary of the voting control. Additionally, upon sale or transfer of any Class B shares to any non-affiliated Apollo entity or person, the shares would immediately be converted on a one-to-one basis into Class A. So long as at least one Class B share existed, the holder would have 45% of voting rights. (**Exhibit 19** illustrates Athene’s ownership prior to the offering).

³⁴ Regulators in Iowa and New York required Athene to agree to higher reserves before approving Aviva’s acquisition

³⁵ Athene’s reserve liabilities had a weighted-average life of 8.4 years

³⁶ Benjamin Lawskey, 2013, at the 22nd Annual Hyman P. Minsky Conference on the State of the U.S. and World Economies in New York City

³⁷ Athene closes on Aviva USA deal | ThinkAdvisor. (2013, October 3). Retrieved from <https://www.thinkadvisor.com/2013/10/03/athene-closes-on-aviva-usa-deal/>

As of 28 November 2016, Athene's largest shareholder was Apollo Alternative Assets (AAA), a closed-end vehicle managed by Apollo in which the private equity firm had a 2.4% ownership, with 45.6% of total shares. Other main shareholders included Ontario Limited, Stanhope Investments, Teacher Retirement System of Texas, Normanton Investments and Athene's executive officers and directors. James R. Belardi himself had a total economic ownership of 2.7% in class A shares corresponding to 8.8% of all Class A shares outstanding. Additionally, Apollo had an ultimate economic ownership on Athene of 9.1%, comprising both direct ownership and indirect ownership. The company had 8% directly via Athene's shares and 1.1% indirect ownership through its investment vehicles (2.4% of AAA).

The IPO

On 28th November 2016, Athene Holding filed for an amended initial public offering, offering 23.75 million Class A shares at \$38 to \$42 a piece plus an additional 3.5 million shares in a clause that gave underwriters the option to buy into the company at the offering price. The high end of that range would raise \$997.5 million to the selling shareholders and value Athene at about \$7.8 billion.

Among the shareholders selling stock in the IPO were Ontario Limited, Teacher Retirement Systems of Texas, Stanhope Investments and funds managed by Apollo, all would retain a stake of their holdings after the offering. According to the S-1 filing, Athene would not receive proceeds from the sale as the offering's purpose was to reward committed shareholders who invested in Athene since its early days. (See **Exhibit 20** for Athene's detailed ownership before and after the offering).

Besides, the IPO would increase Athene's reliability as a leading retirement services provider and provide the company cheaper access to capital. Additionally, regulators, costumers and rating agencies esteemed public companies due to transparent information disclosure and close supervision by the financial regulatory authorities thus, going public would be a major step to achieve higher ratings and eventually boost deposits in the future.

The Decision

The range pricing for the initial public offering was set and Brandon Snow, Chief Investment Officer at Cambridge Investments was struggling to decide whether or not to invest in the IPO. On the one hand, Athene was a compelling growth story that had started from scratch and was now an industry leader in the annuity sphere. Furthermore, the industry seemed to remain attractive and Brandon was confident enough Athene would continue to acquire more businesses and improve its market share in annuity sales due to the strong base of organic channels the company had been able to build up so far. On the other hand, Brandon was hesitant to acquiring a stake in a company where non-Apollo shareholders had a limited say regarding future strategic decisions. Further, Apollo was one of the first alternative investment managers entering the life insurance business and Athene had never been tested in a market crash or credit shock thus, Brandon was uncertain on how the company would react during defiant conditions.

Athene Holding Ltd. – To invest or not to invest?

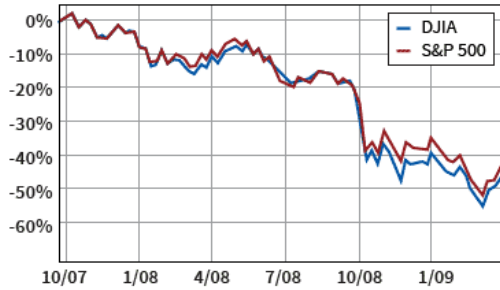
With all this in mind, Cambridge's investment committee would carefully examine if Athene had the foundations that would allow the company to keep growing organically or through acquisitions. In fact, Athene claimed it had excess capital to keep acquiring other insurance companies or reinsurance obligations however, the competitive environment was different than it was in the midst of the global crisis. Furthermore, there was also a lot of uncertainty on how Athene would be perceived in the capital markets. Would investors believe in a private equity backed insurer? Brandon was of the opinion that if Athene continued to achieve superior returns, eventually the stock market would value the company's strategy and its true worth would surface.

(Information on analyst projections regarding Athene's next 12 months EPS and Athene's industry peers next 12 months EPS trading multiples is shown in **Exhibit 21** and **Exhibit 22**, respectively).

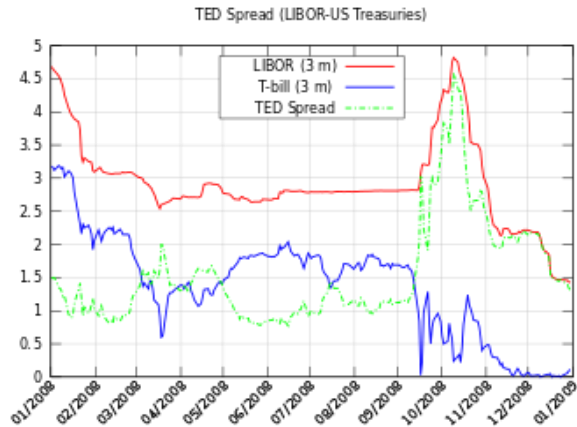
Athene Holding Ltd. – To invest or not to invest?

Exhibit 1 S&P 500 and Dow Jones's stock price from 2007 through 2009 and TED spread's evolution in 2008

The 2008 Crash Was a Long, Bumpy Fall
 The 2008 stock market crash lasted 18 long and brutal months. From October 2007 to March 2009, The Dow Jones Industrial Average shed 53%, while the Standard & Poor's 500 Index plummeted 57%.

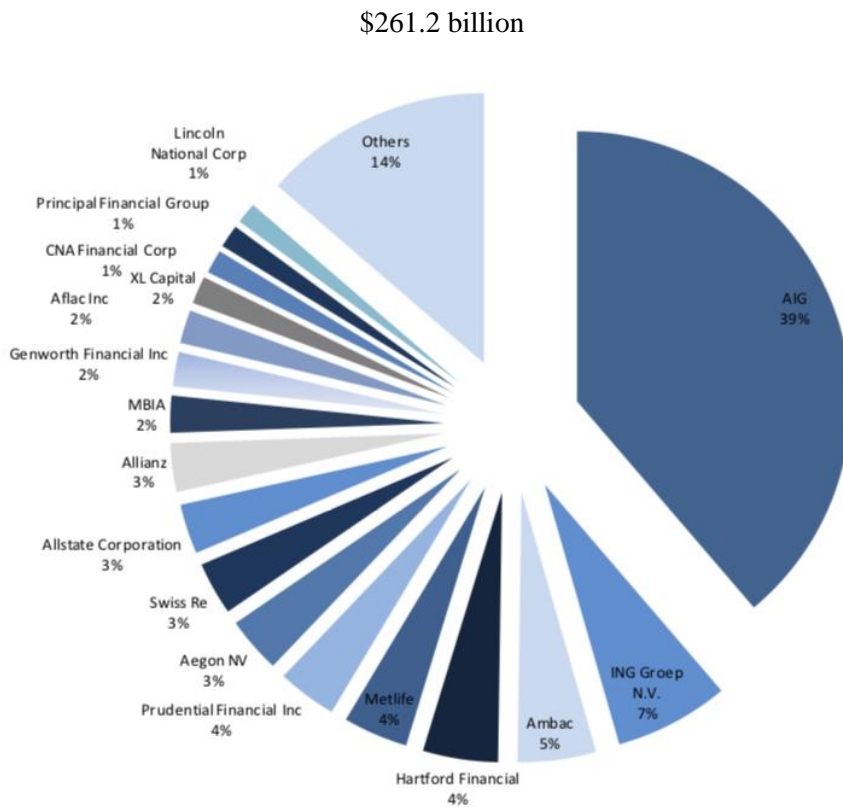


Source: Google Finance



Source: Google Finance

Exhibit 2 Write downs and losses from the beginning of 2007 through August of 2009



Source: Bloomberg

Exhibit 3 Illustrative Fixed Annuity Economics

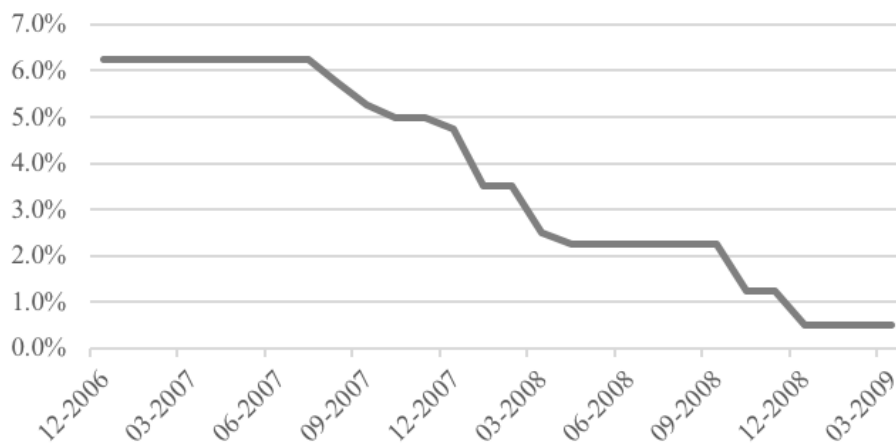
Illustrative Fixed Annuity Economics

- A fixed annuity is a contract in which a policyholder makes premium payments to an insurance company in exchange for a future set of payments at a crediting rate. The rate is guaranteed for a fixed period, and in addition the presence of surrender charges and other protections produces a relatively fixed set of cash flows. After the guaranteed period, the cash flows become floating as the crediting rate is reset
- In order to fund the costs of its future obligations to policyholders, the insurance company invests the premiums it receives in an asset portfolio to earn an investment return ("NIER", or "net investment earned rate")
- To the extent an insurer's NIER exceeds the crediting rate owed to policyholders, the business will generate a positive net spread
 - In order to produce profits, an insurer must generate enough yield to also cover additional expenses associated with running the business, such as acquisition and operating costs
- After accounting for the cost of policyholder obligations, acquisition costs and G&A, the remaining net spread accrues to the insurer's capital providers

