

# Measuring the Financial Health Performance of Life Insurance Company in Indonesia: Case Study During the Period of Before and After the Implementation of Peraturan Otoritas Jasa Keuangan, Nomor 71/POJK.05/2016

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## ABSTRACT

Insurance is simply a risk management by transferring the risk of potential loss to an insurance company. By allowing risk to be spread among a large group of people, everyone will take benefits from insurance. Therefore, selecting strong insurance company is important to make sure that your sum assured or claim will be paid according to the policy term and condition. This research aims to measure, analyze, and compare the financial health performance of public listed life insurance companies in Indonesia namely PT Prudential Life Assurance (PLA) and PT AIA Financial (AIA) from 2013 to 2018 (temporary unaudited) by using 5 financial health aspects such as Solvability Level, Technical Reserve, Investment Adequacy, Equity and Guarantee Fund as regulate by The Financial Services Authority (Otoritas Jasa Keuangan - OJK) through *POJK No.71/POJK.05/2016*. This research is using descriptive analysis and paired t-test to validate the differences of financial aspects during the period of before (2013-2015) and after (2016-2018) the regulation issued. The results of this study show that PLA was performing the best for solvability level, equity and guarantee fund. And PLA must enhance the performance strategy for technical reserve by gaining more premium reserves, reserve claims, reserves on PAYDI and for investment adequacy need to add more non-investment cash saving in banks reserve with the adequacy amount higher than PLA technical reserves.

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## ARTICLE INFO

Keywords:  
Financial Performance,  
Financial Ratio,  
Life Insurance,  
Prudential Indonesia,  
AIA Indonesia

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## **INTRODUCTION**

The Financial Services Authority (Otoritas Jasa Keuangan – OJK) is an independent institution that has the functions, duties and authority to regulate, supervise, inspect and investigate the financial industry in Indonesia advised customer to choose a good insurance company. The main consideration are: 1) Make sure the insurance company to be selected has been registered with the OJK and the Indonesian Life Insurance Association (Asosiasi Asuransi Jiwa Indonesia – AAJI). 2) Pay attention to the financial strength of an insurance company, which can simply be seen through a minimum Risk Based Capital amount of 120%, healthy asset condition and liabilities (refer to financial balance reports published in the media).

In 23 December 2016, OJK issued an OJK regulation *Peraturan Otoritas Jasa Keuangan - POJK No. 71/POJK.05/2016 on measuring the level of financial health of the life insurance and reinsurance in Indonesia*. Article 2 paragraph 2 is mentioning measurement aspects:

1. Solvability Level is Solvency level is the difference between the amount of Allowable Assets reduced by the number of Liabilities. The target of internal solvency level as referred to in paragraph (2) is set at a minimum of 120% of MMBR (Modal Minim Berbasis Risiko) by taking into account the risk profile of each company and considering the results of a stress simulation scenario.

2. Technical Reserve are one of the important factors to calculate liabilities which consist of:

A. Premium reserves:

- a) For products with a maturity of more than 1 (one) year with terms and conditions the policy cannot be renewed (non-renewable) on each policy anniversary.
- b) For products with a maturity of more than 1 (one) year, the terms and conditions of the policy can be renewed (renewable) and provide other benefits after a certain period.
- c) Reserves for premiums that do not yet constitute income for products with a period

of up to 1 (one) year or a period of more than 1 (one) year whose terms and conditions can be renewed (renewable) on each policy anniversary.

B. Reserve Claims are:

- a) Reserve claims in the settlement process
- b) Backup claims that have occurred however not yet reported (incurred but not reported or IBNR)
- c) Reserves of claims for agreed claims and payment of benefits is not at once.

C. Reserves on PAYDI (Produk Asuransi Yang Dikaitkan Dengan Investasi) is insurance products that provide at least protection against the risk of death and provide benefits that refer to investment returns from a collection of funds specifically formed for insurance products whether expressed in units or not units.

D. Catastrophic Reserve is calculated based on retention insurance benefits alone by taking into account the possibility of risk disaster.

3. Investment Adequacy is accumulation of assets in the form of investments, non-investment (cash and banks) with minimum adequacy amount of the company technical reserves, liabilities to pay the company claims and other liabilities to policyholders or insured.

