

Comparative Financial Analysis of AIA and Prudential During the Pandemic (2019—2022)

HioTong Su^{1,*} and Qiyu Yang²

¹*Faculty of Hospitality and Tourism Management, Macau University of Science and Technology, Macau 999078, China*

²*Economics and Management College, Xiamen University, Xiamen 361005, China*

*Corresponding author: HioTong Su.

Abstract

As representatives of the world's leading insurance companies, the performance of AIA and Prudential during the COVID-19 pandemic has been highly important to the insurance industry's response to the crisis. This article uses financial statement analysis and DuPont analysis (ROE decomposition) to compare the performance of the two companies in terms of core profitability (gross profit margin, net profit margin) and business growth capabilities. AIA has shown stronger financial resilience, with core profitability continuing to be positive; while Prudential has faced drastic fluctuations, especially in 2022, with significant operating losses and negative profit margins, and its risk response capabilities have been significantly challenged. DuPont analysis further reveals that one of the key reasons for Prudential's difficulties is its high historical financial leverage ratio. The insurance industry needs to focus on improving strategic agility and operational resilience during the crisis; specifically, at the enterprise level, it should actively expand diversified market sales channels and accelerate the development of innovative insurance products to meet the needs of the times.

Keywords

financial statement, DuPont analysis, AIA, Prudential

1. Introduction

The COVID-19 pandemic has had a profound impact on the global economy and insurance industry. As leading companies in the global insurance market, the financial statements of AIA and Prudential during the pandemic are highly valuable. This study compares and analyses the financial statements of these two companies from 2019--2022 to explore the impact of the pandemic on their financial status.

The pandemic has brought significant challenges to the profitability and operations of insurance companies and has prompted them to accelerate the development of new insurance products. AIA and Prudential have shown resilience during the pandemic. By analysing financial statements, this study focuses on changes in revenue, profitability, and other aspects and explores ideas for future development. The data selected in this article are the financial data of AIA and Prudential from 2019--2022.

2. Company Background and Internal Management Measures

2.1 Company Background

2.1.1 AIA Company Background Information

AIA (American International Insurance Group) was founded in 1919 and is headquartered in New York. It is a subsidiary of the AIA Group; is a leading global life insurance company with business covering Asia Pacific, the Middle East, Europe and the United States; serves more than 40 million customers (2023); and is ranked among the Fortune Global 500. After the 2008 financial crisis, it was rescued and privatized by the U.S. government and listed in Hong Kong in 2010. In 1992, it returned to China as the first foreign-funded life insurance company and cultivated the market with the “AIA Insurance” brand, focusing on health protection and wealth management.

2.1.2 Prudential plc Company Background Information

Prudential plc was founded in 1848 and is headquartered in London, UK. It is a leading global comprehensive insurance and financial services group with businesses covering life insurance, health insurance, asset management and other fields. It started with mutual insurance and gradually developed into a multinational company covering the Americas and Asia, especially in Hong Kong, mainland China and Southeast Asia. In 2023, it will manage assets of more than US\$500 billion, with a solid financial rating, promote sustainable development through digital technology and green finance and is committed to providing customers with full life cycle protection and wealth solutions.

2.2 Internal Management Measures

Table 1: Internal Management Measures

Companies	Coping Strategy	Achievements and Limitations
AIA Group	Introduce the AI underwriting system and reduce the workforce by 20%; Stop selling low-profit health insurance policies	Effective cost control; strategic contraction led to a slowdown in revenue growth
Prudential	Selling the US business to recover funds; no reinsurance hedging was conducted for European long-term insurance policies	Asset disposal failed to improve the core business; cost management completely failed.

3. Analysis of Profitability Indicators

3.1 Research Methods

This article uses the “desktop research” method to analyse the financial indicators of AIA and Prudential. The main raw data in the article come from the financial data of AIA and Prudential, which are calculated and sorted by the author.

3.2 Analysis of Enterprise Profitability

3.2.1 Gross Profit Margin

The gross profit margin is the core metric that measures an enterprise's ability to convert revenue into profits, and it affects the business's resilience and development potential.

