

Enhancing Investment Performance and Sustainability in the Maldives Insurance Industry

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Abstract:

The role of the insurance industry in national economic stability is indispensable, particularly in developing nations like the Maldives. Despite substantial potential, the industry's penetration levels remain below desired thresholds. This research aims to investigate the performance of Maldivian insurance companies, focusing on investment-related aspects. Drawing from existing literature on global insurance sectors, the study formulates hypotheses and employs multiple regression and qualitative analysis on primary data from the Maldives insurance industry. The findings suggest a collective influence of various factors on the financial performance of the sector. Additionally, the study explores preferred investment instruments over different time durations and identifies challenges hindering optimal investment returns. The research provides recommendations for stakeholders to enhance the investment climate, fostering sustainability and collaborative initiatives within the industry.

Keywords: Insurers, Financial performance, Return on Investment, Regulators, Market Exposure, Investment Opportunities, Regulatory Guidelines, Policymakers

1. Introduction

The global insurance industry's growth is increasing rapidly in the contemporary world despite daunting global macroeconomic challenges and cut-throat competition. The swift ability to customize personalized solutions by the insurers and raising consumer interest in insurance products remain catalysts for the trajectory performance of insurance companies (Santenac et al., 2022). Insurance plays a significant role in the global financial industry meanwhile facing numerous challenges (PwC, 2021). The challenges collectively impacting the performance of the insurers and investment returns are identified as one of them (Santenac et al., 2022).

Insurance is seen as a social instrument that compensates for losses caused by unpredictable risks. The sustainability and profitability of insurers is vital given the benefits they provide to society and the nation. A well-developed insurance sector reinforces the country's economic system by mitigating the growing financial crisis (Shawar and Siddiqui, 2019).

Rampant price reductions, a tepid response from rated reinsurers, a significant escalation in claims and limited investment income are some of the major challenges. Investment income is a key determinant of performance for any insurer, particularly when underwriting profits are under threat. An insurer's accounting profit is the sum of its underwriting profit plus investment income. A high claims experience has a negative impact on underwriting performance, while a healthy investment return can turn around the bottom line, underlining its importance.

The insurance industry of Maldives is backed by five operators, consisting of both conventional and Takaful service providers, contributing a Gross written premium of USD 71 Million (Maldives Monetary Authority, 2021b). All players focus on general insurance solutions except one licensed composite insurer. Despite an insurance penetration slightly above 1.1%, the industry has grown continuously, with the exception of 2020 due to the pandemic. Industry investment in 2021 rose to USD 35 Million, which is half of the industry Gross Written Premium (Maldives Monetary Authority, 2021b). Although the industry records a significant portion of investments, it is apparent that the materiality in investment yield is yet to be realised. As shown in Table 1, the investment returns of the Maldives insurance sector have fluctuated over the last five years, with a low of 3.27% and a high of 8.01%, resulting in a cumulative average annual return of 5.36% for the same period.

Table 1: Insurance Industry's Performance in Maldives

Insurance industry's performance						
Particulars	Sum of 2017	Sum of 2018	Sum of 2019	Sum of 2020	Sum of 2021	Total
Investment income	13,660,631.64	18,495,543.19	34,099,585.36	26,230,601.03	17,671,306.59	110,157,667.82
Total Investments (TI)	302,179,828.74	361,391,850.57	425,767,868.25	424,719,485.55	540,012,541.12	2,054,071,574.22
Profit Before Tax (PBT)	70,416,669.83	138,964,262.52	153,926,303.42	139,384,907.46	125,249,767.48	627,941,910.71
Grand Total	386,257,130.21	518,851,656.27	613,793,757.03	590,334,994.04	682,933,615.19	2,792,171,152.74
Investment yield	4.52%	5.12%	8.01%	6.18%	3.27%	5.36%
Inv. Income/PBT	19%	13%	22%	19%	14%	18%

Source: Maldives Monetary Authority

The positive correlation and impact of Investment Income on Profit Before Tax (PBT) is illustrated above in Table 1. With the exceptions in 2017 and 2021, the industry's bottom line has improved significantly on the back of better investment yields. The exceptional years are quite evidently due to other factors, such as claims, impacting the insurance companies' financial performance. Notably, over five years, all investment instruments have reported substantial year-on-year growth, except Equities, which has declined by 50%.

Table 2: Breakdown of Investment Classes

Table - 2						
Breakdown of investment classes						
Particulars	Sum of 2017	Sum of 2018	Sum of 2019	Sum of 2020	Sum of 2021	Total
Debt securities	53,055,158.44	71,612,512.90	129,672,632.28	93,671,493.05	126,430,057.93	474,441,854.60
Equity securities	102,394,528.31	89,440,115.44	87,416,978.00	86,189,700.28	83,432,652.79	448,873,974.82
Fixed deposits	32,695,264.43	49,147,819.51	83,599,085.54	80,729,643.30	138,680,046.95	384,851,859.73
Treasury bills	113,824,200.15	150,957,541.05	92,323,577.40	162,897,240.67	189,952,724.46	709,952,283.73
Others	210,677.41	233,861.66	32,755,595.03	1,231,408.25	1,517,058.99	35,948,601.34
Total Investments (TI)	302,179,828.74	361,391,850.57	425,767,868.25	424,719,485.55	540,012,541.12	2,054,071,574.22
Profit Before Tax (PBT)	70,416,669.83	138,964,262.52	153,926,303.42	139,384,907.46	125,249,767.48	627,941,910.71
Total assets of insurance companies	1,148,418,631.91	1,440,081,730.97	1,607,386,395.24	1,880,617,693.99	2,319,455,883.04	8,395,960,335.17
<i>Source: Maldives Monetary Authority</i>						

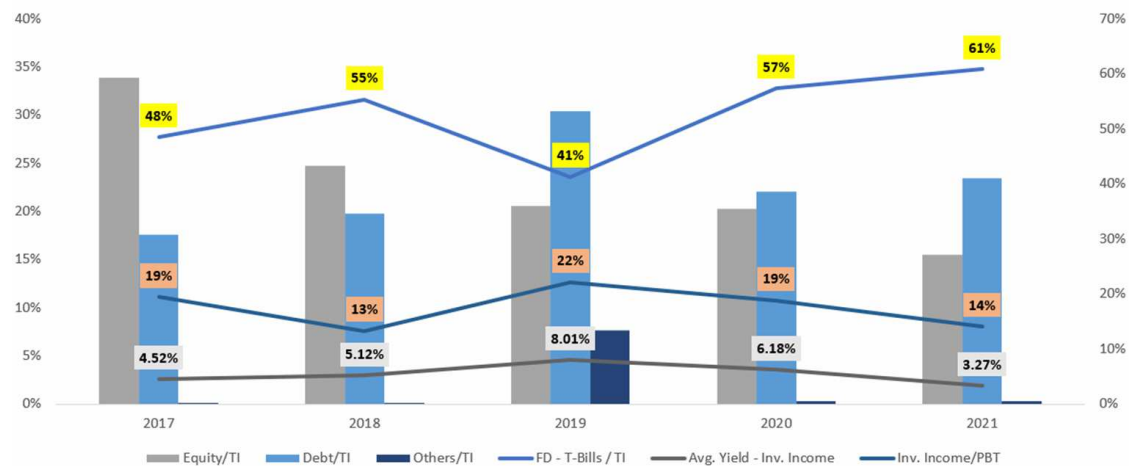
Despite the unattractive returns, insurers' interest in fixed deposits remains strong. Factors such as the lack of investment opportunities make FDs a safe option, offering risk-free returns to marginally support the bottom line: the fixed deposits yield around 3% per annum (see Table 5).

Table 3: Investment Types and Their Contribution to the Total Investments

Table - 3					
Investment types and their contribution to the total investments					
Particulars	2017	2018	2019	2020	2021
Treasury bills + Fixed Dep./Total investments	48%	55%	41%	57%	61%
Equity securities/Total investments	34%	25%	21%	20%	15%
Debt securities/Total investments	18%	20%	30%	22%	23%
Others/Total investments	0%	0%	8%	0%	0%
Investment yield	4.52%	5.12%	8.01%	6.18%	3.27%
Inv. Income/PBT	19%	13%	22%	19%	14%
<i>Source: Maldives Monetary Authority</i>					

As shown in Table 3, the year 2019 has been an exception with massive growth in the investment yield, which rose to 8%: the investment income over PBT jumped to 22%, the highest ever in five years. Interestingly, in the same year, the uptake on Treasury Bills, in particular, declined significantly, offset by a substantial increase in Debt Securities & Other Investments (refer to Table 2). In 2020, investment income over PBT and the average yields have declined. Evidently, in 2021 with a combined total of 61% under Fixed Deposits and Treasury Bills, the average yield fell to 3.27%, the lowest, as shown in Table 3.

Figure 1: Investment Performance of the Insurance Sector



It is apparent that a high concentration on Fixed Deposits and Treasury Bills lowers investment performance significantly as shown in Figure 1. Compared to the Insurance sector, the Banking sector's investments are overperforming:

Table 4: Investment Performance of Banking Sector of Maldives

Investment performance of Banking Sector of Maldives					
Table 4	2017	2018	2019	2020	2021
Particulars					
Interest Income	13,096,482,000	13,681,716,000	14,983,598,000	16,159,033,180	18,972,682,000
Non Interest Income	6,306,850,000	7,117,396,000	7,445,124,000	5,693,660,000	11,438,718,000
Total Income	19,403,334,017	20,799,114,018	22,428,724,019	21,852,695,200	30,411,402,021
Investments	91,751,658,000	96,467,756,000	105,824,928,000	129,647,840,000	159,086,008,000
Investment Yield	21%	22%	21%	17%	19%
Source: Maldives Monetary Authority (https://database.mma.gov.mv/query)					

Table 5: Interest Rates/ Lending Rates 2016-2021

Interest Rates / Lending Rates 2016 - 2021								
Weighted average; in % per annum								
Table 5	Government				Commercial banks (local currency)			
Period	Treasury bills ^{1/}				Deposits		Loans & advances	
	28 days	91 days	182 days	364 days	Saving deposits	Time deposits (3-6m)	Public nonfinancial corp.	Pvt. sector
2016	3.50	3.87	4.23	4.60	1.65	2.63	9.00	10.62
2017	3.50	3.87	4.23	4.60	1.48	2.86	9.98	9.82
2018	3.50	3.87	4.23	4.60	1.50	2.61	9.21	11.47
2019	3.50	3.87	4.23	4.60	1.50	2.65	9.83	11.59
2020	3.50	3.87	4.23	4.60	1.49	3.04	8.74	11.55
2021	3.50	3.87	4.23	4.60	1.49	2.74	8.58	11.39
Source: Maldives Monetary Authority (http://www.mma.gov.mv/#/monetarypolicy)								

The data provided in the illustrations above (Figure 1 and Table 4 and 5) prompts a series of inquiries. One key question revolves around the relatively modest yield, despite the insurers' escalating investments. This situation raises a fundamental query: could restricted investment opportunities be hindering insurers' ability to achieve the desired financial performance? Another perspective to explore is whether the available investment avenues are failing to generate a satisfactory return. This, in turn, may lead to insurers' avoidance of listed securities. These questions call for an examination of the factors contributing to insurers' risk-averse behavior and their decision-making processes concerning investments.