Key Assumptions									
Crediting Rate	2.8%			Acquisition Costs (% Premium)		5.0%			
OpEx (% Premium)	0.4%			Yield on Investments		5.5%			
Target Capital / Reserves	10.0%								
		Year							
		0	1	2	3	4	5	6	7
Premium Received from Policyholder	\$1,000								
Acquisition Costs	(50)								
Investment Income		\$59	\$61	\$63	\$65	\$67	\$70	\$71	
OpEx		(4)	(4)	(4)	(4)	(4)	(4)	(4)	
Fixed Payment to Policyholder ¹									
Policy Withdrawal								(1,000)	
Total Cash Flows to Company²	\$950	\$55	\$57	\$59	\$61	\$63	\$66	(\$1,145)	
Interest Credited to Policyholder ³		(35)	(36)	(37)	(37)	(38)	(39)	(40)	
Policy Withdrawal								1,212	
Total Net Income⁴	\$20	\$21	\$22	\$24	\$25	\$27	\$27	\$27	
Memo:									
ROE		20%	21%	21%	22%	23%	23%	23%	
Excess Capital Dividend to Shareholders		\$16	\$17	\$19	\$20	\$21	\$23	\$144	
Balance Sheet - Statutory Framework									
Total Assets	\$1,045	\$1,084	\$1,123	\$1,163	\$1,204	\$1,246	\$1,289	–	
Reserves	\$950	\$985	\$1,021	\$1,057	\$1,095	\$1,133	\$1,172	–	
Total Equity	95	99	102	106	109	113	117	–	
Reserves + Equity	\$1,045	\$1,084	\$1,123	\$1,163	\$1,204	\$1,246	\$1,289	–	
Memo:									
Account Value	\$1,000	\$1,028	\$1,057	\$1,086	\$1,116	\$1,147	\$1,179	\$1,212	
Equity / Reserves	10%	10%	10%	10%	10%	10%	10%		

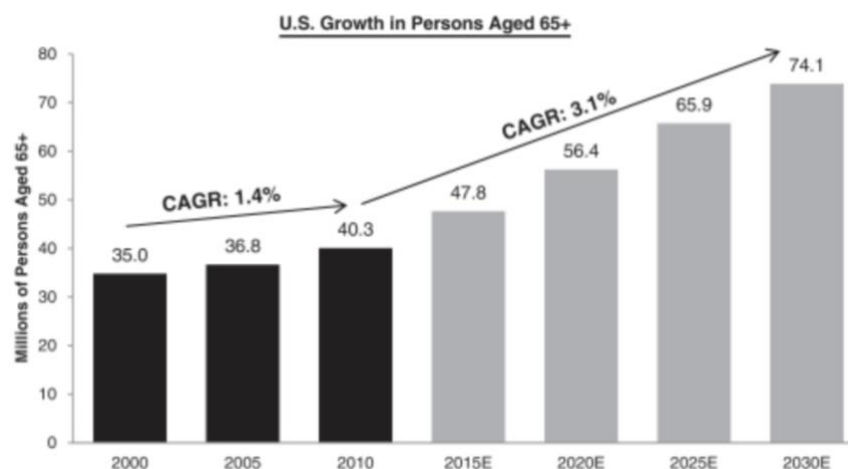
Source: Company Information

Exhibit 4 Fed interest rates from 2006 to 2009



Source: Macrotrends database

Exhibit 5 Retirement-age population outlook in the US



Source: U.S. Census Bureau

Exhibit 6 Athene’s Management Team

Name	Role	Years Experience
Jim Belardi	<i>Chairman and Chief Executive Officer of Athene Holding Ltd., Chief Executive Officer and Chief Investment Officer of Athene Asset Management LLC</i> Prior to founding AHL and AAM Jim was President of SunAmerica Life Insurance Company and was also Chief Investment Officer of AIG Retirement Services, Inc., responsible for a \$250bn invested asset portfolio. In 1994, Jim created the GIC-backed note (GICBN), which has developed into a \$300bn market.	25
Grant Kvalheim	<i>President and Chief Financial Officer of Athene Holding Ltd.</i> Grant was Co-President of Barclays Capital from September 2005 until the end of 2007. Having joined Barclays in 2001 as Global Head of Credit Products, Grant converted a European cash investment grade business into a leading global cash and derivatives business across both securitized and non-securitized credit products. Assuming responsibility for Investment Banking in late 2001, he similarly expanded the Investment Banking platform.	30
Chip Gillis	<i>Chief Executive Officer of Athene Life Re Ltd.</i> Prior to founding Athene, Chip was a Senior Managing Director of Bear, Stearns & Co. Inc. (“BSC”) and Head of BSC’s Insurance Solutions Group that provided advice and solutions to Life and Annuity companies. He led BSC’s entry into the GICBN business (which subsequently ranked consistently in the top 6 dealers in the market) and created the turn-key Premium Asset Trust Series program. It was recognized by S&P as the only non-issuer insurance-only program. Chip also serves on the Board of Directors of the Bermuda International Long-Term Insurers and Reinsurers, an association representing the long-term insurer and reinsurer groups in Bermuda of which Athene is a founding member.	30
Chip Smith	<i>President of Athene Annuity & Life Assurance Company</i> Prior to joining Athene Annuity, Chip was President and CEO of Liberty Life Insurance Company (now, Athene Annuity) from April 2010 until the acquisition by AHL in April 2011. Before becoming President of Athene Annuity, he served as Vice President, Treasurer, and Chief Financial Officer, with oversight of all finance and related areas of the U.S. insurance operations.	24
Steve Cernich	<i>Executive Vice President of Corporate Development, Athene Annuity & Life Assurance Company</i> Prior to joining Athene Annuity, Steve was Chief Risk Management Officer and EVP for Capital Assurance Corporation. He had responsibility for all product development, pricing valuation and asset/liability management and oversaw the company’s institutional line of business and managed the relationship with the firm’s external asset manager. Steve built and managed the funding agreement line of business for XL Life & Annuity, and built and managed the funding agreement business for Zurich Kemper Life, with responsibility for its \$9bn bank-owned life insurance (BOLI) business.	28
Chris Grady	<i>Head of Retail Distribution, Athene Annuity & Life Assurance Company</i> Former President, Distribution and Marketing of Genworth Financial’s U.S. Life Insurance Companies where he oversaw a diverse multi-channel sales and marketing organization. Prior to joining Genworth, Chris spent 14 years in senior leadership roles at Merrill Lynch ultimately serving as Managing Director and National Sales Manager for Merrill’s Consumer Finance Group.	33

Source: Company Information

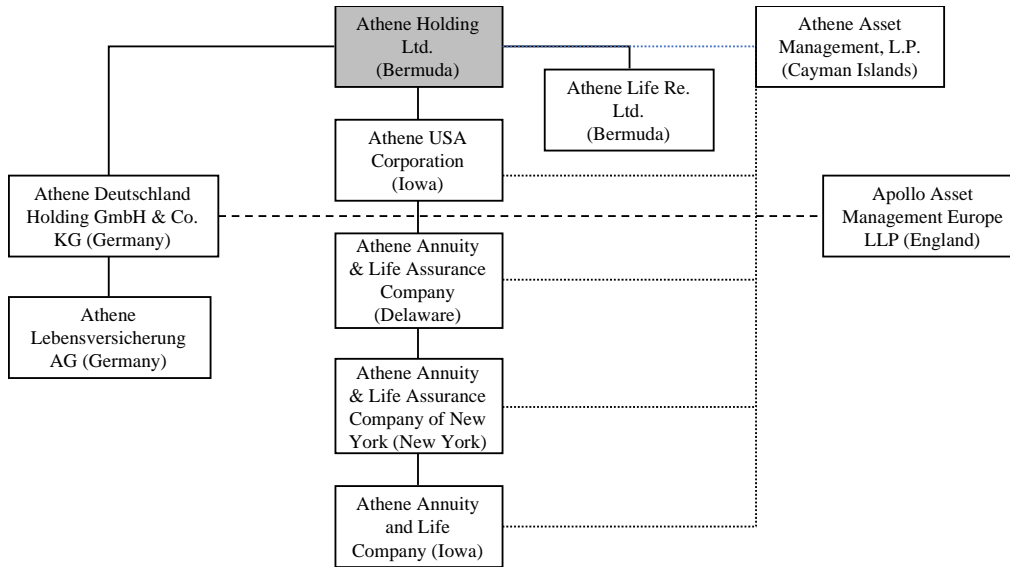
Athene Holding Ltd. – To invest or not to invest?

Exhibit 7 Main Financials (\$ Million except per share data)

	31st December			Nine Months Ended			31st December			Nine Months Ended	
	2013	2014	2015	2015	2016		2013	2014	2015	2015	2016
Operating Income Statement						Balance Sheet Items					
Retirement Services margins						Total Assets					
Net Investment Earned Rate	5,40%	4,26%	4,37%	4,31%	4,65%	80 807	82 710	80 854		87 000	
Cost of crediting	2,42%	1,94%	1,92%	1,92%	1,97%	Total invested Assets	58 156	59 039	66 959	71 595	
Investment Margin on Deferred Annuities	2,98%	2,32%	2,45%	2,39%	2,68%	Total Liabilities	77 952	78 122	75 491	79 926	
Consolidated						Total Equity					
Net Investment Income (Consolidated)	1 730	2 538	2 608	1 928	2 190	2 761	4 555	5 362		7 073	
Taxable Income (Consolidated)	989	532	592	372	367	Average Invested Assets:					
Income Tax expense (benefit)	-8	54	14	36	-70	Retirement Services average invested assets	25 220	58 284	58 917	58 672	61 948
Non-controlling interest	81	15	16	16	0	Corporate and Other average invested assets	745	923	2 567	1 442	7 120
After-Tax Operating Income by Segment						Consolidated average invested assets					
Retirement Services	416	764	769	513	563	25 965	59 207	61 484	60 114	69 068	
Corporate	361	29	-29	-17	-87	Avg. Account value of Deferred Annuities					
After-Tax consolidated Operating Income	777	793	740	496	476	20 308	48 353	48 956	48 881	51 183	
Operating EPS	6,75	6,03	4,22	2,89	2,56	Equity Segment:					
Book Value						Statutory Capital					
Book Value Per Share	\$23,99	\$34,61	\$30,61	\$31,26	\$38,02	Retirement Services					
Return on Equity						Corporate and Other					
Operating ROE (excl. AOCI)	35,8%	24,0%	15,6%	13,9%	10,8%	AOICI					
ROE excluding AOCI	42,3%	14,0%	11,8%	9,0%	9,9%	Total Equity					
ROE	39,6%	12,7%	11,3%	8,6%	9,4%	Avg Equity					
Retirement Services Operating ROE	23,2%	32,2%	22,7%	20,2%	17,5%	Avg Equity excl AOCI					
Calculation of Weighted Average Diluted Share Count						Avg Retirement Services Equity					
Basic Weighted Average Shares Outstanding	113,5	129,5	175,1	171,5	185,9	1 793					
Dilutive Shares	1,6	2,1	0,1	0,1	0,1						
Weighted Average Diluted Shares Outstanding	115,1	131,6	175,2	171,5	186,0						
Net Income Calculation											
Consolidated Operating Income	777	793	740	496	476						
Non-Operating Adjustments	139	-330	-178	-176	-39						
Net Income	916	463	562	320	437						
Net EPS	\$7,96	\$3,52	\$3,21	\$1,87	\$2,35						
Leverage, Excess Capital and Capital Ratios											
US RBC Ratio	427%	506%	552%	552%	469%						
Bermuda BSCR Ratio		237%	323%	323%							
Athene Life Re Ltd RBC			468%	468%							
Estimated Excess Capital	750	1 104	1 625	1 612	1 569						
Excess Capital Per Share	\$6,52	\$8,39	\$9,28	\$9,40	\$8,43						
Debt	0	0	0	0	0						
Incremental Debt Capacity to 20% Debt/Capital Ratio	673	978	1 400	1 338	1 538						
Pro-forma Debt/capital	20%	20%	20%	20%	20%						
Pro-Forma Interest Coverage (6% coupon)	19,2x	13,5x	8,8x	8,2x	6,9x						