4. Equity is equity based on the financial accounting standards that apply in Indonesia.

5. Guarantee Fund is an insurance company asset that functions as the last guarantee in order to protect the interests of policyholders, insured, or participants, in the event that the insurance company is liquidated, with the largest provisions between:

A. Establish a guarantee fund of at least 20% of the minimum Equity, or

B. Establish a guarantee fund of 2% of reserves for PAYDI plus 5% of premium reserves for products other than PAYDI plus reserves of premiums that have not yet constituted income

To define the sample, this research is referring to Investor Magazine Indonesia, 10 top life insurance

in Indonesia based on net profit as seen below:

According to net profit performance 2015, 2016 and 2017, only 2 companies consistently achieved net profit  $\geq$  IDR 1,010 billion which were PT Prudential Life Assurance (PLA) and PT AIA Financial (AIA). In this research, PLA has recorded the highest net profit of IDR 6,219 billion for 2017 (increase 7% compared to net profit 2016) and AIA has recorded high net profit of IDR 1,050 billion for 2017 (however 2016 performance is 44% better than net profit in 2017).

### Company Profile of PT Prudential Life Assurance

Established in 1995 as a leading provider of life insurance services in Indonesia and is part of Prudential plc, a leading group of financial services companies in the United Kingdom. As part of the Group with more than 168 years of experience in the life insurance industry, Prudential Indonesia is committed to developing its business in Indonesia.

Since launching a life insurance product linked to its first unit link in 1999, Prudential Indonesia is the market leader for these products in Indonesia. Prudential Indonesia has established a sharia business unit since 2007 and is believed to be the leader of the sharia life insurance market in Indonesia since its founding.

Prudential Indonesia is headquartered in Jakarta with marketing offices in Medan, Surabaya, Bandung, Denpasar, Batam and Semarang. As of December 31, 2016, Prudential Indonesia served more than 2.4 million customers through nearly 260,000 licensed marketers in 393 Mandiri Marketing Offices (KPM) throughout the archipelago (including in Jakarta, Surabaya, Medan, Bandung, Yogyakarta, Batam and Bali).

The composition of PLA shareholders consists of Prudential Corporation Holding Limited hold 94.6% of ownership, and PT Sasana Dwi Paramitra hold 5.4% percent of ownership.

**Table 1.** Top 10 life insurance in Indonesia based on net profit

RANK	LIFE INSURANCE COMPANY	2017	2016	%	RANK	LIFE INSURANCE COMPANY	2017	2016	%
1	PT Prudential Life Assurance	6,219	5,785	7.50%	1	PT Prudential Life Assurance	5,785	5,445	5.24%
2	PT AIA Financial	1,010	1,509	-33.10%	2	PT Asuransi Jiwasraya (Persero)	1,706	1,055	60.01%
3	PT AXA Mandiri Financial Service	1,007	1,302	-22.69%	3	PT AIA Financial	1,509	1,030	-21.83%
4	PT Asuransi Jiwa Sequis Life	1,002	792	26.54%	4	PT AXA Mandiri Financial Service	1,302	1,287	2.74%
5	PT Asuransi Jiwa Sinarmas MSIG	494	308	60.36%	5	PT Asuransi Allianz Life Indonesia	899	806	11.58%
6	PT Commonwealth Life	443	280	58.15%	6	PT Asuransi Jiwa Sequis Life	792	715	10.72%
7	PT Asuransi Jiwa Manulife Indonesia	411	19	2,035.39	7	PT Panin Dai-Ichi Life	341	344	-92%
8	PT Panin Dai-Ichi Life	364	341	6.74%	8	PT Asuransi Jiwa Sinarmas MSIG	308	(1,945)	115.54%
9	PT Asuransi Jiwasraya (Persero)	360	1,706	-78.88%	9	PT Commonwealth Life	280	250	8.07%
10	PT BNI Life Insurance	339	155	118.22%	10	PT Asuransi Jiwa Central Asia Raya	227	50	350.74%
	TOTAL	11,649	12,197	-4.50		TOTAL	13,149	9,037	92.31%

Source: Investor Magazine, 2017 and 2016 (in IDR billion)

### Company Profile of PT AIA Financial

PT. AIA FINANCIAL (AIA) is one of the leading life insurance companies in Indonesia and is a life insurance company registered in and supervised by the Financial Services Authority.

In 2009, PT AIG Life changed its name to PT AIA Financial Based on letter number 042 / LGL-AIGL / Srt / V / 2009 dated May 27, 2009 and in accordance with a copy of PT AIG Life Shareholders' Decree Number 35 dated April 29, 2009 made by notary Merryana Suryana, SH and approved by the Minister of Law and Human Rights through the Decree of the Minister of Law and Human Rights Number AHU - 21773.AH.01.02 of 2009 dated May 19, 2009 stating that the letter of Minister of Education number S-078 / MK.5 / 2005 February 1, 2005 applies to the new name of PT. AIA Financial before PT AIG Life.