Empirical studies have examined several insurance companies' performance issues and some studies have identified that investment income is one of the determinants of insurance companies. For instance, Morara and Sibindi (2021) have explored the components contributing to the financial performance of Kenyan insurance companies. Similarly, Gockov and Kamenjarska (2021) studied the factors determining the profitability of insurance companies in North Macedonia. Similar research has been conducted in many parts of the world, including South Asian, African, East European, and Far/Middle East regions. However, thus far, in the Maldives, no studies have been undertaken on insurers' financial performance or investments.

Comparing the overall investment yields with the neighboring countries, Maldives records a much lower percentage. Over the past five years, the cumulative average yield of the Maldives insurance sector has been circa 3% lower than Sri Lanka and India. The investment yield of the Sri Lankan insurance industry stands at 9.17% as in Table 6, while Indian insurance records at 8.42% as in the table 7 below.

Table 6: Investment Yield of Insurance Sector of Sri-Lanka
Investment yield of Insurance Sector of Sri Lanka

<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>Average</u>
6.77	12.583	7.23	7.01	12.25	9.1686

Source: Insurance Regulatory Commission of Sri Lanka

Table 7: Investment Yield of Insurance Sector of India
Investment yield of Insurance sector of India

<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>Average</u>
6.85	7.88	8.33	9.29	9.76	8.422

Source: Insurance Regulatory and Development Authority of India

Yielding lower returns does not strengthen the overall financial performance of the insurance sector, and this becomes a vital area for study and action.

This study aims to fill the gap and explore the above areas for sustainable growth and betterment of the industry. It shall address the significance of the problem. The findings can shed some light on the insurance companies' investment climate. Further, they can be critically discussed with the regulators and policymakers to provide the right solutions and opportunities to the insurers.

The objectives of this study are as follows: to examine the factors essential for advancing the financial performance of the Maldivian insurance sector, to gain an understanding of how investment income influences the financial performance of Maldivian insurance companies, and to propose strategies for stakeholders to enhance the financial performance of these companies in terms of investments.

This study is organized into five sections. Following this introduction, section two provides a literature review, while section three outlines the research methodology. Section four is dedicated to presenting the research's discussion and findings, and it is followed by the final section. The anticipated outcome of this research is to provide valuable insights that can inform policymakers and insurance industry stakeholders, fostering further advancements in the Maldivian insurance sector.

2. Literature Review

This section reviews literature on the possible relationship between the financial performance of insurance companies and their investments and formulates hypotheses based on the literature reviewed. The emphasis is made on profitability as the proxy of financial performance and how investment returns can impact this.

2.1. Financial Performance

Several empirical studies have been carried out on insurance companies' financial performance. Financial performance evaluates a company's overall standing in categories including revenue, expense, assets, liabilities, and profitability. The financial performance can be measured through business-related formulas that help calculate details on the company's potential effectiveness.

The research carried out by Bawa and Chattha (2013) addressed that measuring the performance of insurers is essential because their surplus funds are channeled toward deficit economic units and support the investment activities in the economy.

Many researchers have shown interest in identifying determinants of insurance companies' financial performance, associating the aspect of profitability in their studies. Interestingly, all studies on this have included investment as one of the critical factors and argue that this impacts profitability. According to Morara and Sibindi (2021), insurance companies perform better when there are high investments. Thereby, making sound investment decisions and maximizing their returns will enable insurers to increase their profitability. Another study (Gockov and Kamenjarska, 2021) examined the determinants of performance of fourteen companies in the Republic of North Macedonia from 2012 to 2018. It recommends more focus on optimizing the investment portfolio to strengthen the financial capacity.

Studies also reveal a positive relationship between investments with insurers' performance. It was emphasized that efficient utilization of higher investments yields higher returns, ultimately producing higher profitability. His studies further find that the leverage of insurance companies is negatively correlated with insurers' performance, which suggests that higher leverage of insurers reduces profitability and leads to lower performance as debt capital is more expensive than equity capital with high-interest rates. This argument was supported by Meher and Zewudu (2020), as his research also reveals that managing minimum borrowing increases financial performance. On the contrary, Morara and Sibindi's (2021) study unravels that higher-leveraged insurers performed better than the low-g geared insurers and suggest that insurance companies should focus more on debt capital than equity capital.

A study conducted by Kamau (2013) to evaluate the relationship between underwriting profit and investment income in the Kenyan Insurance industry from 2000 to 2011 states that the low correlation between underwriting profit and investment income is unhealthy for the industry. The study concludes that the industry almost depends on investment income to improve financial performance and thereby maximize shareholders' wealth.

Investment funds of the insurers are gradually developed over time, and their liquidity position supports this. Although insurance is based on 'cash before cover,' the collection of premiums may get delayed due to market practices. This will thwart the excess liquidity for investments. Kamau (2013) further discusses that investments are funded through the collection of policy premiums, and the time lag between the collection of premiums and claim settlements limits the investment duration. A shorter time lag results in a shorter investment maturity period and potentially generates lower returns and limited investment avenues.

The research conducted by Morara and Sibindi (2021) also confirms that companies must manage their liquidity position, thus balancing their cash position while maximizing investment returns. This argument was further supported by Meher and Zewudu (2020) that inadequate availability of cash deprives the insurers of earning a sufficient return on investments.

An insurer has a tremendous cash outflow since the claim recovery from the reinsurers takes place gradually. This impacts liquidity, as justified by Singhal (2015) which investigated the determinants of insurance investment. The result of the study suggests that premiums collection and claims payments significantly influenced the sector's investment.

The amount of funds tied to the investment determines the financial performance. Research by Meher and Zewudu (2020) has covered the aspect of an insurer's financial performance that would be affected by the quantum of funds invested in the assets which earn a return. Prudent investments and the returns generated will improve insurance companies' financial performance and have favorable ratios in Return on Assets (ROA), Return on Equity (ROE), Earnings per Share (EPS), and year-on-year growth. All these ratios are commonly used to evaluate the financial performance of an insurance company.

ROA and ROE are commonly used methods to measure profitability by companies as per past research (Barua et al., 2018; Mehari and Aemiro, 2013). According to Almajali et al., (2012), the formula of ROA was developed by Dupont in 1919. Mehari and Aemiro (2013) used ROA to compare his study against the independent variables like the size of the firm, market share, company size, and GDP per capita while studying the insurers' financial performance, which are positively correlated.

2.2. Return on investment

Return on Investment (ROI) on any insurance company's investment will impact the overall financial performance. It measures the effectiveness of the management in generating profits with its available assets (Ichsani and Suhardi, 2015). Hence, the ROI should be attractive in whichever investment an insurance company chooses. As per Anderson et al., (2013), ROI value is considered an acceptable element to justify an investment, and it keeps varying. Other factors, such as economic conditions, the size of the investee company and the industry in which it operates, and the risks associated with the investments, are also important. Combining all these factors, the decisions should support ROI values. The study Ichsani and Suhardi (2015) also concludes that investors do not consider ROI as the only component while making an investment decision.

Factors like interest income, dividends, capital gain, and trade profit markup will positively correlate with ROI. Fixed income instruments yield attractive interest to insurers, and in Maldives' context, treasury bills, bonds, and fixed deposits are the primary choices. Although (Holsboer, 2000) emphasizes the acute impact of the low-interest rate in the life industry as per the study undertaken, the general insurers also shall have similar detrimental effects as supported by solid empirical literature (Alokla et al., 2022) and further citation from (Ismail, 2013) reinforces that the higher investment earnings are related to high-interest rates and, as a result, positively contribute to the investment performance of the insurer.

Equity investment is crucial for insurers. Their investment decision will be based on the investee company's dividend. According to Sukmawardini and Ardiansari (2018), the dividend policy is a decision to determine how much of a company's income will be given to shareholders who are reinvested in the company. Blagoeva et al. (2020), further proves that the investors favor capital gain and reward them twice as much as the investment decisions made by those companies with consistent dividend policies. This study also cautions about evaluating decisions based on capital gain and suggests avoiding biases when investing.

2.3. Investment opportunities

Maldivian government initiatives to attract foreign investment since late 1980's are paying off, especially in tourism (Najeeb, 2020). As a nation, there is a need for domestic and international investments to improve, and a considerable portion of the private sector's investment requirements are to be sourced from FDIs and loans from overseas banks (Rashfa, 2015). However, insurance companies' appetite for such investments is minimal due to the ticket size of investment and liquidity maintenance.

In the Maldives, treasury bills are the insurance companies' highest preference (Maldives Monetary Authority, 2021a). The reasons are the high liquidity, flexibility terms, and sovereign guarantee. Appealing interest rates attracted many institutional investors. The study on the capital markets of Maldives (Muneeza, 2018), highlights the absence of liquidity in the secondary market, which is a challenge for the entire capital market. With a little trade history of MSE, it is evident that many investors hold on to their equity investments only for dividend income. Diversification of investments helps insurers to maximize returns. Real Estate is one of the avenues. A report from Maldives Monetary Authority (MMA) reveals that certain insurers have chosen fixed deposits over other investments due to a lack of preferred investments according to the operating model (Maldives Monetary Authority, 2021a).