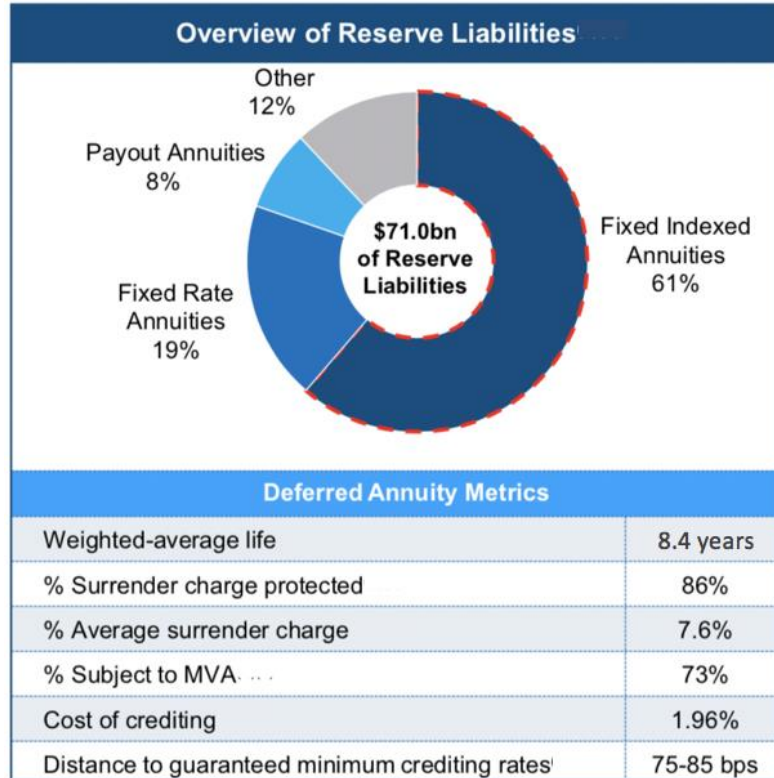
Source: Company Information

Exhibit 8 Athene’s Corporate Structure



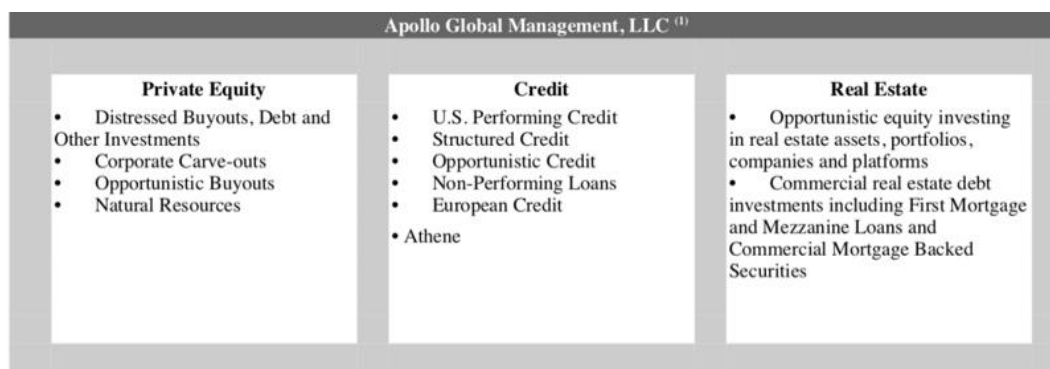
Source: Company Information

Exhibit 9 Athene’s Liabilities as of September 30, 2016



Source: Company Information

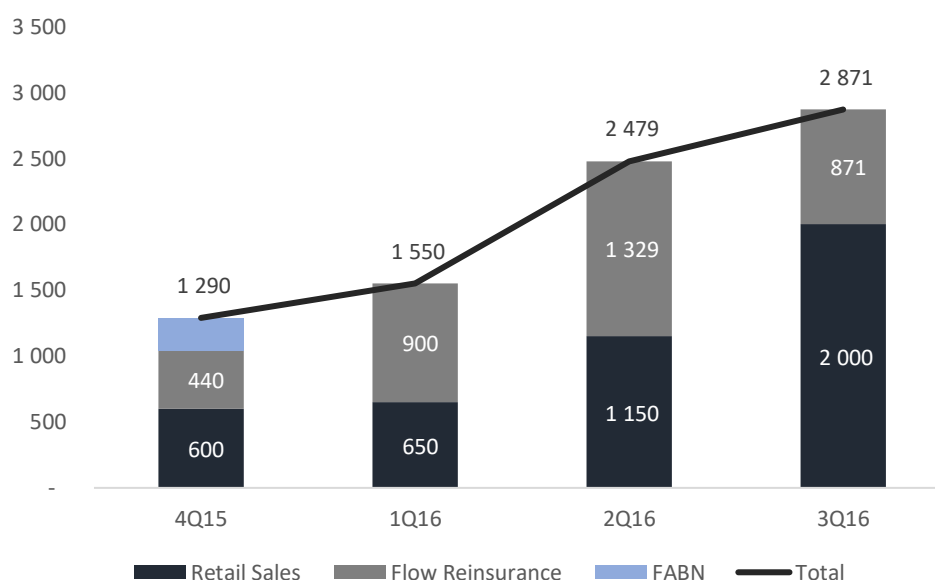
Exhibit 10 Apollo Management Fees and AUM by business segment and business segment description



	Assets Under Management (in \$ billion)				Management and Advisory Fees (in \$ thousand)			
	2013	2014	2015	9M16	2013	2014	2015	9M16
Private Equity	49 908	41 049	37 502	42 181	363	373	288	331
Real Estate	9 289	9 538	11 260	11 059	57	50	55	49
Credit (excluding Athene)	42 730	49 406	54 402	63 801	534	208	244	133
Athene	58 156	59 039	66 959	71 595	260	299	339	322
Apollo's total	160 083	159 032	170 123	188 636	1 214	930	926	834

Source: Company Information

Exhibit 11a New Deposits from 4Q15 through 3Q16 (quarterly)



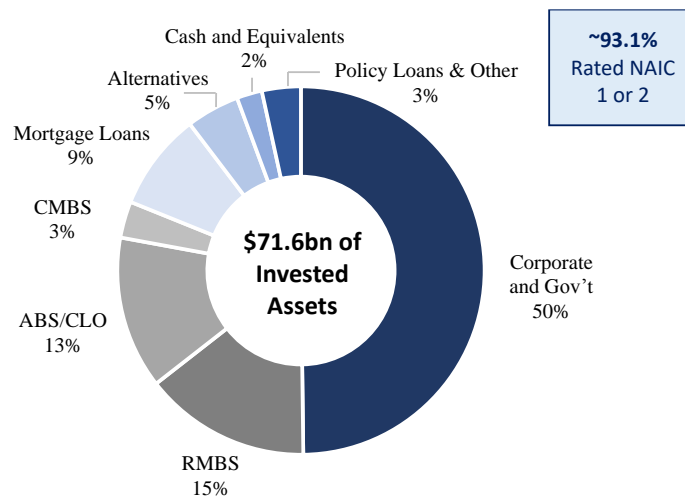
Source: Company Information

Exhibit 11b New Deposits from 2013 through the nine months ended 2016

Deposits by Product (in \$ billions)				
	2013	2014	2015	9M16
Retail Sales	1 300	2 500	2 500	3 800
Flow Reinsurance	167	349	1 100	3 100
FABN			250	
Total Deposits	1 467	2 849	3 850	6 900

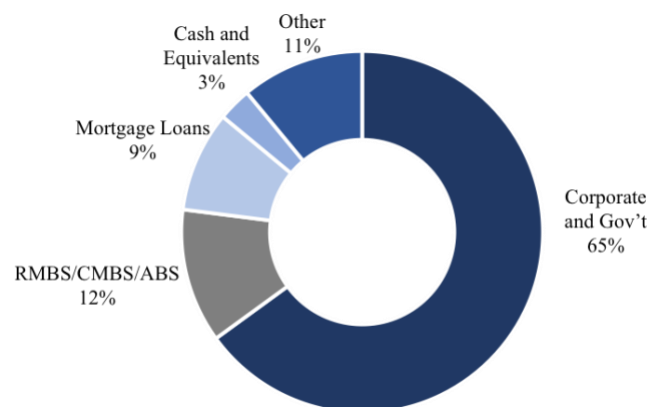
Source: Company Information

Exhibit 12a Athene’s Investment Portfolio as of 30 September, 2016



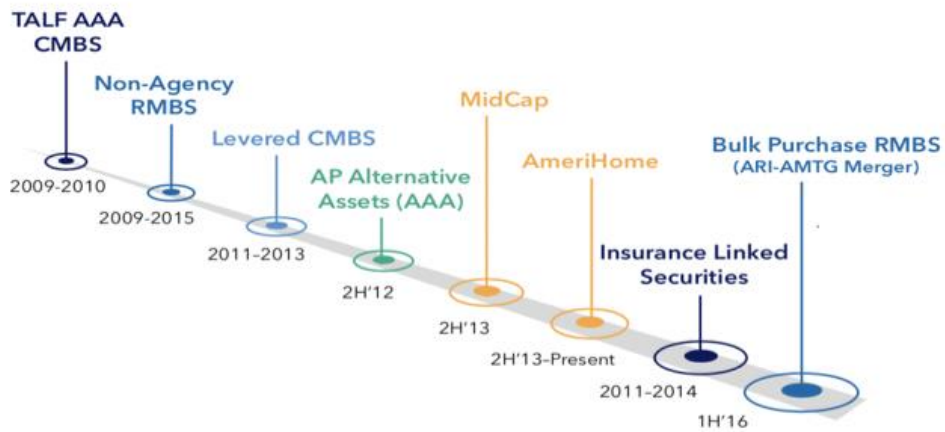
Source: Company Information

Exhibit 12b Typical life insurance’s investment portfolio.



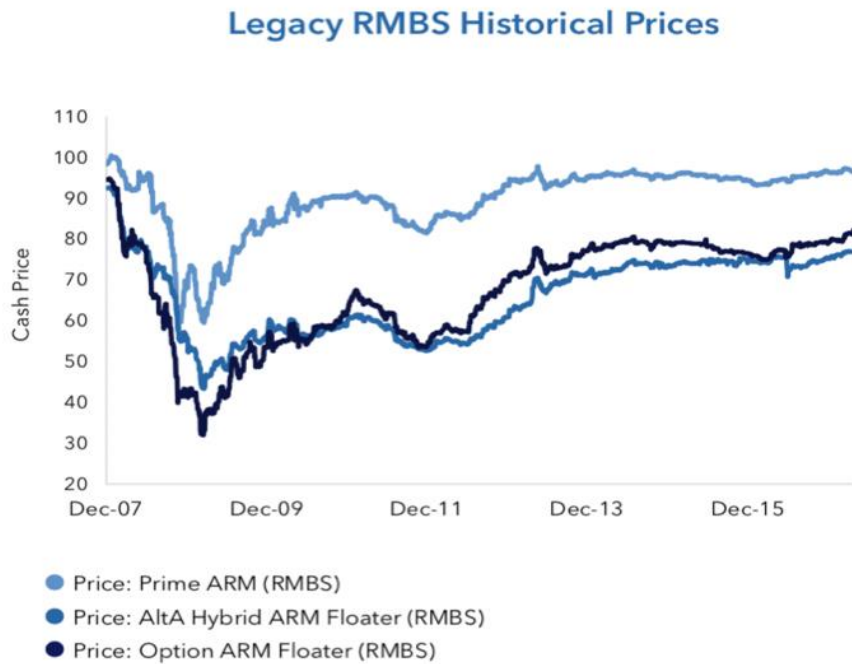
Source: Company Information

Exhibit 13 History of Investments



Source: Company Information

Exhibit 14 RMBS historical prices



Source: Company Information

Athene Holding Ltd. – To invest or not to invest?