There was a significant disparity in the financial health of AIA and Prudential from 2019--2022, which covered the major impact period of the COVID-19 pandemic. As shown in Table 2, AIA demonstrated greater resilience and stability. Although its operating income and gross margin were also affected and fluctuated during the pandemic, its overall scale was larger, and key indicators remained positive throughout without experiencing catastrophic losses. In contrast, Prudential's financial performance was extremely fragile and volatile. In particular, in 2022, its operating income plummeted to a very large negative value (-8,219 million US dollars), and its financial situation deteriorated sharply, highlighting the more severe challenges it faced during the pandemic and its significantly weaker risk-resistance capacity than AIA.

Table 2: Indicators of Gross Profit Margin (data collection and statistics from the author, Unit: millions of dollars)

Indicators	AIA Group				Prudential			
	2019	2020	2021	2022	2019	2020	2021	2022
Year	2019	2020	2021	2022	2019	2020	2021	2022
Operation Income	47242	50359	47525	19110	93736	55973	26500	-8219
Operating Costs	-40007	-43072	-39046	-18587	-91846	-54071	-23834	9672
Gross Profit Margin	15.31%	14.47%	17.84%	2.74%	2.01%	3.4%	10.06%	-17.68%

Sources: AIA Group Limited (2019, 2020, 2021, 2022); Prudential plc (2019, 2020, 2021, 2022).

As Table 2 shows, the differences and problems are even more prominent. For AIA, its operating income slightly increased in 2020 (possibly benefiting from the accumulation of previous business or short-term factors) but then dropped sharply in 2021 and 2022 (down by approximately 5.6% and 62%, respectively, compared with that in 2020), reflecting the continuous negative impact of the pandemic on its premium income or investment returns. Although costs were reduced accordingly, the gross margin showed a fluctuating trajectory of “decrease (20) - increase (21) - sharp decrease (22)”, plummeting from 15.31% in 2019 to only 2.74% in 2022, indicating that its profit margin was severely compressed. For Prudential, the problems are much more serious. Its operating income plummeted from a peak of 93.7 billion in 2019, dropping by 40.3% in 2020, halving again in 2021, and falling into a negative abyss of -820 million in 2022. More crucially, its operating costs turned positive in 2022 (967.2 million US dollars), which usually indicates unconventional factors (such as significant asset write-downs, reserve adjustments, enormous payouts/losses, or abnormal expense reversals), resulting in a gross margin of an astonishing -17.68%. Such extreme fluctuations and negative indicators expose potential severe issues for Prudential in terms of cost control ability, stability of income structure (or excessive reliance on specific businesses/markets severely hit by the pandemic), investment portfolio risk, and even its overall financial foundation, causing it to suffer a devastating blow in the face of systemic risks such as the pandemic.

3.2.2 Net Profit Margin

The net profit margin is a key financial indicator for measuring the efficiency of a company's profitability, reflecting the ability to convert revenue into final profits. It directly affects the sustainability of a company's operations and its investment value.

Table 3: Indicators of the Net Profit Margin (data collection and statistics from the author, Unit: millions of dollars)

Indicators	AIA Group				Prudential			
	2019	2020	2021	2022	2019	2020	2021	2022
Year	2019	2020	2021	2022	2019	2020	2021	2022
Operation Income	47242	50359	47525	19110	93736	55973	26500	-8219
Net Profit	6018	5779	7477	320	792	2185	-2813	1007
Net Profit Margin	12.74%	11.48%	15.73%	1.67%	0.84%	3.9%	-10.84%	-12.25%

Sources: AIA Group Limited (2019, 2020, 2021, 2022); Prudential plc (2019, 2020, 2021, 2022).