AIA in Indonesia is a subsidiary of AIA Group. AIA offers a variety of insurance products, including insurance under Sharia principles, which include life insurance, health insurance, personal accident insurance, insurance associated with investment, employee welfare programs, severance programs, and Pension Fund programs (DPLK). These products are marketed by more than 10,000 experienced and professional salespeople through various distribution channels such as agency, Bancassurance and Corporate

Solutions (Pension & Employee Benefits).

The composition of AIA shareholders consists of AIA International Limited hold 95% of ownership, and PT Asta Indah Abadi hold 5% percent of ownership.

### Problem Statement

POJK No.71/POJK.05/2016 was issued in 23 December 2016. Before the issuance, both PLA and AIA were reporting the company financial statement based on the standard accounting report. Starting 2017, both PLA and AIA are reporting the company financial statement based on the 5 financial health aspects: solvability level, technical reserve, investment adequacy, equity and guarantee fund.

As seen in Table 2, the performance of 5 financial health aspects for both companies are outstanding.

### Research Question

The research questions examined in this final project are:

1. Compared then ranked the companies based on 5 measurement aspects, which company is superior compared to other?
2. Is there any correlation of the 5 measurement aspects during before and after the POJK No.71/POJK.05/2016 issued?
3. Is the gap during before and after POJK No.71

**Table 2.** PLA & AIA performance based from 5 financial health aspects

PRUDENTIAL	2013	2014	2015	2016	2017	2018
1. Solvability	1090%	927%	1029%	1061%	677%	746%
2. Technical Reserve	32,275,788	43,530,894	41,421,829	48,599,466	59,560,093	57,857,995
3. Investment Adequacy	250%	249%	261%	273%	239%	233%
4. Equity	6,016,071	7,019,665	8,414,856	9,097,637	8,797,858	7,588,444
5. Guarantee Fund	659,381	781.384	1,265,879	995,929	1,104,094	1,262,252

AIA	2013	2014	2015	2016	2017	2018
1. Solvability	972%	1088%	1038%	727%	675%	630%
2. Technical Reserve	19,912,503	24,618,604	26,932,652	31,107,016	31,258,739	32,205,756
3. Investment Adequacy	163%	152%	150%	193%	218%	209%
4. Equity	4,706,691	6,288,771	7,300,230	8,937,206	12,198,475	10,976,215
5. Guarantee Fund	581,367	739,573	812,570	844,385	934,124	-

Source: Financial Statement PLA & AIA from 2013 to 2018

/POJK.05/2016 significant or not?

### Research Objective

The research objective in this research will answer all the questions as mentioned above.

1. This study will measure the 5 aspects for financial health result for PLA and AIA in the situation before the POJK No. 71 / POJK. 05 / 2016 issued during 2013 until 2015 and after the issued during 2016 until 2018.
2. The result from the Research Question No.1 will be compared and ranked to conclude which company has the best financial performance.
3. This research will be verified by using statistical method namely descriptive statistic and paired t-test to find whether there is any difference result during before (2013 until 2015) and after (2016 until 2018) of POJK No.71 / POJK.05 / 2016 issuance.

### Research Limitation

In order to reach the goals of this research, there will be some research limitations that will be described below:

1. This research is discussing based on the 5 financial health aspects: solvability level, technical reserve, investment adequacy, equity and guarantee fund then will be verified using descriptive statistic and paired t-test statistical method analysis.

2. This study only uses secondary data (2013 to 2017 audited financial statements, 2018 unaudited financial statement, annual reports, and websites) of PLA & AIA.

### METHODOLOGY

In conducting this research, there will be some processes, consist of:

1. Collect the historical data of financial statements obtained from PLA and AIA website.
2. Conduct calculation and analysis using the 5 aspects, before & after statistical method and compare and rank the result to find which company has the best financial performance during before and after the POJK issuance.
3. Provide recommendation for PLA & AIA.

### Conceptual Framework

Miles and Huberman define conceptual framework as “a visual catalogue either graphically or in narrative form which contains the main things to be studied such as the key factors, constructs or variables and the presumed relationships among them” (1994: 18). Meanwhile, according to Maxwell (2013), “conceptual framework is an actual idea and belief that hold about phenomena studied”. Based on problem statement described in the previous chapter, to answer the research questions, author develops following conceptual framework.