Exhibit 15 Competitors' Main Financials (\$ Million except per share data)

<i>End of the Period</i>	Metlife				Prudential Financial				Lincoln National				Genworth Financial			
	2013	2014	2015	2016 3Q	2013	2014	2015	3Q2016	2013	2014	2015	3Q2016	2013	2014	2015	3Q2016
Total Assets	885 296	902 337	877 933	952 904	731 781	766 665	757 255	819 865	236 945	253 377	251 937	266 605	108 045	111 316	106 431	108 852
Total Invested Assets	517 052	505 995	494 459	548 791	398 173	419 986	417 192	465 771	95 291	102 967	102 208	111 591	68 613	71 773	69 128	75 260
Total Liabilities	822 313	829 678	809 437	874 438	695 900	724 306	715 332	762 891	223 493	237 637	238 320	250 282	92 425	94 519	91 794	92 103
Total Equity	62 983	72 659	68 419	78 466	35 881	42 359	41 923	56 974	13 452	15 740	13 617	16 323	15 620	16 797	14 637	16 749
Total Shareholder's Equity	61 553	72 053	67 949	78 286	35 278	41 770	41 890	56 431	13 452	15 740	13 617	16 323	14 393	14 923	12 824	14 871
Investment Income	22 232	21 153	19 281	14 910	14 729	15 256	14 829	11 532	4 754	4 859	4 827	3 630	3 155	3 142	3 138	2 373
Taxable Income	4 052	8 804	7 470	3 370	-1 684	1 759	7 769	5 388	1 631	1 997	1 430	1 262	993	-1 299	-15	-125
Tax expense (benefit)	661	2 465	2 148	480	-1 058	349	2 072	1 300	387	483	276	263	313	-94	-9	222
Net Income to Shareholders	3 368	6 309	5 310	2 888	-667	1 381	5 642	4 084	1 244	1 514	1 154	998	560	-1 244	-615	-380
Average Invested Assets	502 916	511 524	500 227	525 506	401 878	409 080	418 589	444 951	97 178	99 129	102 588	107 570	71 496	70 193	70 451	72 632
Average Equity	63 003	66 803	70 001	74 160	36 891	38 524	41 830	50 524	14 123	14 596	14 679	15 163	15 443	14 658	13 874	13 994
Diluted Shares Outstanding	1 116	1 142	1 128	1 109	463	468	460	447	275	268	255	240	499	496	497	498
Book Value	55.1	63.1	60.2	70.6	76.2	89.3	91.0	126.4	48.9	58.7	53.4	68.0	28.9	30.1	25.8	29.8
Return on Average Equity	5.35%	9.44%	7.59%	5.19%	-1.81%	3.58%	13.49%	8.08%	8.81%	10.37%	7.86%	8.78%	3.63%	-8.49%	-4.43%	-3.62%

<i>End of the Period</i>	American Equity Life				Fidelity Guarantee Life				Principal Financial				AIG			
	2013	2014	2015	3Q2016	2013	2014	2015	3Q2016	2013	2014	2015	3Q2016	2013	2014	2015	3Q2016
Total Assets	39 621	43 990	49 041	55 848	22 403	24 153	24 925	27 035	208 191	219 087	218 660	230 368	541 581	515 581	496 943	514 568
Total Invested Assets	30 347	35 982	39 570	45 811	16 223	18 802	19 094	21 025	66 757	68 433	69 821	77 759	356 428	355 766	338 354	346 368
Total Liabilities	38 237	41 850	47 097	53 035	21 264	22 494	23 423	25 101	198 167	208 797	209 228	219 314	440 218	408 309	406 733	425 403
Total Equity	1 385	2 140	1 945	2 813	1 139	1 659	1 502	1 934	10 024	10 290	9 432	11 054	101 363	107 272	90 210	89 165
Total Shareholder's Equity	1 385	2 140	1 945	2 813	1 139	1 659	1 502	1 934	9 684	10 232	9 312	10 795	100 470	106 898	89 658	88 663
Investment Income	1 384	1 532	1 692	1 374	708	760	851	702	3 138	3 258	3 052	2 537	15 810	16 079	14 053	10 479
Taxable Income	389	196	337	-57	508	189	182	16	1 124	1 495	1 431	1 204	9 368	10 501	3 281	3 381
Tax expense (benefit)	136	70	117	-20	160	26	64	6	188	319	178	245	360	2 927	1 059	1 170
Net Income to Shareholders	253	126	220	-38	348	163	118	30	913	1 144	1 234	999	9 085	7 529	2 196	2 192
Average Invested Assets	28 942	33 164	37 776	43 137	16 390	17 513	18 948	20 197	67 784	67 595	69 127	74 357	366 126	356 097	347 060	342 933
Average Equity	1 552	1 762	2 042	2 441	1 215	1 399	1 581	1 749	9 684	9 958	9 772	10 159	99 236	103 684	98 278	89 089
Diluted Shares Outstanding	75	80	81	84	47	56	58	59	298	299	298	293	1 481	1 448	1 357	1 143
Book Value per share	18.5	26.8	24.0	33.3	24.2	29.6	25.7	33.0	32.5	34.3	31.2	36.9	67.8	73.8	66.1	77.6
Return on Average Equity	16.31%	7.15%	10.76%	-2.05%	28.65%	11.65%	7.47%	2.29%	9.43%	11.49%	12.63%	13.10%	9.15%	7.26%	2.23%	3.28%

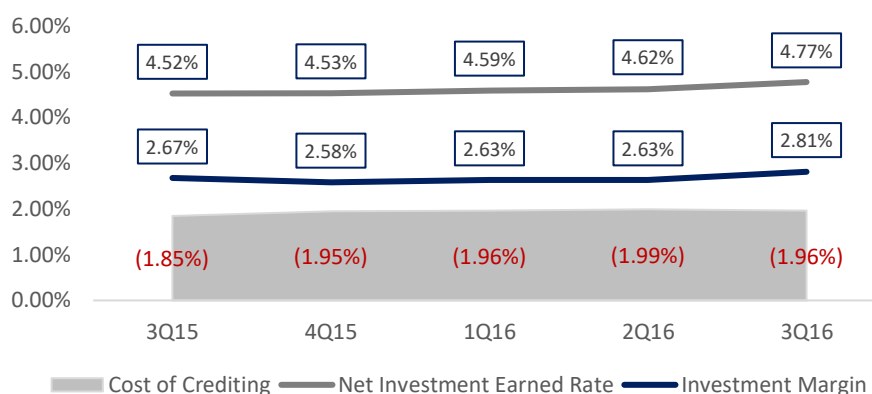
Source: Companies' Annual Reports

Exhibit 16a Retirement Services Operating Results, 2015

Retirement Services Operating Results (in \$ billions)	
	2015
Net Investment Earnings	2 572
Cost of crediting on deferred annuities	-940
Other liability costs	-656
Operating expenses	-166
Operating income before tax	810
Income tax expense (benefit)	41
Operating Income, net of tax	769