More investment avenues will help in optimizing the returns. A study by Teklu (2018) on how an investment portfolio is related to private insurance companies, covering nine insurance companies in Ethiopia from 2008 to 2016, concludes that investing in equities, real estate and investing in bank deposits positively affected the profitability of insurance companies. Similarly, Morara and Sibindi (2021) found that investment in real estate has the highest impact on the financial performance of insurance companies in Kenya, followed by government securities and bank deposits. The Maldivian insurance industry, however, lacks investment diversification.

2.4. Market exposure

Investments are subject to market risk and insurers must be cautious in the optimisation of funds as it has an impact on overall performance. Foreign exchange losses, unrated investments, marked-to-market losses, credit risk and a fall in interest rates can all have a significant impact.

As institutional investors, insurers opt for overseas investment instruments to generate more significant potential income or for capital appreciation. A report discussing currency hedging for overseas investments indicates that hedging shall remove the exchange-rate risk, reduce the negative impact on fund performance, and minimize portfolio volatility. It recommends partly hedging international equities as it may be an effective long-term portfolio strategy. However, the associated costs should be worth the risk reduction.

The absence of rated investment is associated with its risks for institutional investors. While diversifying investments, ratings of certain structured debt instruments give comfort on repayment of the capital and returns. Insurers should be mindful of rating whether local or overseas investments. In giving institutional investor perspective on the pros and cons of redesigning credit rating agency regulation, Partnoy's (2009) pointed out that rating agencies do not always provide consistent, reliable information about credit risk. Investors are seeking ways to strengthen the oversight and accountability of rating agencies and new tools to evaluate credit risk.

At present, Maldivian debt investments are not rated by any rating agency. Hence, for structured facilities, the insurance companies seek personal guarantees and collaterals as security: a firm's ability to collateralize reflects a better measure of the degree of

financial constraints (Gan, 2007). Risk and exposure over default payments in the Maldives for such instruments may be higher than in other countries.

As for Sukuks (bond instrument) in the Maldives, they are not subjected to ratings or channeled through a Special Purpose Vehicle (SPV) to own the assets; the latter is the most critical inhibition since there is a lack of a required framework to create SPV in the Maldives (Muneeza, 2020). However, institutional issuers have crafted their solutions for issuing Sukuk. Despite the risks, the insurers' participation has been significant in anticipation of high returns.

Unrealized gains or losses reported on equity securities create a significant impact on the results of insurance companies. Although the Accounting Standards classify the treatment of price fluctuations under short-term or long-term (AFS), the former has a significant impact when there are price movements as they are captured in income instantly. Campbell et al., (2022) examined the consequences on US insurance companies due to reclassifying equity investments as per the accounting standard ASU 2016-01. Although the findings confirm a decrease in earnings persistent as per the new rule updates, countries that adopt IFRS, including the Maldives, will not have a significant impact at present.

Antolin et al., (2011) reveals that non-life insurers have lower interest-rate sensitivity as their liabilities are short-tailed, and therefore, their investment allocation is high towards bonds. Hence, they would be less affected by a drop in interest rates. Nonetheless, according to Ismail, (2013), whether life or non-life insurers, when the interest earnings are higher, the companies are more likely to perform well and remain solvent.

2.5 Regulatory guidelines

The regulators monitor insurers' investments through stringent investment guidelines. The guidelines clearly define aggregate investment and single investee limits to reduce undesirable exposure for insurers.

The solvency regulations ensure the insurers' financial stability in honoring their liabilities. This outlines investments' composition according to specified limits to avoid concentrated risks over one specific investment. In compliance with the regulations, insurers are bound to select the most viable investment opportunities. The regulations keep evolving, and as per the study (Singhal, 2015), the worldwide financial crisis has posed many challenges for the Regulators in monitoring insurance investments.

The research carried out by (Alokla et al., 2022) to investigate the solvency determinants of Takaful Insurance companies from 2011 to 2016 based on the data collected from 52 operators reveals that firm size negatively affects solvency; thereby, smaller-sized firms exhibit a lower probability of insolvency.

Although there are no specific guidelines over infrastructure investment in the Maldives, changes may be expected with regulatory intervention. As per the study by Alokla et al., (2022), the spillover effect of the financial crisis over the recent past is

assumed to increase demand for equity capital and increase the investment volume of infrastructure investments in the future. However, Teklu's (2018) study results suggest that although real estate investments positively impact profitability, insurers should reduce their holdings to safeguard liquidity.

3. Research Methodology

Thus far, no researchers have conducted any study about Maldivian Insurance Industry. As in any industry, a few essential factors impact insurance companies' financial performance. They are not only the pillars of existence for insurance companies but also are indispensable to the industry's sustainability. Investment returns are constitutive of the success of any insurance company, as revealed by many works of literature covered in the earlier section. As a crucial element, they significantly contribute to financial performance. Hence, it necessitates focusing on this untapped area in the Maldivian context. After thorough scrutiny, the four most important factors have been identified for this research.

This study attempts to analyze the existing facts by reviewing literature to identify and understand whether any particular theory can be applied or amended related to the topic. When the initiative was embarked on, it was intended that the research findings contribute to any existing theories or knowledge sources to understand how well the identified factors (variables), which will be discussed in the subsequent section, are suited to a developing country like the Maldives.

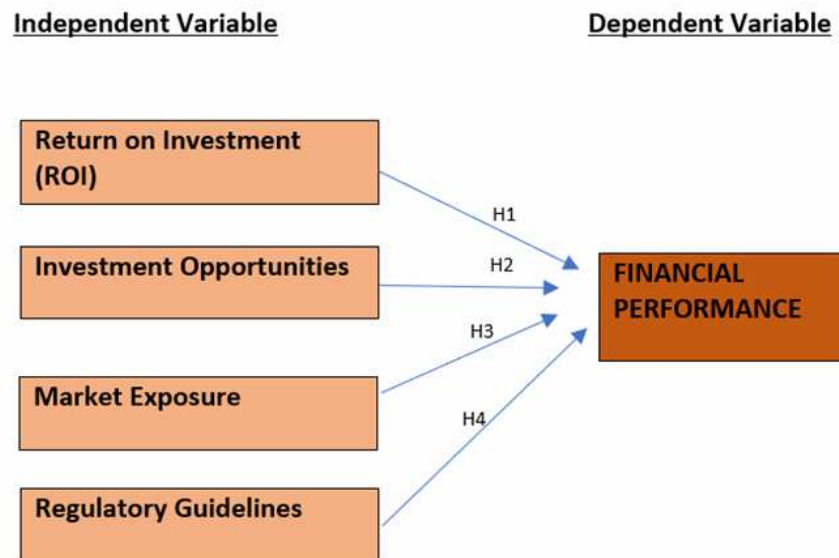
However, it was evident that no theories were established giving importance to this segment. Hence, this research intends to contribute new findings that were not given priority or not directly found in the past in the research domain. The factors chosen as independent variables include return on investment, investment opportunities, market exposure and associated risks, and regulatory guidelines in terms of investments that would impact the insurance industry's financial performance. As no theories have been established, this research would adopt an inductive approach that envisages trying to build a theory. The inductive approach is characterized by developing a theory as a result of data analysis (Sekaran and Bougie, 2016). For this study, a mixed model was chosen where it combines qualitative and quantitative data analysis procedures and approaches.

Considering that this research is a combination of confirmatory and exploratory research, where the variables are taken from previous literature while trying to contribute to an area that has never been tested before, a mixed method is preferred. Furthermore, it is important to understand the nature of the context in which limited data has been collected, and the interpretation of this data may not be helpful in arriving at accurate results. Therefore, rather than limiting the work to qualitative analysis, quantitative work has also helped to further confirm and test the hypotheses. It was also necessary to explore the extent to which the data and the scope of the industry supported the hypotheses. A similar approach has been used by a few researchers like Hussien et al. (2022) and Nobles et al., (2018).

3.1. Conceptual framework

The conceptual framework shown in Figure 2 represents how the identified variables are related to each other. This was designed based on the systematic literature review in connection with answering the specific research questions mentioned in the introduction.

Figure 2: Conceptual Framework



The following variables shall be used to evaluate the financial performance of Maldivian Insurance companies in terms of investment opportunities.

Dependent Variable: Financial Performance

Independent Variables are:

- a) Return on Investment (ROI)
- b) Investment Opportunities
- c) Market Exposure
- d) Regulatory Guidelines

Respective variables are defined below:

a) Return on Investment

Return on investment measures the amount of return on a particular investment with the investment cost. It is a metric used to evaluate the profitability of an investment, and it is generally calculated by dividing its profit by its initial investment cost. The expressed percentage of ROI can be compared with the other related available opportunities, which are parallelly chosen or forgone when selecting the particular investment.

b) Investment Opportunities

These are known as the opportunities to acquire an asset with the goal of generating future income or appreciation. The more diverse opportunities available in the market, the more they can create future wealth by optimizing the best options. Maximizing

revenue or profits also depends on the ease of disposal of investments when there is a requirement. The more avenues available for investment will create higher wealth.

c) Market exposure

It is a tool to measure and balance risk in an investment portfolio. In other words, it represents the amount of an investment that can lose its capital or value from the risk unique to a particular investment or asset class. More concentration in one type or a specific area may result in too much exposure. To balance the market exposure, portfolio diversification will be the mitigating factor.

d) Regulatory Guidelines

The insurance industry is governed by rules and regulations specifically on investments to protect the policyholders' and shareholders' funds and ensure financial stability. Adequate investment regulations will limit risks, and frauds, encourage responsibility among the insurers, and create a level playing field. A neutral and sound regulation with proper supervision will help insurance companies thrive with discipline.

3.2. Development of hypotheses

A hypothesis is known as testable statement, which predicts what is expected to find in the empirical data (Sekaran and Bougie, 2016). Testable statements are formed to express the logically conjectured relationship between the variables.

Using the conceptual framework developed above, hypotheses are developed to test the identified independent variables with the dependent variables below.