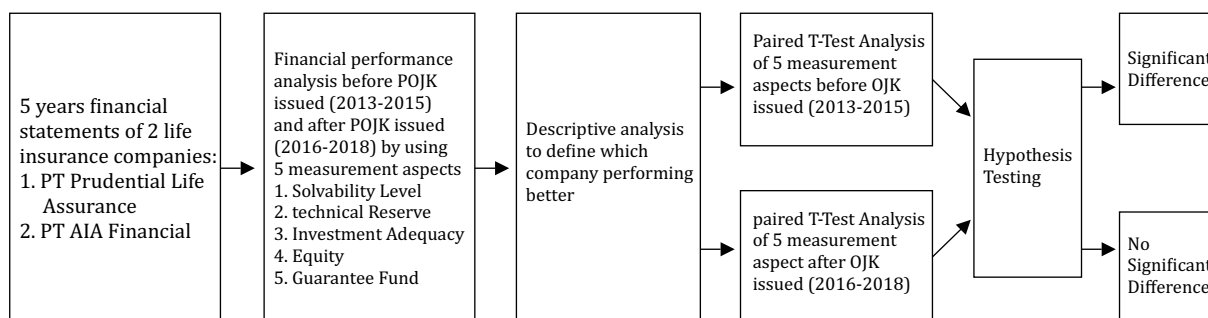


Figure 1. Conceptual framework

**RESULTS AND DISCUSSIONS**  
**Financial Performance Analysis By 5**  
**Measurement Aspects**

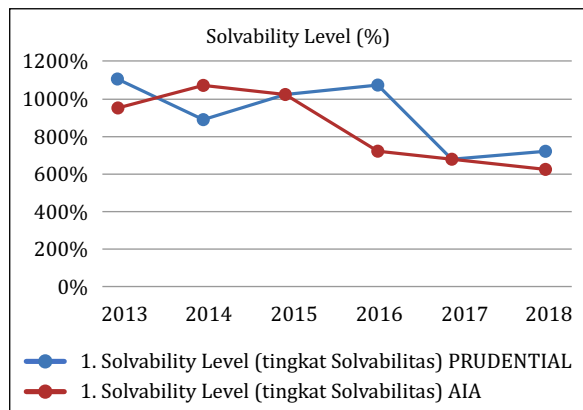


Figure 2. Solvability Level

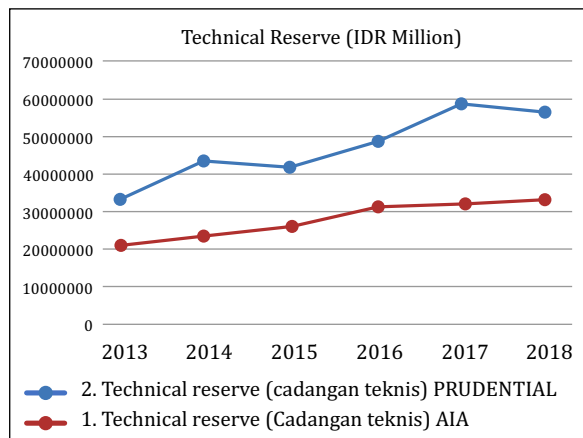


Figure 3. Technical Reserve

For solvability level, both company solvencies are above 120%, but the trend has decline since 2013 to 2018. Hence PLA is gaining solvencies level in 2018 (PLA 746% vs AIA 630%). For technical reserve, both trends are showing positive growth. Hence PLA performance is above AIA.