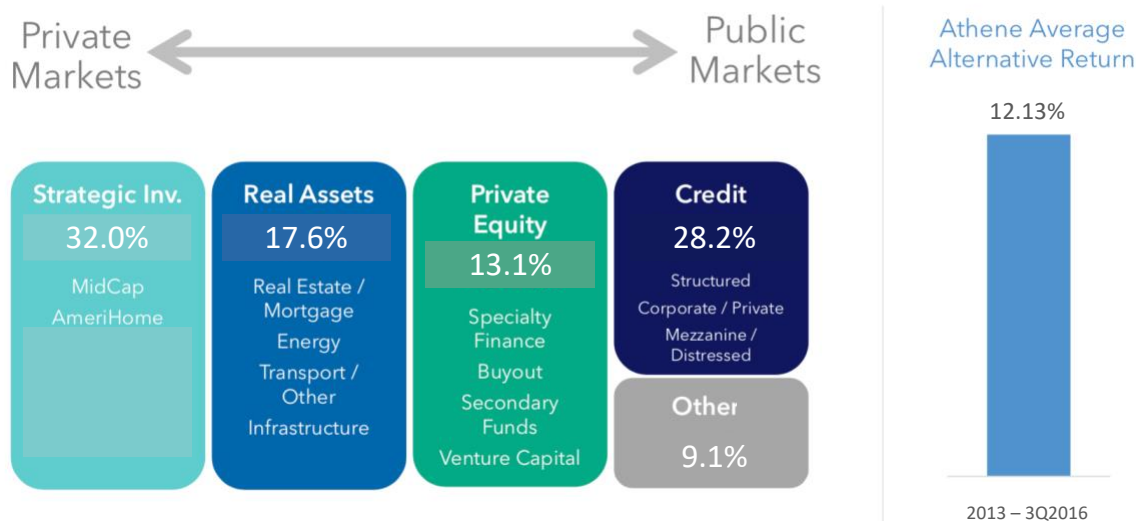
Source: Company Information

Exhibit 16b 3Q15-3Q16 Net Investment Margin



Source: Company Information

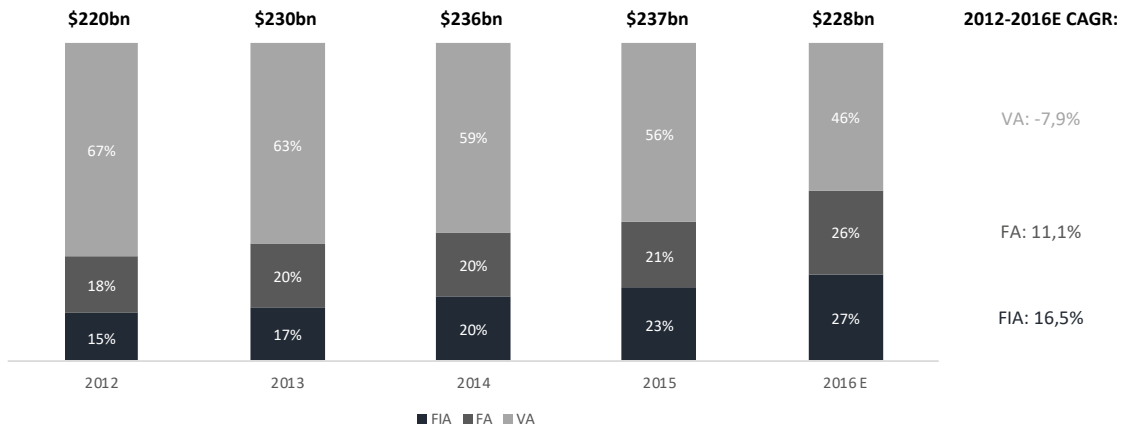
Exhibit 17 Alternatives



Source: Company Information

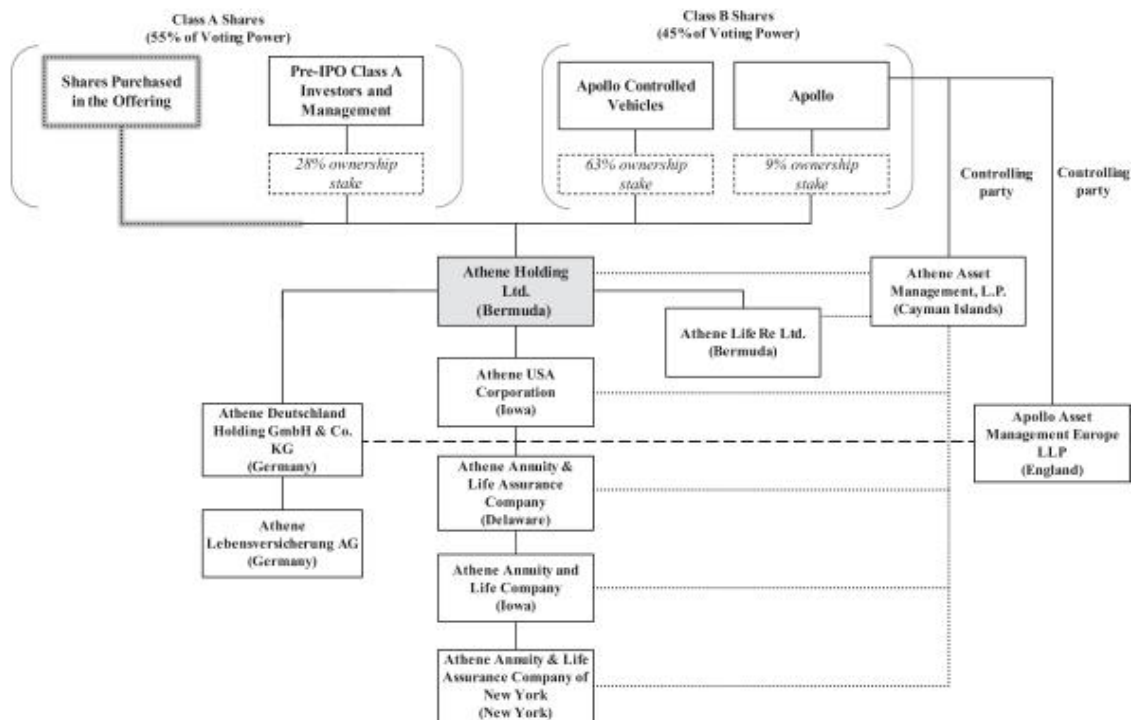
Athene Holding Ltd. – To invest or not to invest?

Exhibit 18 Evolution of U.S Annuity sales from 2013 to 2016 (Annualized)



Source: LIMRA database

Exhibit 19 Ownership Structure prior to the offering



Source: Company Information

Athene Holding Ltd. – To invest or not to invest?

Exhibit 20 Athene's detailed ownership before and after the offering.

	CLASS A (55% voting rights)					
	Pre IPO			Post IPO		
	# Shares	Ownership	Voting Right	# Shares	Ownership	Voting Right
Institutional Investors	52 901 345	28%	55%	72 794 654	39%	55%
Ontario Limited	5 769 231	3,1%	6,0%	4 099 324	2,2%	3,1%
Stanhope Investments	4 615 385	2,4%	4,8%	3 279 460	1,7%	2,5%
Procific	4 936 795	2,6%	5,1%	-	0,0%	0,0%
Teacher Retirement System of Texas	3 653 846	1,9%	3,8%	3 111 276	1,6%	2,4%
Normanton Investments Pte. Ltd.	2 884 615	1,5%	3,0%	2 429 163	1,3%	1,8%
CREL/OAC L.L.C	2 500 000	1,3%	2,6%	2 011 303	1,1%	1,5%
Arizona State Retirement System	1 846 154	1,0%	1,9%	1 311 784	0,7%	1,0%
AAA*	-	0,0%	0,0%	10 507 906	5,6%	7,9%
IPO buyers	-	0,0%	0,0%	23 750 000	12,6%	17,9%
Other institutional investors	13 794 284	7,3%	14,3%	9 357 858	5,0%	7,1%
Directors and Executive officers						
James R. Belardi	5 038 922	2,7%	5,2%	5 038 922	2,7%	3,8%
William J. Wheeler	554 311	0,3%	0,6%	554 311	0,3%	0,4%
Grant Kvalheim	2 171 382	1,1%	2,3%	2 171 382	1,1%	1,6%
Martin P. Klein	89 158	0,0%	0,1%	89 158	0,0%	0,1%
Guy H. ("Chip") Smith, III	276 633	0,1%	0,3%	234 758	0,1%	0,2%
Marc Beilinson	48 304	0,0%	0,1%	48 304	0,0%	0,0%
Imran Siddiqui	1 961 539	1,0%	2,0%	1 962 540	1,0%	1,5%
Gernot Lohr	1 103 589	0,6%	1,1%	1 179 540	0,6%	0,9%
Matthew R. Michelini	125 000	0,1%	0,1%	125 433	0,1%	0,1%
Robert Borden	40 407	0,0%	0,0%	40 407	0,0%	0,0%
Hope Taitz	52 618	0,0%	0,1%	52 618	0,0%	0,0%
Lawrence J. Ruisi	40 713	0,0%	0,0%	40 713	0,0%	0,0%
Dr. Manfred Puffer	40 511	0,0%	0,0%	40 511	0,0%	0,0%
Others	1 357 948	0,7%	1,4%	1 357 983	0,7%	1,0%

	CLASS B (45% voting rights)					
	Pre IPO			Post IPO		
	# Shares	Ownership	Voting Right	# Shares	Ownership	Voting Right
Holders	135 963 975	72%	45%	116 070 666	61%	45%
AAA	86 130 376	45,6%	28,5%	75 364 079	39,9%	29,2%
Stanhope Life LP	14 480 286	7,7%	4,8%	10 288 961	5,4%	4,0%
Pelmetto	10 069 757	5,3%	3,3%	7 178 246	3,8%	2,8%
AHL 2014 Investor	8 461 538	4,5%	2,8%	6 702 672	3,5%	2,6%
Apollo	14 822 015	7,8%	4,9%	15 080 406	8,0%	5,8%
Marc Rowan		0,0%	0,0%	227 953	0,1%	0,1%
Other	2 000 003	1,1%	0,7%	1 228 349	0,7%	0,5%
			0,0%			0,0%
Total	135 963 975	72,0%	45,0%	116 070 666	61,5%	45,0%

Source: Company Information

Athene Holding Ltd. – To invest or not to invest?

Exhibit 21 Athene's next 12 months EPS consensus

Earnings Estimates	4Q16E	1Q17E	2Q17E	3Q17E	NT12ME
Consensus EPS	1,17	1,00	1,07	1,12	4,36

Source: Credit Suisse

Exhibit 22 Peers' next 12 months P/E Ratio

P/E Ratio 12M FWD	Metlife	Prudential Financial	Lincoln National	Genworth Financial	American Equity Life	Principal Financial	Voya Financial	AIG
01/01/2015	8,68x	8,69x	8,94x	6,05x	12,23x	11,28x	12,73x	10,85x
01/02/2015	8,19x	8,08x	8,25x	5,70x	11,39x	10,77x	12,06x	10,25x
01/03/2015	8,53x	8,09x	9,14x	7,16x	12,32x	11,55x	12,82x	10,84x
01/04/2015	8,66x	8,29x	9,11x	6,77x	12,04x	11,43x	12,84x	11,06x
01/05/2015	8,49x	8,08x	9,09x	7,58x	12,00x	11,51x	12,47x	11,39x
01/06/2015	8,77x	8,39x	9,27x	7,29x	10,50x	11,40x	12,69x	11,33x
01/07/2015	9,23x	8,66x	9,42x	7,20x	10,39x	11,44x	13,40x	11,81x
01/08/2015	9,41x	8,60x	9,11x	7,12x	10,50x	11,46x	13,39x	12,11x
01/09/2015	8,72x	8,36x	8,60x	4,62x	10,50x	12,33x	12,92x	11,77x
01/10/2015	8,11x	7,70x	7,84x	4,87x	9,30x	10,64x	12,41x	10,97x
01/11/2015	7,80x	7,38x	7,58x	4,94x	9,31x	10,46x	11,38x	10,78x
01/12/2015	8,59x	8,50x	8,67x	4,85x	10,04x	11,37x	12,50x	12,11x
01/01/2016	8,24x	8,29x	7,94x	4,07x	8,98x	10,62x	11,06x	11,83x
01/02/2016	7,22x	7,05x	6,37x	2,45x	7,02x	8,66x	9,04x	10,89x
01/03/2016	6,79x	6,74x	5,56x	2,17x	5,26x	8,71x	8,63x	10,37x
01/04/2016	7,50x	7,29x	6,19x	3,23x	5,75x	9,21x	9,07x	10,39x
01/05/2016	7,59x	7,59x	6,22x	3,26x	5,73x	9,53x	9,06x	10,81x
01/06/2016	7,93x	7,95x	6,96x	4,20x	6,61x	9,86x	9,54x	12,09x
01/07/2016	7,34x	7,21x	6,43x	3,62x	6,58x	9,38x	8,33x	11,15x
01/08/2016	7,11x	7,31x	6,21x	3,17x	6,76x	9,68x	7,13x	10,97x
01/09/2016	7,51x	7,86x	7,03x	4,21x	7,12x	10,39x	8,03x	11,70x
01/10/2016	8,05x	8,02x	7,08x	5,24x	7,43x	10,50x	7,94x	11,21x
01/11/2016	8,52x	8,41x	7,36x	5,66x	7,72x	11,29x	8,36x	11,45x
01/12/2016	9,71x	9,57x	8,96x	5,37x	9,67x	11,98x	9,99x	12,11x

Source: Thomson Reuters

Athene Holding, Inc

To invest or not to invest?

-Teaching Note-

Summary of the Case

Athene Holding, an annuity provider backed by Apollo Global Management, was envisioned by Apollo and two members of the company's current management team – James Belardi and Chip Gillis. The company was founded during the global financial crisis, aiming to capitalize on the dislocation happening in the sector. After six years of existence, Athene had become one of the leading Fixed Annuity providers in the United States, with more than \$71bn in invested assets. The company had achieved tremendous growth mainly through acquisitions at large discounts from struggling firms, allowing the company to develop a strong organic channel.

The case is focused on Cambridge Global Asset Management's investment committee who is deciding whether or not to invest in Athene's initial public offering. Athene had an unorthodox corporate structure and was controlled by the private equity mogul Apollo. The case was designed to analyze the advantages and disadvantages of private equity ownership/control in life insurance companies and its implications to all stakeholders.

In order to decide if Athene would be a good investment, Cambridge's investment committee should access if Apollo's ties to Athene would work in favor or against the company's overall profitability. In fact, Athene proved to be a "honey pot" for Apollo but, Cambridge Global Asset Management should evaluate the implications for the remaining shareholders.

Possible Poll Questions

1. Comment the challenges posed by the financial crisis to insurance companies? What were the implications for life insurance companies? How did the bad moment of the market provide a good opportunity to Athene's creation?
2. In Apollo's perspective, why was life insurance the perfect business to be in? What are the characteristics of retirement products that Apollo found most attractive?
3. Why was so important to Apollo that Athene kept growing? Do Athene's shareholders also benefit with scale?
4. What are reputational risks? Why are these so important to companies like Apollo? Do you think these risks protect or harm Athene's shareholders?