3.2.1 Return on investment (ROI)

ROI has been one of the critical factors in the financial performance of any insurance company. As risk management service providers, insurance companies' core performance for a defined period is based on the claim payments and reinsurance costs. The investment income strengthens the bottom line when the underwriting results are low during adverse periods. Therefore, the following hypothesis is proposed:

H1: Higher ROI has a positive influence on the financial performance of Maldivian insurance companies

3.2.2 Investment opportunity

Numerous investment opportunities allow insurance companies to optimize the excess funds that yield desired results. When options are available, companies can keep trying to invest and divest depending on the risk appetite. Whether short-term or long-term investments, insurers need diversified opportunities to invest their funds. When there are more avenues, insurers can keep exploring them to maximize the returns or exit to minimize losses. Based on these facts below hypothesis is proposed:

H2: Greater investment opportunities positively impact the financial performance of Maldivian insurance companies

3.2.3 Market Exposure

Market volatility risks are related explicitly to investments such as equity, unit trusts, bullion, or any listed instruments. These are subject to marked-to-market price adjustments recorded in the financial statements. Insurers risk investing in the listed instruments when there is a lack of vibrancy in the local stock market with limited instruments. Investing out of the country in any of the listed instruments is subject to FOREX exposure in addition to market volatility. On the other hand, debt instruments potentially yield high returns as demand for borrowing is significant in any market. The risk of default and delay in payments will significantly impact a non-banking institution as the internal policies on structuring debt will be more lenient than commercial banks. The general interest rate in the market will also influence the insurers' financial performance. Accordingly, the below hypothesis is proposed:

H3: Low market exposure has a positive relationship with the financial performance of Maldivian insurance companies

3.2.4 Regulatory guidelines

While managing public funds, risk appetite over investments needs to be guided well by the regulators. This protects the policyholders' funds and ensures that the shareholders' funds are well diversified. This will prevent the companies from single investee, concentration, and aggregation risks. Developed markets are regulated through solvency regulations that correlate with the company's investments. When there are flexible but efficient investment guidelines, the insurance companies' investment funds are protected, and companies are guided toward yielding decent returns. Based on this argument, below hypothesis has been developed:

H4: Streamlined regulatory guidelines have a positive relationship with the financial performance of Maldivian insurance companies

3.3. Data collection methods

3.3.1. Questionnaires

The data collection instrument for this study is a pre-printed, personally administered questionnaire. The questionnaires were pretested with very selected individuals to ensure the appropriateness and comprehension of the questions. This enabled to fine-tune and rectify inadequacies.

Although online data collection could have brought convenience and saved time for the respondents and as well as for the researcher, data collection from the printed copy opted for a few justifiable reasons. A one-to-one session was vital because the specific details that need to be gathered for the research and the divulged information are sensitive in nature. Understanding the intensity of the competitive market, right from the beginning, when enlightening the purpose of the study to the respondents, assurance was made on how it would benefit the industry as a whole. A pre-printed, personally administered questionnaire was needed to convince participants to participate in this information gathering. It provided an opportunity to introduce the research topic and motivate the participants to give their candid answers.

Hence, the researcher took his personal interest in being present when the respondents filled out the questionnaires. This comforted the respondents that none of the information collected is directly related to the organization they represent. Furthermore, this approach clarified any of the questionnaire's specific areas that the respondents did not fully understand when answering the questions.

This also allowed obtaining their feedback on the subject concerned after completing the questionnaire. The responses gathered through the questionnaires from a specific niche group meaningfully contributed to the study.

3.3.2 Semi-structured interviews

As interviewees were briefed about the purpose of the interview, a recap of the objective of the meeting was necessitated to make them comfortable. Permission was sought to record the interview, and assurance was given in maintaining confidentiality.

Key findings of the responses from all 25 questionnaires were summarized in graphs and presented to the interviewees to enlighten the industry practitioners' viewpoint on investments. The interview questions were prepared based on the key findings.

Additional direct questions were prepared to obtain the interviewees' practical perspectives on the industry's investment challenges. In addition, their suggestions and recommendations, particularly for improving the industry's investment returns, were recorded. The role and objectives of the regulator in the development of the industry, the general expectations of the insurance industry and cooperation with policymakers in relation to investments were then discussed in detail.

Follow-up questions were asked when the answers were incomplete and when there was a requirement to obtain specific and in-depth information. Overall the process helped gather more information with clarity and deeper understanding. As a mixed model research approach, the qualitative and quantitative data collected from all sources complemented each other. The Likert scale was used to examine the questionnaire responses on how strongly the respondents agree or disagree on the subject on a five-point scale with the lowest anchor of 'strongly disagree' to 'strongly agree.'

3.4. Data analysis

Gathered data from the questionnaire were summarized into a datasheet. The responses over several items targeting the particular variable were analysed item by item. They were initially entered into Microsoft Excel spreadsheets to calculate the total score and the mean value across items. The raw data were then fed into SPSS software for descriptive and bivariate analysis, comparing the hypotheses outlined for this study. Multiple linear regression model was used afterwards. Microsoft Excel spreadsheets were also used to analyze the insurers' preference of investment, factors that influence short-term and long-term investments, and their view of the factors that impact financial performance. Information gathered through interviews was tabulated, and analyzed separately. This helped to quantify the information, identify a specific

problem, and analyze the factors that influence the problem. Finally, the information helped find answers to the research question.

4. Data Presentation and Analysis

Data Coding was done in Microsoft Excel based on 25 questionnaires. The average value (mean) of each respondent's score was computed and fed into the SPSS software to arrive at the detailed findings illustrated in the analysis below.

4.1. Sample Profile Analysis

25 respondents, comprising past & present employees of Insurers, and other individuals associated with the industry participated. Responses of the current workforce shall reflect more accurately on the current issue and they are summarized in Table 8 below.

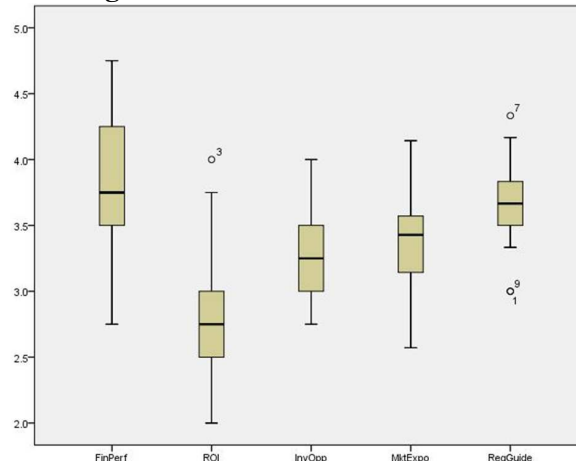
Table 8: Demographic Profile

QUESTIONS	RESPONSES		
	YES	NO	
Presently employed in the industry	64%	36%	
Contributed towards investment decision making for insurers	72%	28%	
Number of years associated with the insurance industry	1-5	5-10	>10
	years	years	years
	12%	16%	72%

4.2. Preliminary data analysis

4.2.1 Identification of outliers

Figure 3: Identification of Outliers



Considering the smaller sample size, the inconsistent responses under ROI and Regulatory Guidelines were not edited to eliminate the outliers.

4.2.2 Data Distribution Assessment

The Skewness and Kurtosis analysis was performed to ensure that the data were normally distributed. The variables, Financial Performance and ROI, are moderately skewed, and the other variables' distribution is symmetric as shown in Table 9. As per

the Kurtosis analysis, all variables fall into a flat curve except the variable Financial Performance.

Table 9: Statistics

		FinPerf	ROI	InvOpp	MktExpo	RegGuide
N	Valid	25	25	25	25	25
	Missing	0	0	0	0	0
Skewness		-.059	.610	.177	-.214	-.119
Std. Error of Skewness		.464	.464	.464	.464	.464
Kurtosis		.196	-.044	-.615	-.275	-.187
Std. Error of Kurtosis		.902	.902	.902	.902	.902

4.2.3. Frequency tables and charts

In order to estimate the population characteristics from those represented in a sample with reasonable accuracy normality of distributions will be helpful (Sekaran and Bougie, 2016).

a) Financial Performance

Figure 4: Financial Performance

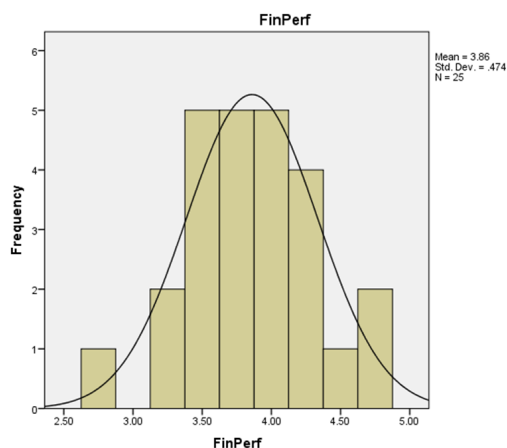


Table 10: Financial Performance

FinPerf				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.75	1	4.0	4.0
	3.25	2	8.0	12.0
	3.50	5	20.0	32.0
	3.75	5	20.0	52.0
	4.00	5	20.0	72.0
	4.25	4	16.0	88.0
	4.50	1	4.0	92.0
	4.75	2	8.0	100.0
Total	25	100.0	100.0	

b) ROI

Figure 5. Return on Investment

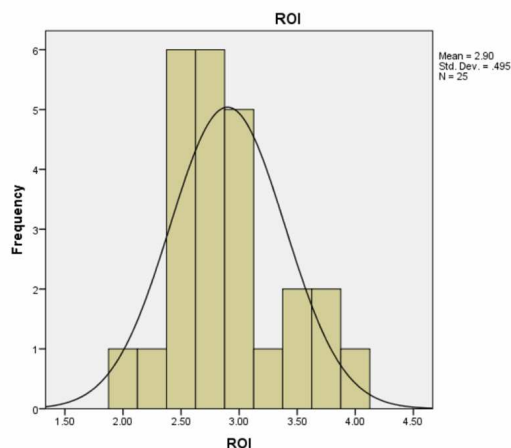


Table 11. Return on Investment

ROI				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	1	4.0	4.0
	2.25	1	4.0	8.0
	2.50	6	24.0	32.0
	2.75	6	24.0	56.0
	3.00	5	20.0	76.0
	3.25	1	4.0	80.0
	3.50	2	8.0	88.0
	3.75	2	8.0	96.0
	4.00	1	4.0	100.0
Total	25	100.0	100.0	