As Table 3 shows, the impact of the pandemic on the two companies was particularly evident in the specific indicator data. AIA's revenue slightly declined in 2020 (5,779 vs. 6,018), rebounded strongly to 7,477 million US dollars in 2021, but plummeted to only 320 million US dollars in 2022, with its profit level severely squeezed. Prudential's net profit showed an abnormal surge in 2020 (2,185 vs. 792), which might be due to short-term investment gains, cost cuts, and one-off non-operational gains, masking the deterioration of its core business; this unsustainable situation was fully exposed in 2021 (net loss of 2,813 million US dollars, profit margin of -10.84%) and only slightly turned around in 2022 (1,007 million US dollars), combined with its operating income losses, indicating extremely unstable and unstable profitability and a weak foundation. The most crucial net profit margin indicator reveals the core problem: AIA's profit margin rose from 11.48% in 2020 to 15.73% in 2021 but plummeted to 1.67% in 2022, with its profit efficiency severely damaged; Prudential's profit margin seemed to improve in 2020 (3.9% vs. 0.84%) but then recorded enormous negative profit margins in the following two years (-10.84% in 2021, -12.25% in 2022), not only completely losing profitability but also indicating that for every 100 US dollars of revenue generated by its operations, it needs to bear more than 12 US dollars of net losses, and its financial situation has seriously deteriorated.

3.3 Analysis of Business Growth Capacity

Business growth ability measures a company's development trajectory and pace, fundamentally driven by profitability growth. In this paper, the total asset turnover rate, the growth rate of main business income, and the growth rate of main business profit are selected as the indicators for analysis.

Table 4: Indicators of business growth capacity (data collection and statistics from the author)

Indicators	AIA Group				Prudential			
	2019	2020	2021	2022	2019	2020	2021	2022
Total Asset Growth Rate	23.63%	14.78%	4.22%	-10.84%	-29.88%	13.62%	-61.42%	-16.65%
Growth Rate of Main Business Revenue	30.15%	6.6%	-5.63%	-59.79%	161.5%	-40.29%	-52.66%	-131.02%
Growth Rate of Profit of Main Business	73.5%	0.72%	16.36%	-93.83%	-41.63%	0.63%	40.17%	-45.5%

Sources: AIA Group Limited (2019, 2020, 2021, 2022); Prudential plc (2019, 2020, 2021, 2022).

As shown in Table 4, AIA and Prudential showed significantly different business growth trajectories between 2019 and 2022. With its localized strategy of deepening its presence in the Asian market, AIA maintained relatively steady growth in the early stages of the pandemic (2019–2020), such as a smooth transition of total asset growth from 23.63% to 14.78%. Although the growth rate of main business profit decreased sharply from 73.5% to 0.72%, it was still better than that of its peers. In contrast, Prudential's total asset growth rate fluctuated dramatically during the same period (-29.88% in 2019 to 13.62% in 2020), and its main business income plummeted by 40.29% in 2020, revealing its vulnerability to single market risk. This differentiation stems from the restructuring effect of the epidemic on the insurance industry: when offline agent channels were paralyzed on a large scale due to blockades (such as the multiple closures of Hong Kong in 2020, which led to the interruption of face-to-face sales), AIA's first-mover advantage in digital layout (such as the "AIA Vitality" health management ecosystem) enabled it to quickly turn to online services and maintain customer reach through remote underwriting and policy management. However, Prudential's structural shortcomings in relying on traditional distribution channels make it obviously insufficient in terms of risk resistance when encountering systemic shocks.

AIA's resilient performance in the late stage of the epidemic (the main business profit grew by 16.36% against the trend in 2021) confirmed the long-term value of its regional focus strategy. Although the industry was generally under pressure in 2022 (AIA's total assets showed negative growth of -10.84% for the first time), it was still significantly better than Prudential's decline of -16.65% in the same period. The core is that AIA has always been anchored in the high-growth market in Asia. When Prudential fell into a sustained recession due to its European and American business (its main operating income plummeted by 131.02% in 2022), AIA captured the post-epidemic demand for health insurance and savings insurance by deeply cultivating the emerging middle-class customer groups in mainland China and Southeast Asia. A typical case can be seen in the "COVID-19 protection micro-insurance" launched in Thailand in 2021. Through seamless mobile insurance, it broke one million orders in three days, accurately responding to the protection gap in the post-epidemic era. This combination strategy of "regional penetration + product agility" enables AIA to maintain strategic depth in the industry's cold winter, while Prudential's global decentralized layout has increased cross-regional management costs, ultimately leading to a growth momentum fault. This also reveals that, in contrast to the two giants, under systemic risk, the strategic focus of intensive cultivation of regional markets is more sustainable than breadth expansion.