5. Comment Apollo and Athene's relationship. What are the Pros and Cons of this relationship?
6. Explain the importance of keeping shareholders and managers interests aligned. How well do you think Apollo managed to keep Athene's management team's interests aligned with its own?
7. What is the role of Regulators? Do they have reasons to be worried about Athene/Apollo?
8. Should Cambridge Global Asset Management invest in the IPO?

Suggested Answers

1. Comment the challenges posed by the financial crisis on insurance companies. What were the implications for Life Insurance Companies? How did the bad moment of the market provide a good opportunity to Athene's creation?

As the crisis of 2008 shattered the banking system, the insurance sector was also largely affected due to its tight links to banks and the financial markets. This led to one of the most challenging times in the insurance industry's history. By 2008, the market capitalization of the 10 largest insurers shrank by more than 50 percent and, total losses exceeded \$35bn³⁸. The sector continued to suffer and, according to **Exhibit 2**, by August 2009, the insurance industry had lost more than \$260 billion, with AIG being responsible for almost 40% of total losses due to its excessive exposure to the subprime mortgage sector.

The post-crisis era would prove to be extremely challenging to insurance companies. The stock market had its worst year since the Great Depression and two of the main indexes, S&P500 and Dow Jones, lost half of their value in less than two years. Accordingly, the volatility on the stock markets spiked and the VIX reached all-time highs after the fall of Lehman Brothers. To make it worse, the Fed interest rate reached an all-time low and short-term treasury bills hit the bottom low in 2009, with no expectation to increase in the near future (see **Exhibit 1** and **Exhibit 4**).

To avoid future crisis with the extent of the 2008 Global Crisis, regulators implemented tighter capital requirements to financial institutions. This measure, although inevitable, created further pressure on insurance companies because not only their asset side was suffering immense pressure with mark-downs and losses in the capital markets, new regulations required additional capital to back-up their liabilities. These new restrictions together with the difficulty to raise additional equity and the inability to earn returns in the capital markets left many insurance companies with no choice but to exit the market or divest some business segments.

For life insurance companies, the global crisis was less severe than it was for other insurance companies, such as mortgage insurance companies or large financial groups, mainly due to their limited exposure to the mortgage sector. Even though life insurers were not massive investors in residential mortgage backed securities (RMBS) and structured financial products (e.g. CDOs), they were still large investors in securities' markets, including equities and corporate bond markets, where valuations also decreased drastically. Additionally, many life insurers have written annuities contracts prior to the crisis with overly-optimistic assumptions, during high interest rate environments. As such, faced with a low interest rate environment, life insurers were struggling to meet their liabilities as well as earning any spread on their investments. On the liability side, the decline in low-risk interest rates and tighter capital requirements implied increases in liability levels, leading to even lower returns on equity. Overall, the insurance

³⁸ McKinsey Working Papers on Risk – Responding to the Variable Annuity Crisis (2009)

industry was facing a tremendous pressure after the crisis which led many insurance companies to exit the market, downsize/divest non-core areas or explore reinsurance.

On the one hand, the fundamentals for retirement products were still in place – the retirement-age population in the United States was increasing and was expected to almost double in 20 years (see **Exhibit 5**); more than 50% of the population did not have any retirement plan and the financial crisis caused great anxiety on many pre-retirees who saw their savings depreciate, making them look for safer solutions to guarantee a stream of income after retirement. On the other hand, insurance companies providing retirement products were exiting the market, looking for reinsurance or not writing any new business, creating large imbalances between the supply and demand for retirements services products. Additionally, companies divesting or reinsuring blocks of annuities were doing it at huge discounts due to their urgency in alleviating their balance sheets and comply with new capital requirements. At the same time life insurers were struggling to survive the challenging economic conditions, private equity firms were alert to invest opportunistically at the market bottom.

In fact, Apollo “smelled the blood” and saw the perfect opportunity to enter the market and amass a significant market share in the annuity industry through cheap acquisitions. Athene was possibly a successful idea right from the beginning since Apollo was an opportunistic alternative investor, capable to source attractive investments during challenging economic conditions. In addition, the private equity company partnered up with an experience management team (See **Exhibit 6**) who knew how to lead a life insurer. Ray Belardi, the chosen leader for Athene had previously built and lead SunAmerica alongside Eli Broad, which turned out to be the best performance stock of the 90s³⁹. Apollo and Ray Belardi’s vision was to take on SunAmerica’s idea and enhance it to form a new company. Actually, Athene was extremely similar to SunAmerica with the key difference being the new entity was based in Bermuda in a low tax-environment.

Athene had the perfect conditions to thrive during the bad moment of the life insurance sector because of the opportunity to acquire companies at massive price to book discounts, allowing the company to quickly gain market share in the industry while its competitors were writing less new business. Even though Athene acquired liabilities that were written at high-interest rate environments, the implicit discounts on the acquisitions more than outweighed the higher crediting rates, allowing Athene to pay down some of the liabilities and seek better investments. Contrarily, Athene’s new contracts were written after the crisis, permitting Athene to hold substantially fewer legacy liabilities than its competitors.

Summing up, the opportunities arising from companies exiting the life insurance market at large discounts, the expected increase in demand and decrease in supply for retirement products provided the perfect opportunity to Apollo partnering up with an experienced management team to fill the void left in the industry.

2. In Apollo’s perspective, why was life insurance the perfect business to be in? What are the characteristics of retirement products that Apollo found most attractive?

Since inception, Athene concentrated its activities in two core products – Fixed Annuities and Fixed Index Annuities which comprised 80% of its liabilities prior to the IPO (see **Exhibit 9**). First, it is important to understand the products and its implications to both policyholders and issuers. By looking at **Exhibit 3**, one understands these products are most comparable to bank deposits or certificates with the key difference being annuities usually return higher rates to investors given the lack of a FDIC⁴⁰ guarantee. In practical terms, policyholders accrue interest

³⁹ Broad, E. (2012). *The Art of Being Unreasonable: Lessons in Unconventional Thinking*. John Wiley & Sons.

⁴⁰ The Federal Deposit Insurance Corporation (FDIC) is an independent agency of the United States government that protects the funds depositors place in banks and savings associations

in their annuity account which is tax deferred until withdrawal. Oppositely, providers invest the premiums harvested from the policyholders to earn an investment return and, in order to make money, they must achieve returns in excess to what it is owed to policyholders and to cover any acquisition and operational costs.

Apollo was known for its Private Equity, Credit and Real Estate funds, which required the alternative investor to constantly raise capital from pension funds, wealth funds or endowments, as well as debt from financial institutions. Marc Rowan and Imran Sidiqui envisioned Athene to be the perfect vehicle to guarantee Apollo's main obsessions: permanent capital and private credit. In fact, traditional funds have finite lives thus, capital invested in Apollo's buyout and credit funds has to be returned to its investors after 7-10 years and, after that period, a new fundraising cycle has to occur. Oppositely, insurance does not have a finite life and new policies are constantly being written and premiums collected thus, life insurance companies represent great sources of permanent capital.

Additionally, Athene's liabilities are priced relative to certificate deposits⁴¹ which are among the cheapest forms of capital while equity committed in Apollo's funds is relatively expensive. This particularity of the life insurance business allowed Apollo not only to have permanent capital but also the cheapest type of capital. The annuity industry was indeed the perfect way to achieve permanent capital and decrease the dependence on fundraising.

The other feature appreciated by Apollo is the maturity of the products. Annuities are long-term products⁴² which do not require providers to pay policyholders before a long period of time, allowing Athene to invest in illiquid and complex assets. In fact, Apollo helped Athene achieving abnormal returns just by moving down the liquidity spectrum, using its established network in the private markets. Additionally, given the long-term nature of the products, Athene did not have to hold exclusively liquid assets instead, they had to be highly rated to comply with risk-adjusted capital requirements.

Furthermore, the life insurance industry is known for its high asset leverage in which companies can hold invested assets up to 10-14x its equity commitments, allowing companies to achieve extremely high returns on equity through small spreads on investments. For instance, 2015 Retirement Services' after-tax operating results (\$769m) represents a small investment margin of 131bps however, for a company with an asset leverage of 12.5x, the operating return net of tax for that segment is 16.32% which is well above the industry average. The annuity business is highly dependent on managing spreads and, Athene has proved it can achieve extraordinary investment spreads after fees paid to Apollo. Contrarily, most life insurers had been suffering because they were not achieving spreads on their invested assets.

All in all, Athene is a platform from which Apollo can source capital in a predictive and permanent way without the resource to any fundraising initiatives. In addition, annuity liabilities are cheap and have a long-term duration which, added to Apollo's unique sourcing abilities for illiquid opportunities and a fair amount of leverage, results in attractive returns for both Apollo and Athene's shareholders.

⁴¹ A few bps more expensive due to the lack of guarantees

⁴² Athene's liabilities had an average life of 8.4 years (Exhibit 9)

3. Why was so important to Apollo that Athene kept growing? Do Athene's shareholders also benefit with scale?

In Apollo's perspective, it was quite obvious that its future earnings depended on how big Athene was. Apollo owned Athene Asset Management (AAM) which was responsible for managing and investing 100% of Athene's assets. In fact, Apollo and Athene had a fee arrangement where the asset manager (through AAM) received 40 bps of all assets invested plus additional sub-advisory fees for roughly 20% of Athene's portfolio that was allocated to asset classes that required unique sourcing and underwriting capabilities (e.g. high yield credit, CMBs, direct investments). With this arrangement, Apollo had clear advantages in keeping Athene's AUM growing as it resulted in a larger sum of fees. Even though Apollo's financial performance was directly linked to Athene's balance sheet size, the alternative investor did not want to promote imprudent growth or disregard profitability. Moreover, AAM's bad performance in managing and investing Athene's assets could lead to the termination of the investment management contract or serious reputation damages.

The remaining shareholders could benefit from scale as well. As in many other acquisitions, Athene had been able to achieve cost benefits with its acquisitions by incorporating all the operations under the same organization. Although the cost of crediting does not change with additional volume, operational expenses such as wages, G&A costs or licensing can be diluted thus, growth can indeed generate higher returns for Athene's shareholders. (See **Exhibit 16a** to understand Athene's Retirement Services profit breakdown). Another advantage achieved by Athene's acquisition spree was the possibility of being large enough to go through an initial public offering that usually rewards shareholders. Generally, public companies are more valuable than private companies because the latter are subject to a liquidity discount. In fact, private companies' shareholders are not able to quickly liquidate their positions as they would be if the shares were trading.

Moreover, Athene communicated it would reduce AAM's management fees for AUM over the threshold verified at 31 December 2016. The reduction was estimated to be 10bps therefore, assets acquired after 2016 would generate higher investment income than the investments already made in the past. Once again, leverage plays a big role in this case and a 10 bps increase in the investment margin, leveraged up to 12.5x, accounts for a 1.25% increase in the return on equity for new assets. In addition, the fee reduction announcement unveiled Apollo willingness to negotiate and anticipates future cuts that would also benefit non-Apollo shareholders.