c) Investment Opportunities

Figure 6: Investment Opportunities

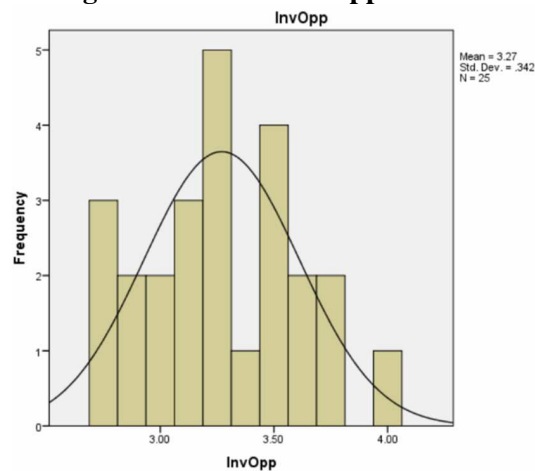


Table 12: Investment Opportunities

InvOpp				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.75	3	12.0	12.0
	2.88	2	8.0	20.0
	3.00	2	8.0	28.0
	3.13	3	12.0	40.0
	3.25	5	20.0	60.0
	3.38	1	4.0	64.0
	3.50	4	16.0	80.0
	3.63	2	8.0	88.0
	3.75	2	8.0	96.0
	4.00	1	4.0	100.0
Total	25	100.0	100.0	

d) Market Exposure

Figure 7: Market Exposure

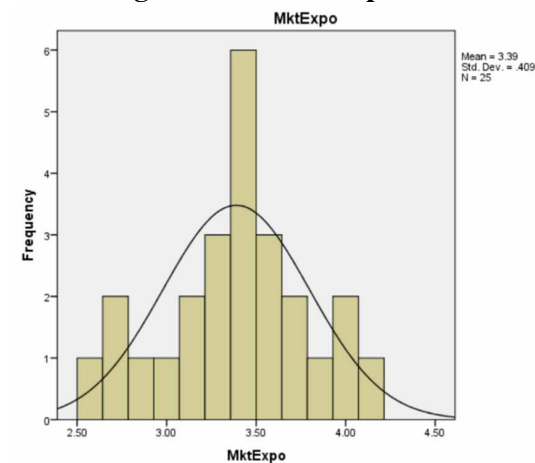


Table 13: Market Exposure

MktExpo				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.57	1	4.0	4.0
	2.71	2	8.0	12.0
	2.86	1	4.0	16.0
	3.00	1	4.0	20.0
	3.14	2	8.0	28.0
	3.29	3	12.0	40.0
	3.43	6	24.0	64.0
	3.57	3	12.0	76.0
	3.71	2	8.0	84.0
	3.86	1	4.0	88.0
	4.00	2	8.0	96.0
	4.14	1	4.0	100.0
Total	25	100.0	100.0	

e) Regulatory guidelines

Figure 8: Regulatory Guidelines

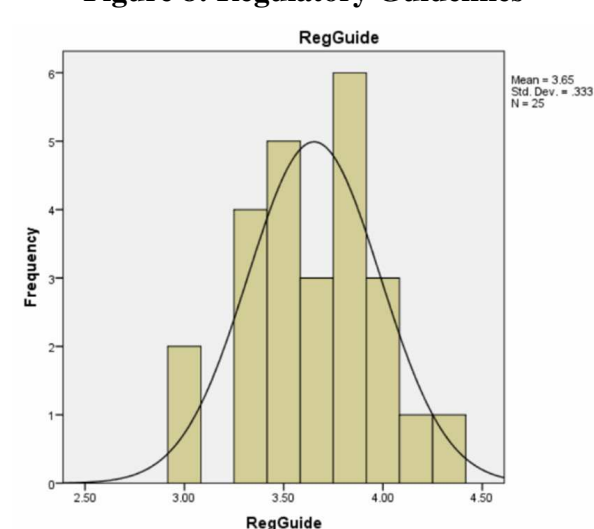


Table 14: Regulatory Guidelines

RegGuide				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.00	2	8.0	8.0
	3.33	4	16.0	24.0
	3.50	5	20.0	44.0
	3.67	3	12.0	56.0
	3.83	6	24.0	80.0
	4.00	3	12.0	92.0
	4.17	1	4.0	96.0
	4.33	1	4.0	100.0
Total	25	100.0	100.0	

The data of all five variables are symmetrically distributed as presented in the graphs. That confirms that values of variables appear at regular frequencies and all mean values occur at the same point.

4.2.4. Measurement of Model Assessment - Test of Reliability

The reliability test confirms that the concept is reliable and consistent. If the test were to be conducted again, it would result in the same on another occasion. Cronbach's Alpha is used as the reliability coefficient, indicating that the items in the conceptual model are positively correlated. Alpha value of this study is 0.570 as shown in Table 15, which is a minimally acceptable reliability value.

Table 15: Reliability Statistics

Cronbach's Alpha	N of Items
.570	5

Variables	Cronbach's Alpha value	Number of indicators used to measure the construct
FinPerf	.608	4
ROI	.314	4
InvOpp	.549	8
MktExpo	.439	7
RegGuide	.580	6

Table 16: Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
FinPerf	13.2119	1.176	.182	.608
ROI	14.1719	.810	.599	.314
InvOpp	13.8019	1.270	.261	.549
MktExpo	13.6833	1.039	.458	.439
RegGuide	13.4186	1.333	.187	.580

4.3 Hypotheses testing

To identify the significance of the relationship between the dependent and independent variables Pearson correlation matrix with an appropriate scatterplot was used.

4.3.1. Testing the relationship between the financial performance of the insurers and ROI

Return on Investment (ROI) to the financial performance of the insurance companies is moderately positive, with R-value being the rate of 0.327 reflected in Figure 9 and

as shown in Table 18. Since this is less than 0.5, the relationship between financial performance and ROI is statistically insignificant.

Figure 9: Correlation Between FinPerf and ROI

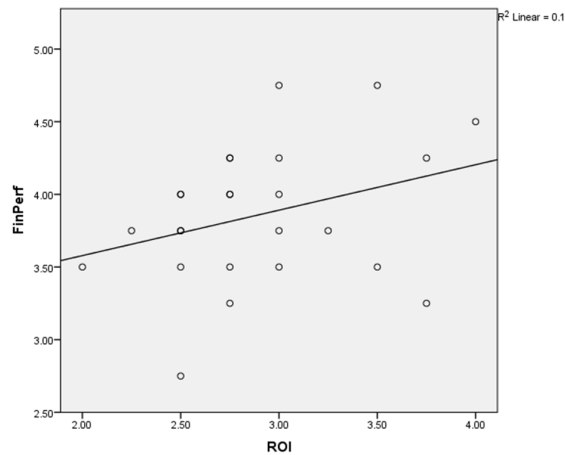


Table 17: Descriptive Statistics

	Mean	Std. Deviation	N
FinPerf	3.8600	.47368	25
ROI	2.9000	.49476	25

Table 18: Correlations

		FinPerf	ROI
FinPerf	Pearson Correlation	1	.327
	Sig. (2-tailed)		.111
	N	25	25
ROI	Pearson Correlation	.327	1
	Sig. (2-tailed)	.111	
	N	25	25

Co-efficient value reveals that 10.7% of the financial performance is impacted due to ROI, based on the data collected. This means more than 89% of the insurance companies' financial performances are influenced due to other unknown reasons based on the study.

4.3.2 Testing the relationship between the financial performance of the insurers and investment opportunities

Figure 10: Correlation between FinPerf and InvOpp

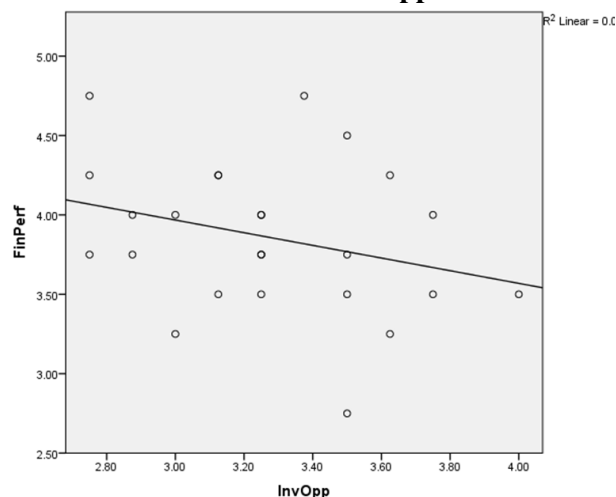


Table 19: Descriptive Statistics

	Mean	Std. Deviation	N
FinPerf	3.8600	.47368	25
InvOpp	3.2700	.34172	25

Table 20: Correlations

		FinPerf	InvOpp
FinPerf	Pearson Correlation	1	-.288
	Sig. (2-tailed)		.163
	N	25	25
InvOpp	Pearson Correlation	-.288	1
	Sig. (2-tailed)	.163	
	N	25	25

With the recorded R-value of -0.288 reflected in Figure 10 and as shown in Table 20. As per the collected data, there is no relationship identified between the Investment Opportunities and the financial performance of the insurance companies. Furthermore, investment opportunities contribute to the financial performance of the insurers in the Maldives by 8.3% based on the coefficient analysis.

4.3.3. Testing the relationship between the insurers' financial performance and market exposure

Figure 11: Correlation Between FinPerf and MktExpo

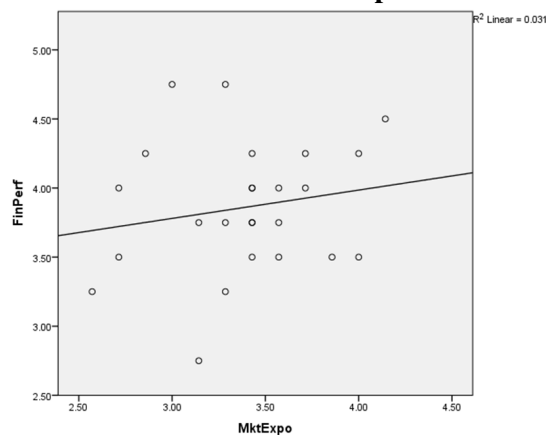


Table 21: Descriptive Statistics

	Mean	Std. Deviation	N
FinPerf	3.8600	.47368	25
MktExpo	3.3886	.40933	25

Table 22: Correlations

		FinPerf	MktExpo
FinPerf	Pearson Correlation	1	.177
	Sig. (2-tailed)		.397
	N	25	25
MktExpo	Pearson Correlation	.177	1
	Sig. (2-tailed)	.397	
	N	25	25

Market exposure to the financial performance of the insurance companies is positively moderate at the rate of 0.177 reflected in Figure 11 and as shown in Table 22. Based on the data collected, circa 3.1% of the financial performance is impacted due to market exposure and risks. This hasn't been a primary concern, as per the study conducted.