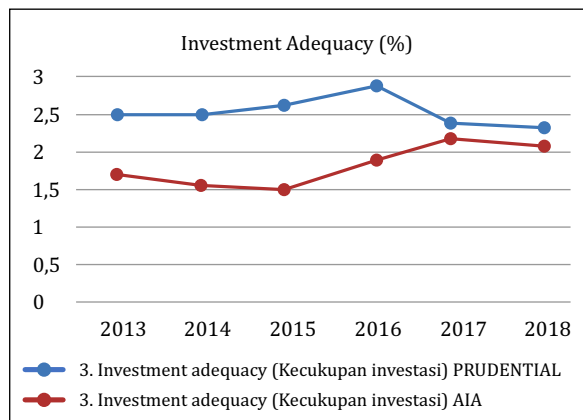


Figure 4. Investment Adequacy

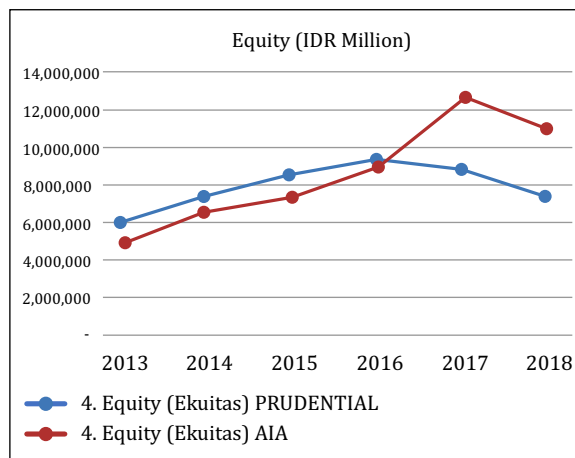


Figure 5. Equity

For investment adequacy, both companies start from different performance (PLA 250% vs AIA 163%). Then the trend shift where PLA was decreasing in 2016 until 2018 due to underperforming fund manager. While AIA investment was gaining performance since 2015 until 2017 then slightly underperform in 2018. For equity, both companies start low (PLA IDR 6.016.071 billion vs AIA IDR 4.706.691) then reach almost the same equity in 2016. But then PLA performance is decreasing start from 2016 to 2018. AIA equities were getting stronger from 2013 to 2017, then start going slower in 2018.

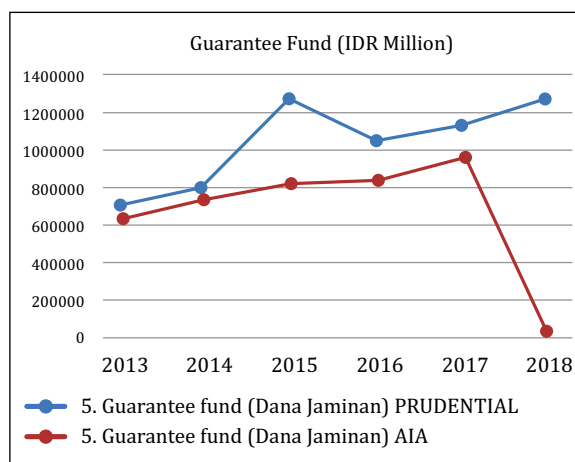


Figure 6. Guarantee Fund

For guarantee fund, both companies start almost the same but Prudential performance is getting stronger every year (PLA reach the peak in 2015). AIA guarantee fund also growing, but starting 2018, AIA is not reporting the result for guarantee fund.

### Financial Performance Before and After POJK Issuance

For solvability level, the rank 1 before POJK is AIA (1,033%) and the rank 1 after POJK is Prudential (828%). In this aspect, Prudential (M = 9.22, SD = 1.73, n = 6) is hypothesis higher than AIA (M = 8.55, SD = 2.01, n = 6). However the difference was not significant,  $t(10) = 0.62$ ,  $P = 0.28$  (one tail). (Accepted) if  $t \text{ stat } 0.62 \leq t \text{ critical } 1 \text{ tail } 1.81$ , or  $p\text{-value } 0.28 > \alpha 0.05$ .

For technical reserve, the rank 1 before and after POJK are PLA (before 39.076.170, after 55.339.185). The solvency level of Prudential (M = 47207677.5, SD = 10372122.3, n = 6) is hypothesisly higher than AIA (M = 27672545, SD = 4802054.3, n = 6). However the difference was significant,  $t(10) = 4.18$ ,  $P = 0.001$  (one tail). (Not Accepted) if  $t \text{ stat } 4.187 > t \text{ critical } 1 \text{ tail } 1.81$ , or  $p\text{-value } 0.001 \leq \alpha 0.05$ .

For investment adequacy, the rank 1 before and after POJK are PLA (before 253% after 248%). The solvency level of Prudential (M = 2.51, SD = 0.15, n = 6) is hypothesisly higher than AIA (M = 1.81, SD = 0.30, n = 6). However the difference was significant,  $t(10) = 5.17$ ,  $P = 0.0002$  (one tail). (Not Accepted) if  $t \text{ stat } 5.17 > t \text{ critical } 1 \text{ tail } 1.81$ , or  $p\text{-value } 0.0002 \leq \alpha 0.05$ .

value  $0.0002 \leq \alpha 0.05$ .