Summing up, an increase in Athene's balance sheet is more attractive to Apollo for obvious reasons however, other shareholders may also benefit with growth if AAM keeps achieving attractive returns and pursuing accretive transactions. Athene has a scalable and efficient platform that benefits from growth due to cost synergies and additional distribution channels that future transactions bring to the table.

4. What are reputational risks? Why are these so important to companies like Apollo? Do you think these risks protect or harm Athene's shareholders?

Reputational risks are risks taken by companies as of any decision-making process. Companies build their reputation to facilitate relations with all the stakeholders they have to deal with. Accordingly, reputational risks are threats to the name of a company and can arise from many different ways: from the company's actions, from the employees' actions, from the nature of the company or even through its clients or suppliers. The failure to achieve a good reputation can

devastate a company by limiting its ability to retain/acquire customers, negotiate with suppliers or raise capital or debt.

For private equity companies, reputational risks are even more serious. These companies' business is to raise funds and invest them with the promise of achieving high returns for the investors. The ability to raise funds is directly linked with the company's track record and aptitude to generate attractive returns. With this in mind, fundraisers have to evaluate every single decision they make in any investment because one big failure could jeopardize the company's ability to raise capital or debt in the future. Moreover, private equity companies usually have a core group of investors and banks from which they usually rely on when raising new funds thus, disappointing one of these investors could result in the loss of important partnerships.

In Apollo and Athene's case, the alternative investor is backed by some of the most known pension funds in the world such as Ontario Teachers' Pension Plan, Teacher Retirement System of Texas and Arizona State Retirement System thus, failing to achieve targeted returns for these investors could endanger Apollo's future ability to raise capital from these players. For this reason, it seems likely that Apollo would do anything in its power to keep Athene healthy and attractive to the remainder shareholders, in a way some of these important institutional investors would commit capital in Apollo's future funds. Furthermore, Apollo itself is a publicly-listed company thus, if Athene failed, given its importance to Apollo's AUM and revenues, the company's stock would probably plunge and, Apollo's shareholders would take huge losses.

Nevertheless, Athene's shareholders benefit with Apollo's reputational risks since they work as a tool to discipline Apollo's actions as investment managers. As mentioned before, Apollo benefits directly with Athene's growth regardless profitability however, the fear of seeing its reputation damaged or being fired as investment managers keeps Apollo disciplined and committed to maximizing shareholder value.

5. Comment Apollo and Athene's relationship? What are the Pros and Cons of the relationship?

Athene Holding has been highly controversial since inception due to its highly acquisitive profile and tight affiliations to Apollo. Competitors and regulators have been publicly criticizing Apollo's ambitions and plans for the life insurer. In fact, the private equity helped engineering Athene and has been earning a large sum of fees from the company in a way that Athene alone represented roughly 40% of Apollo's management and monitoring fees as of 30 September 2016 (see **Exhibit 10**). Apollo is not only the largest single shareholder in Athene (9.1%) but also its asset manager which allows the company to charge fees for every asset invested. Moreover, Apollo is in a position with powerful incentives to lead Athene into making decisions favorable to the private equity firm, disregarding the remaining shareholders' interests. Notwithstanding, Apollo is indeed a sharp asset manager and has been extremely successful with managing the life insurer's portfolio.

Although Apollo owns only 9.1% of Athene's economic ownership, the way the company is structured through its Class A and B shares allows the private equity firm to have 45% of the voting rights. This characteristic is a clear disadvantage to other shareholders as their power to exert control over Athene's course of actions is extremely limited. Prior to the IPO, Apollo and Jim Belardi who also benefited from AAM's fee contract, had more than 50% of the voting rights together thus, it was clear other shareholders had absolutely no say in Athene's strategy. Another disadvantage is the inherent short-term focus that private equity firms have over its investments.

Even though Athene has been reinforcing there is not a single dollar invested in the firm that is not permanent, it is impossible to completely disassociate Apollo with having a short-term profit focus. This characteristic of private equity firms hurts Athene since regulators, competitors and the press have been disbelieving the firm's strategy, creating a negative image about the relationship. Moreover, Athene's asset allocation strategy is aggressive and has never been tested in a credit shock. When looking to both Athene and its comparable firms' portfolios (see **Exhibit 12a and 12b**), it is visible Athene hold a substantial amount of illiquid assets that could eventually harm the company during a recession.

Despite having some disadvantages of being backed by Apollo, Athene also benefits from the relationship. Firstly, Apollo was the responsible for Athene's creation and deserves some credit for the idea. Apollo also gathered an experienced management team with a strong track record in the annuity sphere who has been demonstrating a strong ability to lead Athene and create value for its shareholders. Indeed, Apollo profits and charges more than the common asset manager for investing Athene's portfolio however, Athene's performance after fees paid to Apollo has not been "common" as well. In fact, Athene's average return on equity since 2013 until the end of the third quarter of 2016 was 18.2% while its peers' average ROE was only 7.0% during the same period. Additionally, Athene has been demonstrating impressive growth and its average invested assets increased by 166.0% from 2013 through the nine months ended, 2016 while its competitors grew only 12.9% on average over the same period. (**Exhibit TN 1** shows some key indicators comparing Athene's and its peers' performances). Apollo's superior investment capabilities and sourcing have been allowing Athene to record impressive returns that would probably not occur with a different asset manager. The investment manager has access and expertise to invest in certain illiquid opportunities such as Midcap and AmeriHome, private debt or mortgage loans (see **Exhibit 17**), investments that have been overlooked by the average life insurer. These investments have been helping Athene getting one step closer to direct origination that, according to Athene's management team, will be where the company will be able to distinguish itself from the remaining life insurers due to the disappearance of spreads in trading instruments.

Additionally, Apollo has "skin in the game", it holds 9.1% of Athene's shares which is extremely important to align Apollo's and other shareholders' interests. Apollo's stake after the IPO would be valued at roughly \$710m at the mid-point of the offer range, meaning the investment manager will be interested in keeping its holdings appreciating over time. Also, the firm has serious reputational risks associated with Athene's performance because a failure of such dimension could compromise Apollo's future fundraising ability. Lastly, Apollo revised its investment management agreement with Athene, paving ways for further negotiations that would increase the life insurer's earnings.

The most important feature in the relationship that turns it into a win-win situation is Apollo's dependence on Athene. Actually, Apollo's own performance is highly dependent on fees collected from Athene thus, the private equity firm is likely to do anything in its power to keep managing the life insurer's portfolio. Accordingly, Apollo's most effective way to remain Athene's investment manager is to keep generating value to the company and its shareholders.

Summing up, the two companies' relationship is unorthodox and provides Apollo with way too many incentives to disregard the remainder shareholders. Despite the clear conflicts of interest, Apollo is transparent and an exceptional asset manager and has been rewarding Athene's shareholders year after year with astonishing growth and clear outperformance. At the same time, the characteristics of the relationship that allow Apollo to collect a large sum of fees from Athene,

are the same assuring Apollo will keep maximizing Athene's value and rewarding its shareholders.

6. Explain the importance of keeping shareholders and managers interests aligned. How well do you think Apollo managed to keep Athene's management team's interests aligned with its own?

The Principal-Agent problem arises when principal's (e.g. owner) and agent's (e.g. CEO) incentives are not aligned. The theory defends a clear distinction between ownership and control and implies a friction between owners and managers when the objectives of both diverge. On the one hand, managers usually have limited mandates and are mostly concerned with their individual performance when leading a company thus, their goals tend to be short-term oriented. On the other hand, shareholders' objectives consist in maximizing the company's value in the long run, meaning they privilege sustainable and less risky strategies. Michael C. Jensen and William H. Meckling (1976)⁴³ conducted a research in which they compared the behavior of managers who owned 100 percent of a firm in relation to the behavior of managers who did not own the full residual claims of a firm. The conclusions suggested agency costs are indeed real costs and managers not fully owning a company will generally act to increase their own marginal utility instead of maximizing shareholder's value. In addition, the research concluded that as manager's ownership of a company decreased, the propensity to search out new profitable ventures would also decline. The Agency problem has been increasingly gaining relevance in corporate governance and, companies around the globe have been applying innumerable strategies to mitigate these costs and reduce interest misalignments between agents and principals. Some of the most effective ways to alleviate agency costs are the implementation of performance-based forms of compensation or stock-based compensation. In fact, managers will stay more committed to achieving certain results if their compensation increases accordingly. In addition, stock-based compensation incentivizes managers to maximize share value.

Private equity firms are known for providing the management teams leading their portfolio companies' great incentives to perform in behalf of their own interests. In essence, managers are the ones with the deepest understanding and access to information regarding companies' daily operations thus, they are the stakeholders capable of guiding a company into achieving a determined target. The most common practice in private equity is to attribute a considerable equity portion to the management team upon the buy-out, motivating them to work hard in order to achieve a great return at exit. This mechanism assures the management team will have the same interest as the private equity firm - maximizing equity value.

In Athene's case, the alignment between shareholders and managers was designed in a wicked way. Apollo engineered Athene in a way the management team would have its interest aligned with their own and not necessarily with the entire firm. Moreover, Ray Belardi, Athene's CEO is also AMM's CEO and owns 5% of the asset manager thus, he is entitled to 5% of Apollo's profits. In fact, since Ray's compensation is directly linked to the asset manager's fees, it would not be surprising if he would lead the company in a way Apollo would profit the most. In addition, he has a 2.7% stake in Athene in Class A shares, granting him 5.2% of Athene's voting rights. Hence, the CEO and Apollo together have been owning more than 50% of the voting rights, meaning

⁴³ Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*

they have been detaining full control over the company's course of actions. Apollo and Ray Belardi have incentives to grow Athene's balance sheet because their own compensation is directly linked to AAM's investment management contract. In a sense, Apollo managed to keep Athene's management team and their own interests extremely well aligned however, the remainder shareholders do not probably feel the same. The single mechanism preventing other shareholders to be completely disregarded is the Board of Directors ability to fire both the investment manager and Ray Belardi who are extremely interested in "keeping their jobs". In this perspective, Athene's interests are also aligned with Apollo's and the management team's ones because a poor performance could mean the termination of a relationship that had been extremely rewarding for both Apollo and Ray Belardi.

7. What is the role of Regulators? Do they have reasons to be worried about Apollo backing Athene?

The life insurance industry is of extreme importance to the economy in the United States of America. Millions of Americans trust life insurers to invest their money in order to lock-in a guaranteed stream of income during retirement. Moreover, annuities are long-term orientated products and its policyholders rely on the providers to pay out promised benefits in the future. Benjamin M. Lawsky, the New York Financial Services Superintendent, has been manifesting his concerns regarding Athene's private equity ownership. According to his statements, private equity companies have usually high-risk profiles and a short-term approach to businesses which contends a clear mismatch to policyholders' motivations. Even though Apollo has been claiming they are in Athene for the long run and Athene's capital does not have a time fuse on it, Mr. Lawsky's concerns are obviously worth of special attention and Athene's transactions have been deserving reinforced scrutiny.

Regulators have one of the most important roles when it comes to approve transactions between insurers. In fact, due to the complexity of insurance accounting and reporting, the majority of policyholders rely on rating agencies and advisors when deciding from where to buy an annuity and, retirees never get to fully understand the specifics of the product. Actually, most annuities usually have surrender penalties, limiting policyholders' ability to terminate a contract and easily change the provider. As an example, by the end of the third quarter of 2016, 86% of Athene's annuity products included surrender charges which meant policyholders would be heavily penalized if they decided to early withdrawal their annuities. **(See Exhibit 9)** As such, regulators represent the last line of defense to policyholders against changes in the ownership of their annuities' liabilities.