4.3.4. Testing the relationship between insurers' financial performance and regulatory guidelines.

Figure 12: Correlation Between FinPerf and RehGuide

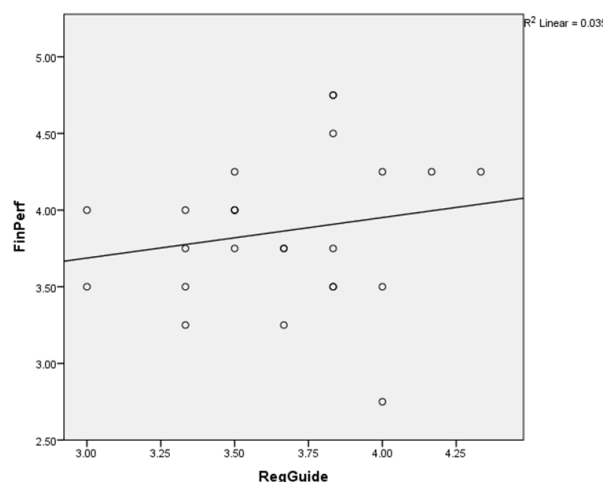


Table 23: Descriptive Statistics

	Mean	Std. Deviation	N
FinPerf	3.8600	.47368	25
RegGuide	3.6533	.33306	25

Table 24: Correlations

		FinPerf	RegGuide
FinPerf	Pearson Correlation	1	.186
	Sig. (2-tailed)		.374
	N	25	25
RegGuide	Pearson Correlation	.186	1
	Sig. (2-tailed)	.374	
	N	25	25

Regulatory guidelines for the financial performance of insurance companies are moderately positive at the rate of 0.186 reflected in Figure 13 and as shown in Table 24. R Linear square value of 0.035 indicates that according to the collected data, just 3.5% financial performance of the insurers in the Maldives is impacted due to Regulatory Guidelines. Statistically, Regulatory guideline is not closely related to the dependent variable.

Table 25: Summary of Correlation (R-value) with the Dependent Variable

	Financial performance	ROI	Investment Opportunities	Market Exposure/ Risk
ROI	0.326686026			
Investment Opportunities	-0.287661584	0.451305776		
Market Exposure/ Risk	0.177135562	0.405600005	0.479381407	
Regulatory Guidelines	0.18575743	0.19174942	0.032949403	0.054140509

In reference to Table 25, the negative 0.28% reveals that even if there are additional investment opportunities, the insurers may not explore them to increase the financial performance. It can also be assumed that insurance companies' management does not believe that selecting new investment opportunities is essential and that only the existing avenues are optimized for investment.

4.4 Multiple Linear Regression

4.4.1 Model Summary

Table 26: Variables Entered/Removed (a.)

Model	Variables Entered	Variables Removed	Method
1	RegGuide, InvOpp, MktExpo, ROI ^b		Enter

a. Dependent Variable: FinPerf

b. All requested variables entered.

Table 27: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.642 ^a	.413	.295	.39767

a. Predictors: (Constant), RegGuide, InvOpp, MktExpo, ROI

1. R-value computed with all independent variables to the dependent variable is strongly positive at the rate of 0.642 as shown in Table 27. This means 64% of independent variables chosen for this study collectively rationalize the changes to the dependent variable (Financial Performance).
2. The adjusted R square value is 0.295 as shown in Table 27. This means the independent variables together making an impact on the dependent variable is just circa 30%, and 70% is unknown. Therefore, other variables may influence the financial performance of insurance companies in terms of investments.
3. R Square of 0.413 in Table 27 explains that using independent variables (ROI, Investment Opportunities, Market Exposure, and Regulatory Guidelines) the outcome can account for little over 41% variance in the financial performance.

4.4.2. ANOVA Table

The significant value (P value) is below 0.05. Therefore, the study accepts the conceptual model at high confidence with a significant level of 0.025 as shown in

Table 28. In other words, this model is statistically significant and can be relied upon to understand/interpret the results.

Table 28: ANOVA (a.)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.222	4	.556	3.513	.025 ^b
	Residual	3.163	20	.158		
	Total	5.385	24			

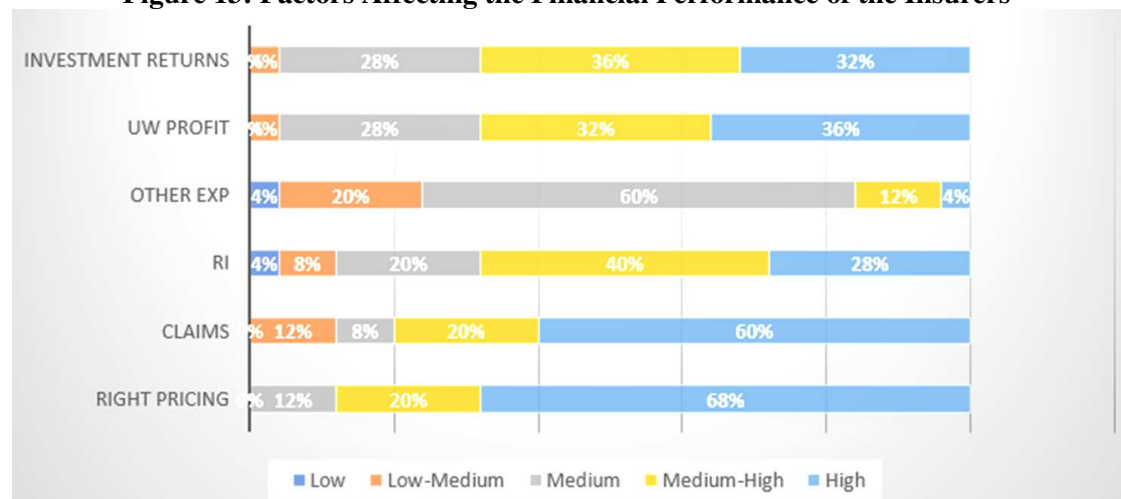
a. Dependent Variable: FinPerf

b. Predictors: (Constant), RegGuide, InvOpp, MktExpo, ROI

4.5 Analysis and interpretation of general information

In analyzing the factors that are essential to advance the insurance sector's performance, the respondents' selection in terms of priority is shown below. For interpretation purposes, the High-medium and Low-medium are referred to as quite high and quite low, respectively.

Figure 13: Factors Affecting the Financial Performance of the Insurers



1. As in Figure 13, an overwhelming 88% of respondents claim that Right Pricing impacts significantly on financial performance while 80% believe that Claims are equally important.
2. 68% of the respondents believe that Re-insurance Expenses weigh highly on financials.
3. In aggregate, 68% shared the view that Investment Income and Underwriting Profits have a sizeable influence on overall results as shown in Figure 13.

As per Table 29, 96% of the respondents agree that *Right Pricing* and *Claims* weigh heavily on financials, 94% of those who chose *Investment Returns* have identified that *Underwriting Profit* is also a critical factor that impacts financial performance. *Other*

Expenses of the insurance companies have not been considered an essential factor as per the gathered data.

Table 29: Correlation between the Factors Impacting the Financial Performance of the Insurance Companies

<i>Correlation between the factors impacting the financial performance of the insurance companies</i>					
	<i>Right Pricing</i>	<i>Claims</i>	<i>RI</i>	<i>Other Exp</i>	<i>UW profit</i>
Claims	96%				
RI	61%	51%			
Other Exp	-32%	-40%	-24%		
UW profit	83%	70%	85%	4%	
Investment Returns	67%	52%	69%	37%	94%

Responses on the deciding factors of both short-term and long-term investments are as below in Table 30.

Table 30: Deciding Factors for the Decision-making

<i>Deciding factors for the decision-making</i>						
Short-term investments	Liquidity ST	0%	4%	16%	24%	56%
	ROI ST	4%	8%	36%	28%	24%
	Mkt Exp ST	16%	12%	20%	44%	8%
Long-term investments	ROI LT	0%	0%	8%	36%	56%
	Mkt Exp LT	0%	4%	52%	20%	24%
	Credit Risk LT	4%	4%	12%	20%	60%
	PBP LT	4%	4%	24%	56%	12%

In reference to Table 30, 56% feel *Liquidity* is a very high concerning factor for short-term investments, while most respondents rate *ROI* (56%) and *Credit Risks* (60%) as high priorities. With *Market Exposure* expressed as moderate concern, it is apparent that insurers are not risk averse for long-term investments where *Pay-back Period* remains a high deciding factor.

Available investments are prioritized from the surveyed results is shown in Table 31.

Table 31: Preferred Investments for ST and LT

<i>Preferred investments for ST and LT</i>							
Short-term investments	Treasury Bills ST	12%	12%	8%	8%	60%	25
	Fixed Deposit ST	4%	16%	20%	20%	40%	25
	Equity Investments ST	48%	16%	16%	16%	4%	25
	Debt Instruments ST	12%	24%	36%	28%	0%	25
Long-term investments	Treasury Bills LT	20%	8%	24%	4%	44%	25
	Fixed Deposit LT	8%	24%	28%	28%	12%	25
	Equity Investments LT	8%	16%	12%	40%	24%	25
	Debt Instruments LT	12%	4%	36%	28%	20%	25
	Real Estate LT	8%	4%	16%	24%	48%	25
	Sukuk LT	8%	8%	32%	40%	12%	25

1. *Treasury Bill* is highly preferred for both short-term and long-term investments. This is corroborated by published statistics of MMA, as 35% of industry investments are under this class (Table 3).
2. 40% strongly prefer *Fixed Deposits* for short term given the nature of risk/flexibility of exiting from investments. Only 12% consider this an option for the long term. Understandably, present rates offered by banks act as a temporary arrangement to optimize on excess funds.
3. Majority say (48%) *Equity Investments* aren't appropriate for the short-term though 64% collectively support the decision to invest them in the long run.
4. Opinion in terms of *Debt Instruments* varies among respondents. Responses are not definitive whether the preference is for long or short-term. Collectively, 23% of funds accrue to this category (Table 2).
5. 48% feel that *Real Estate* is a high-priority long-term investment.