For equity, the rank 1 before POJK is PLA (7.150.197) and the rank 1 after POJK is AIA (10.703.965). The solvency level of Prudential (M = 7822421.8, SD = 1173941.6, n = 6) is hypothesisly lower than AIA (M = 8401264.6, SD = 2851707.9, n = 6). However the difference was not significant,  $t(10) = -0.46$ ,  $P = 0.33$  (one tail). (Accepted) if  $t \text{ stat } -0.46 \leq t \text{ critical } 1 \text{ tail } 1.81$ , or  $p\text{-value } 0.33 > \alpha 0.05$ .

For guarantee fund, the rank 1 before and after POJK are PLA (before 902,215 after 1,050,012). The solvency level of Prudential (M = 961333.4, SD = 243866, n = 6) is hypothesisly higher than AIA (M = 782.4, SD = 132307.3, n = 6). However the difference was not significant,  $t(8) = 1.44$ ,  $P = 0.09$  (one tail). (Accepted) if  $t \text{ stat } 1.44 \leq t \text{ critical } 1 \text{ tail } 1.86$ , or  $p\text{-value } 0.09 > \alpha 0.05$ .

### CONCLUSION

For solvability level, PLA is better than AIA. For technical reserve, PLA is behind AIA. For Investment adequacy, PLA is behind AIA. For equity, PLA is better than AIA. For Guarantee fund, PLA is better than AIA.

Before POJK #71

**Table 3.** Financial performance before and after POJK issuance

Rank	Solvability Level		Technical Reserve		Investment Adequacy		Equity		Guarantee Fund	
1	AIA	1033%	Prudential	39,076,170	Prudential	253%	Prudential	7,150,197	Prudential	902,215
2	Prudential	1015%	AIA	23,821,253	AIA	155%	AIA	6,098,564	AIA	711,170

After POJK #71

Rank	Solvability Level		Technical Reserve		Investment Adequacy		Equity		Guarantee Fund	
1	AIA	1033%	Prudential	39,076,170	Prudential	253%	Prudential	7,150,197	Prudential	902,215
2	Prudential	1015%	AIA	23,821,253	AIA	155%	AIA	6,098,564	AIA	711,170

Source: Financial Statement PLA & AIA from 2013 to 2018

**Table 4.** Descriptive performance before and after POJK issuance

Rank	Solvability Level		Technical Reserve		Investment Adequacy		Equity		Guarantee Fund	
	PLA	AIA	PLA	AIA	PLA	AIA	PLA	AIA	PLA	AIA
Mean	9.22	8.55	47,207,677.50	27,672,545.00	2.51	1.81	7,822,421.83	8,401,264.67	961,333.40	782,403.80
Std. Deviation	1.73	2.01	10,372,122.35	4,802,054.34	0.15	0.30	1,173,941.67	2,851,707.91	243,866.00	132,307.37
Count	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00

Source: Financial Statement PLA & AIA from 2013 to 2018

**Table 5.** Paired T-Test result of 5 aspects before and after POJK issuance

PRUDENTIAL	Period	Means	Std. Deviation	Paired Sample T-Test	Decision
Solvability level	Before	9.78	0.72	Accepted	Pru better than AIA
	After	7.12	0.49		
Technical Reserve	Before	42,476,361.500	1,491,334.163	Not Accepted	Pru better than AIA
	After	58,709,044.000	1,203,565.04		
Investment Adequacy	Before	2.550	0.08	Not Accepted	Pru better than AIA
	After	2.360	0.04		
Equity	Before	7,717,260.50	986,549.02	Accepted	Pru better than AIA
	After	8,193,151.00	855,184.84		
Guarantee Fund	Before	1,023,632.50	342,589.70	Accepted	Pru better than AIA
	After	1,104,094.00			

Source: Financial Statement PLA & AIA from 2013 to 2018

### RECOMMENDATION

PLA has shown best performance for solvability level, equity and guarantee fund. Based on the analysis, the author would like to recommend to enhance the performance strategy for technical reserve and investment adequacy as follow:

- Technical reserve: PLA need to gain more premium reserves, reserve claims, reserves on PAYDI. PLA is fairly maintaining the catastrophic reserve.
- Investment adequacy: PLA need to accumulate more assets in the form of investments, i.e. invest in a high return company like the blue chip. PLA need to add more non-investment cash saving in banks reserve with the adequacy amount higher than PLA technical reserves. PLA to maintain liabilities to pay the company claims and other liabilities to policyholders or insured.

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