4. DuPont Analysis of Financial Indicators

4.1 Theoretical Basis of the DuPont Model

The core of DuPont analysis involves breaking down return on equity (ROE) into the product of three factors—the net profit margin, total asset turnover rate and equity multiplier—to accurately diagnose corporate profitability, asset efficiency and the financial leverage strategy (Lv, 2024).

The formula for DuPont is as follows: $ROE = \text{Net profit margin} * \text{Total asset turnover} * \text{Equity multiplier}$. ROE represents return on equity (Penman, 2001).

4.2 Calculation and Analysis of ROE Indicators

4.2.1 Calculation of ROE Indicators

According to the DuPont analysis formula, ROE is affected by three indicators: net profit margin, total asset turnover, and the equity multiplier. This article calculates ROE by calculating the relevant financial data of the AIA Group and Prudential from 2019--2022, and the specific calculation results are as follows.

Table 5: Indicators of the Net Profit Margin (data collection and statistics from the author, Unit: millions of dollars)

Indicators	AIA Group				Prudential			
	2019	2020	2021	2022	2019	2020	2021	2022
Year	2019	2020	2021	2022	2019	2020	2021	2022
Net Profit	6018	5779	7477	320	792	2185	-2813	1007
Operating Revenue	47242	50259	47525	19110	93736	55973	26500	-8219
Net Profit Margin	12.74%	11.48%	15.73%	1.67%	0.84%	3.9%	-10.84%	-12.25%

Sources: AIA Group Limited (2019, 2020, 2021, 2022); Prudential plc (2019, 2020, 2021, 2022).

Table 6: Indicators of Equity Multiplier (data collection and statistics from the author, Unit: millions of dollars)

Indicators	AIA Group				Prudential			
	2019	2020	2021	2022	2019	2020	2021	2022
Total Asset	284132	326121	339874	303048	454214	516097	199102	165942
Stockholders' Equity	54947	63200	60467	38096	19477	20878	17088	16960
Equity Multiplier	5.17	5.16	5.62	7.95	23.32	24.72	11.65	9.78

Sources: AIA Group Limited (2019, 2020, 2021, 2022); Prudential plc (2019, 2020, 2021, 2022).

Table 7: Indicators of Total Asset Turnover (data collection and statistics from the author, Unit: millions of dollars)

Indicators	AIA Group				Prudential			
	2019	2020	2021	2022	2019	2020	2021	2022
Average Total Asset	256969	305126.5	332997.5	321461	551012	485155.5	357599.5	182522
Operating Revenue	47242	50359	47525	19110	93736	55973	26500	-8219
Total Asset Turnover	18.38%	16.5%	14.27%	5.94%	17.01%	11.54%	7.41%	-4.5%

Sources: AIA Group Limited (2019, 2020, 2021, 2022); Prudential plc (2019, 2020, 2021, 2022).

Table 8. ROE Calculation (data collection and statistics from the author)

Indicators	AIA Group				Prudential			
	2019	2020	2021	2022	2019	2020	2021	2022
Net Profit Margin	12.74%	11.48%	15.73%	1.67%	0.84%	3.9%	-10.84%	-12.25%
Equity Multiplier	5.17	5.16	5.62	7.95	23.32	24.72	11.65	9.78
Total Asset Turnover	18.38%	16.5%	14.27%	5.94%	17.01%	11.54%	7.41%	-4.5%
ROE	12.1%	9.77%	12.62%	0.79%	3.33%	11.13%	-9.36%	5.39%

Sources: AIA Group Limited (2019, 2020, 2021, 2022); Prudential plc (2019, 2020, 2021, 2022).