4.6. Semi-structured Interviews

Six industry experts were selected for semi-structured interviews, comprising both regulatory authorities and professionals from the insurance industry. The participants included a Former Governor and CEO of the Capital Market Development Authority, providing historical and financial expertise. The Executive Director of the Insurance Division at the Maldives Monetary Authority (MMA) shared regulatory perspectives, while the Deputy Governor of MMA offered additional insights. The Managing Director of Allied Insurance contributed a sector-specific viewpoint, and the Chairman of Dhivehi Insurance brought expertise in solvency regulation. The results from these interviews are presented in this section.

4.6.1. Insurers' expectations on improving and achieving the desired returns.

Responses from those who are/had been directly involved in deciding on investments of Insurers are shown below in Figure 14 and 15.

Figure 14: Responses on the Need to Improve Investment Returns

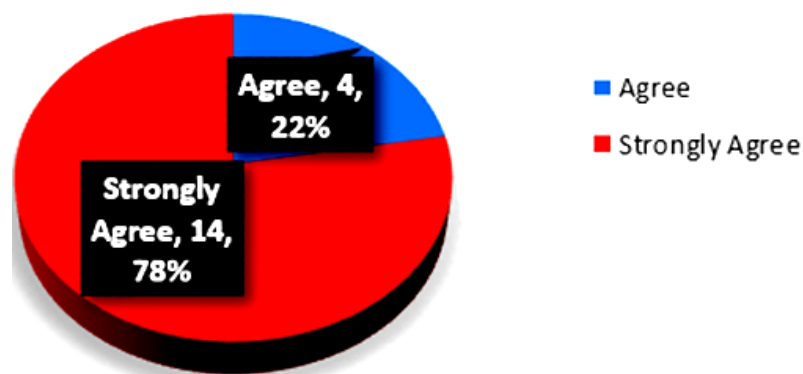
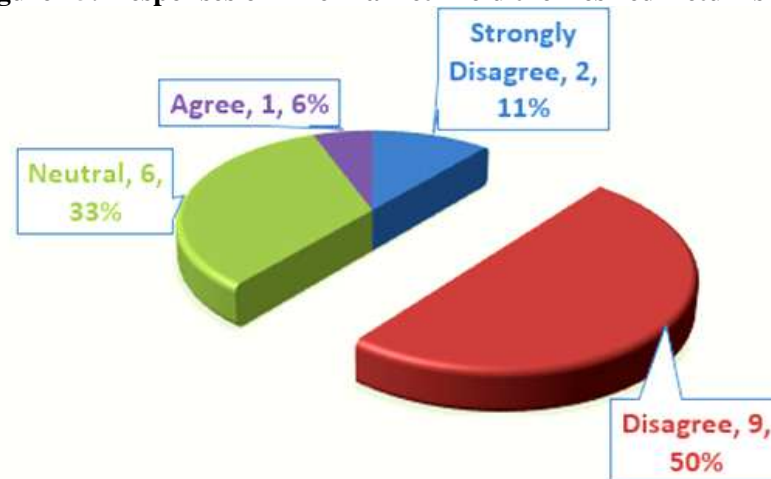


Figure 15: Responses on The Market Yield the Desired Returns



All interviewees for this study acknowledged the views of the respondents. In one voice, they collectively agreed that investment opportunities have tremendous room for improving the sector. A Former Governor of MMA and former CEO of Capital Market Development Authority, opined that: “The finance sector of Maldives has been underdeveloped for many years compared to other similar countries, especially the non-banking industry. In the Insurance sector, there are not many options despite various efforts by many parties; for over 10-15 years, we haven’t been able to make significant development/progress on that front”.

An Executive Director of the Insurance Division of MMA, expressed: “There is a huge demand for financing, especially for the development areas like infrastructure, housing, transport, and tourism. At the same time, the insurers seek investment opportunities. It is evident that there is a huge mismatch in the demand and supply of funds. It arises because there is no appropriate instrument to tap these together.”

The unanimous acknowledgment from interviewees directly involved in investment decisions within the insurance sector highlights a consensus on the existing challenges and opportunities for improvement. The insights provided by a Former Governor of MMA and former CEO of Capital Market Development Authority shed light on the historical underdevelopment of the finance sector in the Maldives, particularly in comparison to similar countries. The lack of significant progress in the non-banking industry, despite sustained efforts over the past decade, underscores the complexity of the challenges faced.

The statement from the Executive Director of the Insurance Division of MMA emphasizes the pressing need for financial instruments that can bridge the gap between the demand for financing, especially in critical development areas like infrastructure, housing, transport, and tourism, and the available investment opportunities. The identified mismatch between the demand and supply of funds signals a systemic issue that requires strategic interventions.

In essence, the shared perspective among key decision-makers underscores the urgency for comprehensive reforms and innovative financial instruments to catalyze the growth of the Maldivian insurance sector. The alignment of industry leaders'

views sets the stage for collaborative efforts between regulators, policymakers, and insurance companies to address these challenges and unlock the untapped potential for investment in the nation's development.

4.6.2 Insufficient investments avenues and the need to develop new instruments

Figure 16: The Market has Sufficient Investment Avenues

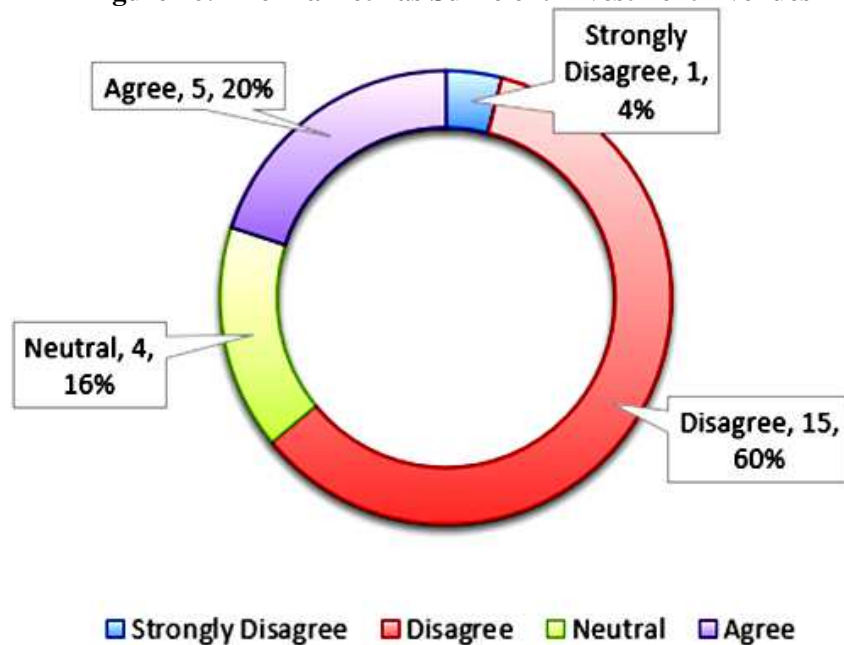
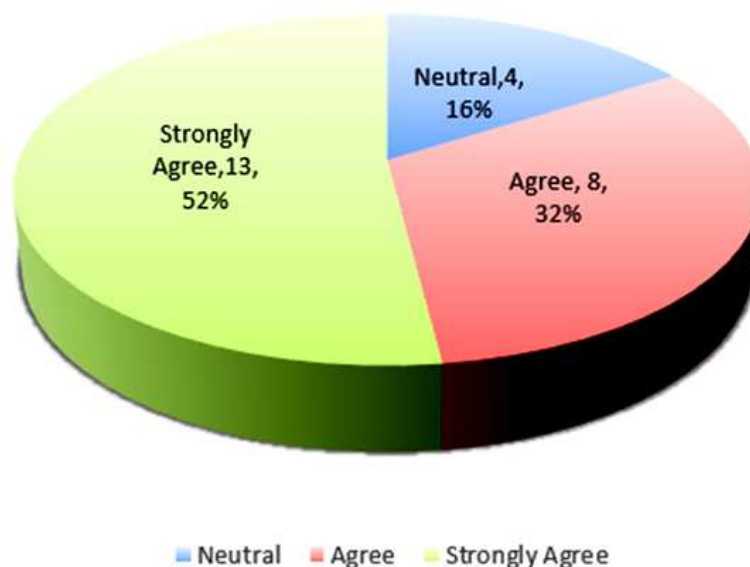


Figure 17: There is a Need to Develop Investment Instruments



Addressing the issue, the reasons pointed out by the other interviewees include limited awareness about raising funds, thereby resorting to traditional borrowing. With increasing economic activities, if the emphasis is made on structured facilities through the secondary markets, with enlistment of more companies, and introduction of

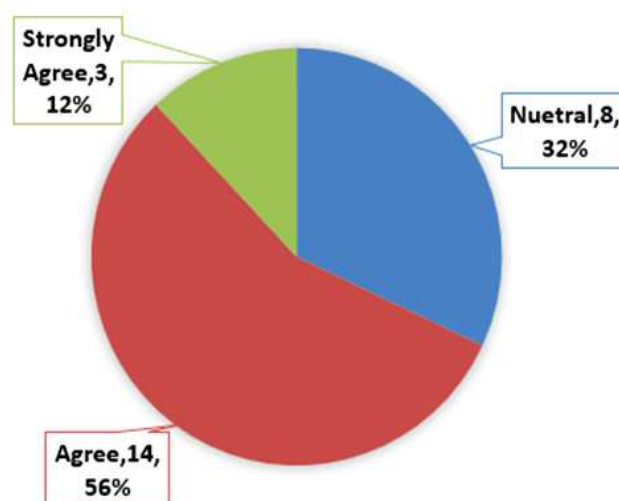
corporate bonds, the insurance sector will surely be able to utilize funds more effectively.

A former Governor of MMA, commented on the finding, “It is natural for the insurance companies to be concerned about the constraints of lack of opportunities. The responsibility lies on both the insurers as well as the government”. He is of the opinion that more instruments available for trading will build confidence. Supporting this claim, a Deputy Governor of MMA, says: “If we are to improve the investment for the next stage, the need for developing the Capital Market is a priority, as the secondary market is not moving as expected. Majority of the liquidity of the banking sector and the non-banking sector is tied up with fiscal needs leaving no room for market development.”