Actually, policyholders, before approving any transaction, have to access the acquirer's ability to honour the acquired contracts and guarantee policyholders' promised income. Their role is especially more important when acquirers are private equity companies and policyholders have no say upon their contracts' transfer. In fact, regulators must assure there will not be significant changes in the risk profile of the assets underlying the retirement services products being transferred. However, this has a higher probability to occur when the acquirers have historically demonstrated more risk appetite. For instance, in 2013, regulators imposed stricter restrictions in

several transactions in the annuity industry in which the acquirers were private equity companies (e.g. Athene acquiring Aviva USA and Guggenheim Partners acquiring Sun Life⁴⁴).

In contrast, regulators also sympathized with private equity's contributions to revitalize an industry that was significantly affected by the financial crisis. Actually, Athene was responsible for a large number of annuities written after the crisis and established itself as the 3rd largest FIA provider in the United States, helping millions of Americans attending their retirement needs. The United States, as many other developed countries, has an aging population issue and, nearly half of individuals approaching retirement age have no retirement savings plan. Faced with this problem, regulators have been more welcoming to firms that are in any way contributing to alleviate the situation.

As the years passed by and Apollo's dependence on Athene increased, the relationship between the two proved to be more long-term focused than it was expected at Athene's inception. Nevertheless, regulators should always be vigilant to Athene and Apollo's relationship in order to prevent policyholders from being exposed to excessive risk. If needed, regulators should require such type of companies (i.e. private equity backed insurers) to comply with tighter risk-based capital restrictions or setting up a backstop trust fund.

8. Should Cambridge Global Asset Management invest in the IPO?

The evaluation process Cambridge's investment committee has to conduct should consider all the aspects and consequences of investing in a company with specific characteristics like Athene. In this case, Cambridge should focus not only in Athene's pricing but also in its ability to keep growing and consolidating its leadership in the fixed annuity industry.

Starting with the valuation, Athene set a \$38 to \$42 share price range for the offering, valuing the company at around \$7.8 bn at the highest end. One of the most important aspects when investing in a company is to assess if the share price has potential to increase or not. In fact, in Athene's case, the company has excess capital and a highly acquisitive mindset thus, the likelihood of acquiring more companies or liability blocks in the future is certainly high. According to the case, as of 30 September 2016, it held more than \$1.5bn in excess capital and had a debt capacity of \$1.5bn, assuming a 20% debt to equity ratio (See **Exhibit 7**). Supposing the company will want to maintain a capital buffer of \$500m, Athene could deploy \$1bn in equity to grow organically or through M&A. Under a conservative scenario, Athene could easily deploy \$1bn in equity and \$1bn through debt issuance which, considering the life insurance industry's 7-10% capital requirement, represents a \$23.5bn account value. Considering Athene's historical retirement services operating profit after tax margin of 131 bps (**Exhibit TN 2**), the \$23.5bn addition in assets would result in an incremental Net Income of \$308.2m which, counterweighed by the interest expense of debt at a rate of 5%⁴⁵ and, assuming a tax rate of around 4%⁴⁶, would amount to total incremental earnings of \$247.9m. Moreover, the deployment of \$2bn in M&A would result in a pro-forma EPS accretion of \$1.31 which, added to Athene's EPS consensus estimate,

⁴⁴ NY state regulator approves Guggenheim buy of Sun Life. (2013, July 31). Retrieved from <https://www.reuters.com/article/us-insurance-regulation/new-york-state-regulator-approves-guggenheim-purchase-of-sun-life-idUSBRE96U11G20130731>

⁴⁵ Assumed a conservative debt yield of 5% considering the rising interest rates. For example, American Equity Life issued debt in 2010 at a coupon of 3.5%.

⁴⁶ Average tax rate for the period 2013-2015 was 3.9%

(see **Exhibit 21**) represents a pro-forma EPS of \$5.67. In **Exhibit 22** are displayed Athene's comparable firms' historical prices in relation to next twelve months (NTM) EPS and, since Athene has been experiencing higher returns on equity and growth than its peers, the company should start trading between the group's median and the 75th percentile NTM EPS (**See Exhibit TN 3**). With this in consideration, Athene's target price under conservative considerations is between \$49.2 and \$61.2, disregarding any operational improvements that would result from future acquisitions. (**Exhibit TN 4** summarizes the calculation of the price range under the abovementioned M&A scenario). Considering Athene's potential price alone, Cambridge should invest in the offering as Athene's lowest potential price is 17% higher than the maximum IPO share price of \$42.

Furthermore, the retirement services market demonstrates strong fundamentals to support future growth: the number of retirees is expected to increase sharply and nearly half of that population does not have a retirement savings plan (see **Exhibit 5**); there is a clear pattern of a product shift in annuity sales as the products Athene provides are taking market share from variable annuities (see **Exhibit 18**); and, finally, interest rates are expected to rise which would increase the returns in fixed income instruments and, subsequently, Athene's net investment income. In addition, a rising interest rate scenario would also increase M&A opportunities as some potential sellers are holding assets to sell them in better macroeconomic environments. (**Exhibit TN 5** shows predictions for the interest rates).

Regarding Athene's strategy, the company recently announced a revised fee agreement with Apollo in which assets acquired after 2016 will be subject to lower management fees. This new agreement will boost shareholder's return due to a higher net investment income achieved from future acquired assets and sales. The retirement market has yet many sectors to be tapped (e.g. corporate pensions) and Apollo will certainly be looking to capitalize on any opportunities that prove profitable. This constant search for new ventures is extremely valuable for shareholders and represents one of the main advantages of having Apollo backing up Athene.

Cambridge's investment committee's main concern should be Athene's relationship with its main shareholder Apollo. The relationship conveys many advantages and disadvantages for the company and its shareholders thus, evaluating the Pros and Cons of the relationship is one of the key aspects when deciding whether or not to invest in Athene. In fact, any new investor will have limited power to influence the company's strategy and decisions due to its bylaws regarding voting power (See **exhibits 19** and **20**). Adding to this, Athene is relatively recent and have not experienced any downturn thus, it is uncertain how will the company behave through different cycles in an industry where commitments can go up to 40 years.

With **Exhibit TN 1**, it is possible to conclude Athene had been outperforming its peers in terms of ROE, growth and share appreciation - the most important metrics for shareholders. At this point, there should be no discussion Apollo is indeed a good investment manager instead, the decision must fall on the likelihood of Athene keep achieving good performances in the future. Athene has proved to be a "honey pot" for Apollo and the management team thus, it is unlikely that they will jeopardize their continuity in the firm by appropriating themselves of the company without rewarding the remaining shareholders. Nevertheless, new investors in the company should proceed carefully and expect that in the case of a recession, they would probably suffer the most while Apollo would still receive a large paycheck as Athene's investment manager.

Apollo's idea inspired many copycats who understood how the annuity industry could provide a good source of permanent capital. The new spree of alternative investors entering the retirement services market increased competition for acquisitions. Nevertheless, Athene has been enjoying

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a significant first-mover advantage that allowed the company to develop its organic channels to the extent of being one of the largest carriers in the United States. The IPO itself comes in line with the increased competition. Rating agencies and regulators have special consideration for public companies due to their better access to capital and higher transparency thus, the IPO will likely boost Athene's organic growth.

Considering all aspects of the deal and Athene's characteristics, Cambridge Global Asset Management should invest in the IPO. Bearing in mind Athene's past performance, the macroeconomic conditions' outlook and the increasing demand for the retirement services products, Athene is well-positioned to keep taking advantage of the retirement market. Moreover, the company started from scratch less than 7 years ago and established itself as the 7th largest provider in fixed annuity sales and the 3rd largest provider in FIA sales in the United States. Meanwhile, Athene has a large capital position readily deployable in M&A that will allow the company to keep growing and gaining market share in the annuity industry. Finally, Athene's valuation for the IPO represents a good opportunity to invest in a company with great price appreciation potential.

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Exhibit TN1 Main indicators comparing Athene and its peers' performances

<i>From 2013 to 3Q2016</i>	Athene	Peers
Average ROE	18,2%	7,0%
Cumulative growth invested assets	166,0%	12,9%
Cumulative growth book value per share	58,5%	35,1%

Exhibit TN2 After-Tax Retirement Services Profit

	<i>31st December</i>			<i>Nine Months Ended</i>	
	2013	2014	2015	2015	2016
<u>After-Tax Operating Income by Segment</u>					
Retirement Services	416	764	769	513	563
<i>% of Retirement Services average invested assets</i>	1,65%	1,31%	1,31%	1,17%	1,21%

Exhibit TN3 Next Twelve Months P/E ratio calculation

P/E Ratio 12M FWD	Metlife	Prudential Financial	Lincoln National	Genworth Financial	American Equity Life	Principal Financial	Voya Financial	AIG
Historical Average	8,20x	8,00x	7,81x	5,03x	8,96x	10,64x	11,26x	10,74x

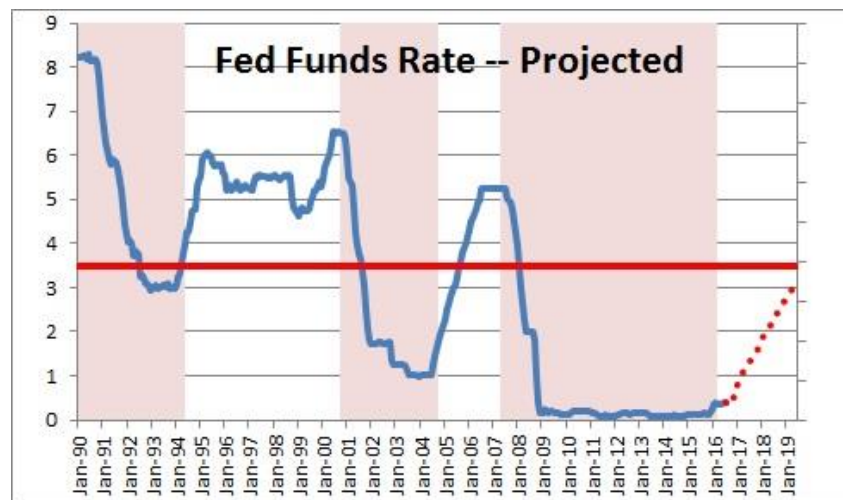
Median	75th Percentile
8,58x	10,67x

Exhibit TN4 M&A scenario – Pro-forma EPS accretion

M&A Scenario Analysis

\$2 Billion acquisitions	
\$1.0bn of Excess Capital + \$11.0bn of Debt = \$2.0 bn	
7-10% Capital Requirement = \$23.5bn Account	
131 bps After tax operating income	
Incremental Net income = \$308.2m	
Interest expense = \$50m 4% Tax Rate	
Incremental Earnings = \$260.2m	
Diluted shares = 188.9m	
\$1.38 Accretion to EPS (Pro-Forma)	
<u>NTM P/E Ratio</u>	
Median Multiple 8,58x	75th Percentile Multiple 10,67x
EPS = \$1.38 + \$4.36 = \$5.74	
Price = \$49.2	Price = \$61.2

Exhibit TN5 FED interest rate outlook



Source: Numbertonics, September 2016