As Table 8 shown, the epidemic caused the return on equity (ROE) of the two companies to fluctuate sharply, but the performance differences were obvious: AIA's ROE rebounded in 2021 after a slight decline in 2020 but fell sharply to 0.79% in 2022, reflecting the risk of continued recession in the later period, whereas Prudential experienced severe fluctuations, with ROE briefly rising to 11.13% in 2020, then plummeting to -9.36% in 2021, and only partially recovering to 5.39% in 2022, indicating weak risk resistance. Specific data difference issues include the following: ROE instability, such as the negative value of Prudential, highlights the profit crisis; the net profit margin has declined sharply, with Prudential at -10.84% and -12.25% in 2021 and 2022, respectively, whereas AIA has dropped sharply from 15.73% in 2021 to 1.67% in 2022, indicating that core profitability has deteriorated in the later period of the epidemic; asset efficiency issues, Prudential's total asset turnover rate was unreasonable at -4.5% in 2022 (possibly due to data anomalies or asset disposal losses), whereas AIA dropped from 18.38% to 5.94%, reflecting the decline in investment and operating efficiency; leverage impact, Prudential's equity multiplier is much greater than AIA (24.72 vs. AIA 5.16 in 2020), but it has dropped sharply to 9.78 in 2022, suggesting that deleveraging risks are exposed. These data reveal the widespread impact of the epidemic on the insurance industry, but Prudential's financial fragility (such as negative ROE and abnormal asset turnover) highlights its greater

management deficiencies in uncertainty, and although AIA is relatively stable, its ROE is close to zero in 2022 warns, warning of potential systemic risk.

The COVID-19 pandemic has increased economic uncertainty and put multiple pressures on the insurance industry. Globally, lockdown measures have led to a decline in customer payment capacity and a slowdown in premium income (reflected in a general decline in total asset turnover, such as AIA's decline from 18.38% to 5.94% in 2022); at the same time, a surge in death and health claims (especially from 2020--2021) has pushed up claim expenses (partially leading to Prudential's negative net profit margin). Macroeconomic recessions trigger portfolio losses: stock market volatility (such as the global market crash in early 2020) erodes investment returns. AIA's brief recovery in net profit margin in 2021 may be due to investment strategy optimization (such as a shift to more stable assets), but continued inflation and rising interest rates in 2022 have led to a decline in bond values, further hitting ROE (such as AIA's ROE from 12.62% to 0.79%). In addition, a stricter regulatory environment (such as new compliance requirements for insurance products in Asia) has increased operating costs.

In the face of the epidemic, competitors launched more attractive digital products (such as online health insurance and remote services) to gain market share at low prices (directly affecting the decline in total asset turnover, such as Prudential's decline from 17.01% to 7.41% in 2021). In the Asian market dominated by AIA, local competitors (such as AIA) accelerated innovation, such as launching special health insurance for the epidemic (which lowered overall industry prices), forcing AIA's net profit margin to be unable to be maintained after a brief increase in 2021 (15.73%), and Prudential's global layout exposed it to more intense competition, such as North American and European competitors improving scale efficiency through mergers and acquisitions (Prudential's own losses in 2021 were partly due to the erosion of market share), further amplifying its ROE fluctuations.

The strategic adjustments of the two companies explain the difference in indicators. AIA has taken conservative optimization measures: in 2020, it implemented cost reduction (such as layoffs and digital transformation) to improve operational efficiency (supporting the rebound of ROE in 2021); at the same time, product structure adjustments (such as focusing on health insurance rather than high-risk investments) helped stabilize the equity multiplier (maintained at 5--7.95). However, it did not effectively respond to continued inflation in 2022 (the net profit margin dropped to 1.67%), revealing insufficient resilience. In contrast, Prudential's aggressive strategy failed during the high-risk period: maintaining high leverage in 2020 (equity multiplier 24.72), resulting in an increase in investment losses in 2021 (net profit margin -10.84%, due to failed stock market investments); then, it urgently deleveraged (equity multiplier dropped to 9.78) and reduced debt through asset sales (supporting ROE recovery to 5.39%), but this led to abnormal changes in total asset turnover. In addition, Prudential's restructuring plan (such as management team replacement and technological transformation) helped to partially recover, but overall, it still lags behind AIA's risk resistance.

5. Summary and Recommendations

5.1 Summary

The COVID-19 pandemic has had a significant effect on both AIA and Prudential, but the two companies have shown significant differences in their financial resilience and strategic adaptability. AIA has shown greater stability, with key profitability indicators remaining positive despite revenue fluctuations (such as a drop in gross profit margin to 2.74% in 2022), while Prudential's total operating income of the Prudential plummeted to -US\$82.19 billion in 2022 due to ineffective cost control and a single revenue structure, highlighting its business fragility. DuPont analysis further revealed that although AIA's return on equity (ROE) has declined to 0.79% due to net profit margin compression (1.67% in 2022) and reduced asset efficiency (total asset turnover rate of 5.94%), it still remains positive; Prudential's ROE fluctuated sharply (-9.36% in 2021) due to its negative net profit margin (-10.84% in 2021) and abnormal asset turnover rate (-4.5% in 2022), and high financial leverage (equity multiplier of 24.72 in 2020) exacerbated risk.

5.2 Recommendations

AIA Group should continue to optimize its product structure, develop insurance products that target the needs of the epidemic, and strengthen asset allocation management to cope with market fluctuations. It can learn from the successful experience of its “COVID-19 Micro Insurance” launched in Thailand to further consolidate its advantages in the Asian market.

Prudential needs to accelerate strategic transformation, divest noncore assets to focus on high-growth markets, and strictly control costs. Focus on promoting digital transformation, reduce dependence on traditional sales channels, and prudently manage leverage levels to reduce financial risk.

References

AIA Group Limited. (2019). *AIA group annual report 2019*. AIA Group Limited. <https://www.aia.com/content/dam/group-wise/zh-hk/docs/annual-report/Annual%20Report%202019-C.pdf.coredownload.inline.pdf>

AIA Group Limited. (2020). *AIA group annual report 2020*. AIA Group Limited. [https://www.aia.com/content/dam/group-wise/zh-hk/docs/annual-report/AIA%20Group%20Annual%20Report%202020%20\(Chi\).pdf.coredownload.inline.pdf](https://www.aia.com/content/dam/group-wise/zh-hk/docs/annual-report/AIA%20Group%20Annual%20Report%202020%20(Chi).pdf.coredownload.inline.pdf)

AIA Group Limited. (2021). *AIA group annual report 2021*. AIA Group Limited. https://www.aia.com/content/dam/group-wise/zh-hk/docs/annual-report/Annual%20Report%202021_C.pdf.coredownload.inline.pdf

AIA Group Limited. (2022). *AIA group annual report 2022*. AIA Group Limited. https://www.aia.com/content/dam/group-wise/zh-hk/docs/annual-report/Annual_Report_2022_CHI.pdf

Lv, J. (2024). Analysis of corporate profitability based on the DuPont analysis system. *National Circulation Economy*, 22, 185-188.

Penman, S. H. (2001). Valuing operations separate from financing. In P. D. Easton & G. A. Sommers (Eds.), *Financial statement analysis and security valuation* (pp. 414-441). McGraw-Hill/Irwin.

Prudential plc. (2019). *Prudential plc 2019 annual report*. <https://www.prudentialplc.com/~/media/Files/P/Prudential-V13/reports/2019/prudential-plc-ar-2019.pdf>

Prudential plc. (2020). *Prudential plc 2020 annual report*. <https://www.prudentialplc.com/~/media/Files/P/Prudential-V13/reports/2020/prudential-plc-ar-2020.pdf>

Prudential plc. (2021). *Prudential plc 2021 annual report*. <https://www.prudentialplc.com/~/media/Files/P/Prudential-V13/reports/2021/prudential-plc-ar-2021.pdf>

Prudential plc. (2022). *Prudential plc 2022 annual report*. <https://www.prudentialplc.com/~/media/Files/P/Prudential-V13/reports/2022/prudential-plc-ar-2022.pdf>

Funding

This research received no external funding.

Conflicts of Interest

The authors declare no conflict of interest.

Acknowledgment

This paper is an output of the science project.

Open Access

This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