The identification of insufficient investment avenues in the Maldivian insurance sector and the call for the development of new instruments highlight critical challenges that require prompt attention. Limited awareness about fundraising options, leading to traditional borrowing, reflects a need for financial education and awareness initiatives. The emphasis on structured facilities, secondary markets, enlistment of more companies, and the introduction of corporate bonds is a strategic move to diversify investment avenues. The endorsement by a former Governor of MMA emphasizes the shared responsibility of insurers and the government in addressing this constraint. The call for more tradable instruments echoes the necessity of creating a robust financial ecosystem. The Deputy Governor of MMA's emphasis on developing the Capital Market underscores the need for comprehensive reforms to facilitate a dynamic and responsive secondary market. The revelation that most liquidity is tied up in fiscal needs suggests a potential shift in priorities to free up liquidity for market development. Overall, these findings call for joint efforts between the industry and policymakers to foster an environment conducive to investment growth and market development.

4.6.3. Market Risks and Volatilities

Figure 18: Market Volatility Impact the Financial Performance



Experts expressed views from different angles: an Executive Director of the Insurance Division of MMA commented: “Developing suitable products should address this to some extent. For example, real estate has a huge demand for funding. Market risks arise on how such instruments are designed and how it is handled. The right instruments with proper structure will promote strong transparency. This can mitigate the risks”.

MD of Allied insurance is of the view that “it is ideal for segregating funds for short-term and long-term, and the investments with market risks can be placed under the long-term. This would be the best way to mitigate market volatility. For mitigation of market volatilities, real estate investments are a good alternative that gives a good return. The returns may have dropped with the soaring number of apartments with urbanization, but the risk is almost nonexistent. Insurance companies should focus on this”.

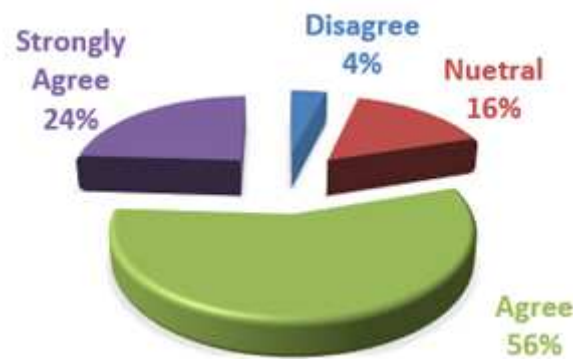
Expressing investment companies’ opportunities in real estate investment, the Chairman of Dhivehi Insurance, opined: “When the government policies keep changing, it challenges the small-time entrepreneurs competing with the state-owned property development companies. Therefore, insurance companies may be exposed to certain risks when they invest in real estate through the private sector, impacting their investment returns. The Government’s help to act on this situation is essential”. Addressing the credit risks, he further commented: “The court process is too long for the recovery of investments in the event of a default. A simple and quick recovery is needed for the investors, including the insurers’ involved in structured investments”.

From above, it is evident that market risks and volatilities in the Maldivian insurance industry are approached from various perspectives. The Executive Director of the Insurance Division of MMA emphasizes the role of tailored product development in addressing these challenges. Specifically, instruments designed for sectors like real estate, which has substantial funding demand, need careful structuring to handle associated market risks. Transparency and risk mitigation can be achieved through the right instrument structures. The MD of Allied Insurance recommends separating short-term and long-term funds, and advocates placing investments with market risks in long-term funds to reduce volatility. Real estate investments are highlighted as an attractive option for mitigating market volatilities, offering good returns with relatively low risk. However, challenges arise from changing government policies and competition with state-owned property development companies, requiring government support. The Chairman of Dhivehi Insurance underscores the need for swift recovery processes in the event of default, particularly for insurers involved in structured investments, emphasizing the importance of a streamlined and efficient legal system for investor protection.

4.6.4. Regulator’s Role

The majority of respondents agree that regulators play an important role in new product development, as shown in Figure 19.

Figure 19: Regulator's Role in Influencing New Product Developments



The unanimous view of the interviewees is that regulators should not get too involved in development, but that a balance in regulation is crucial. They are also of the opinion that regulation should not be too strict as the industry is at an early stage of development, but that support for investment is essential. An Executive Director of the Insurance Division of MMA expressed: “In MMA, we should regulate as minimum as possible and let the industry make the initiative and its cause and take advantage in the market.” The Former Governor of MMA commented: “For the regulators, it is important to provide investment guidelines and broad principles to achieve the industry’s aspirations. There needs to be a right balance in terms of protecting the insured as well addressing the needs of interests of the insurance firms.” He further commented: “striking balance in the regulatory environment is essential considering the smallness of the economy, the limited size of the market and the fact that it is a fast-growing market. There is ample room for creating additional awareness among market participants. Taking the best practices from other well-developed markets, we need to customize according to our needs, and importantly, it can’t be treated like a wall that you erect and is there forever”.

Highlighting the importance of the solvency regulations, the Chairman of Dhivehi Insurance commented: “A sound solvency regulation understanding the country requirement is essential. The regulator cannot track the investments on a piecemeal basis. This will give a free hand to the insurance companies in selecting the investments.”

On the same note, the Former CEO of Capital Market Development Authority commented: “The companies develop products to bring growth to the market. However, when Policymakers lack an understanding of practical market conditions and business matters, regulators are unable to stimulate growth and development of the sector. There is a need for better coordination”. On the same note, some interviewees believe there is a lacuna in the judicial system with regard to a high level of knowledge in finance-related matters, given its importance in the business environment.

All interviewees commonly expressed the urgency of implementing the Insurance Act, which can extend protection and open doors for further development. The regulatory perspective on the insurance industry's investment landscape emphasizes the importance of maintaining a balanced regulatory environment. Interviewees

unanimously express the view that regulators should strike a balance, avoiding excessive involvement while providing essential guidelines and principles. Recognizing the nascent nature of the industry, they advocate for regulations that are not overly strict, allowing room for industry initiatives and market advantage. The emphasis is on creating a regulatory framework that protects insured parties while addressing the interests of insurance firms. The Former Governor of MMA underscores the need for flexibility, customizing regulations based on the country's requirements and drawing from best practices in well-developed markets. Solvency regulations are highlighted as crucial for sound industry practices, emphasizing the importance of understanding the country's specific needs. Coordination between policymakers, regulators, and industry players is deemed essential for stimulating growth, with some interviewees pointing out a potential gap in judicial expertise related to finance matters. Overall, a collaborative and adaptive regulatory approach is advocated to support the unique dynamics of the growing Maldivian insurance market.

4.7. Investment Challenges to the insurance companies

From the collective responses, the identified factors are unavailability of products, inability to bridge the gap, low yields as preference is for fixed deposits, lack of secondary market instruments, etc. Anticipation of the role of the Fund Manager and the benefit to the industry is admitted by all interviewees.

The collective responses from the industry highlight several challenges faced by insurance companies in their investment endeavors. Key factors identified include the unavailability of diverse products, challenges in bridging existing gaps, a preference for fixed deposits leading to low yields, and a lack of secondary market instruments. Importantly, there is a shared anticipation among interviewees regarding the crucial role of Fund Managers and the potential benefits their involvement could bring to the industry. These challenges underscore the need for innovative solutions and collaborative efforts to address the existing gaps in the investment landscape for insurers.

4.7.1. Role of individual insurance companies

Interviewees from regulatory background believe insurers must penetrate directly into the markets to tap individual products by balancing the portfolio. Ample opportunities in the economy can be tapped. To do this, insurers should inculcate risk-taking ability and not depend on the products developed by the stakeholders. The Managing Director of Allied Insurance pointed out: "The risk-taking attitude from the insurers must be there. We need to mix the portfolio segregation with categories of desired returns and risks". He further mentioned: "Insurers must develop solutions for requirements, have dialogue and keep pursuing to get the Regulators' blessings."

The insights from regulatory figures emphasize the pivotal role of individual insurance companies in proactively engaging with the market. The consensus among interviewees is that insurers should take direct initiatives to tap into individual products while maintaining a balanced portfolio. The encouragement for insurers to cultivate a risk-taking attitude signifies the importance of innovation and the exploration of diverse opportunities within the economy. The Managing Director of

Allied Insurance emphasizes the need for insurers to diversify their portfolio by categorizing desired returns and risks, indicating a strategic approach to product development. The call for insurers to actively engage in dialogue and seek regulatory approval reflects the importance of collaboration between the industry and regulatory bodies for sustainable market growth.

4.7.2. The Insurance Industry's collective measures to improve investment returns

A common understanding among the insurance companies was the need for a periodic dialogue among Players. Interviewees representing regulatory background emphasized the need to address the investment-related issues that will pave the way to improve overall financial performance.

A Former Governor of MMA highlighted that: “The industry should be proactive and need not wait for the government or the regulator to do something. Having collective representation with collaboration will give so many advantages.”

The consensus among insurance companies on the necessity of regular dialogue and collaboration within the industry underscores a collective commitment to addressing shared challenges. The emphasis on periodic forums and mechanisms to discuss investment-related issues reflects a proactive approach advocated by industry insiders. The call for the industry to take initiative and not solely rely on governmental or regulatory intervention aligns with the idea of self-regulation and mutual support. The insight from a Former Governor of MMA further accentuates the potential benefits of collective representation, emphasizing that collaboration can yield significant advantages. This collective mindset within the insurance sector suggests a recognition of the interconnected nature of challenges and opportunities, fostering an environment where shared efforts contribute to the improvement of overall financial performance.

4.8. Dialog between the Policymakers and the Regulators

While acknowledging that no law or regulations hinder the development of instruments in the market, an Executive Director of the Insurance Division of MMA, commented that the market is not maturing as fast as we like. He further assured that: “Regulators and Government can start a dialogue with the industry and start somewhere the things can get faster. Whatever the industry arranges, we will participate and support”.

On the same note, a Former Governor of MMA mentioned, “In Maldives, the regulator, promoter, and developer are the same body, which is not the best practice. The government should develop, and the regulators should be responsive to the developers. Regulators cannot too proactively come into the development. One must remember that since both the market and the size of the economy are limited, there is some role that the regulators can play in positively contributing to the development of the industry.”

The dialogues between policymakers, regulators, and industry experts highlighted a crucial aspect of the Maldivian insurance landscape. The acknowledgment that there are no existing legal impediments to market instrument development signifies a

regulatory environment conducive to innovation. However, the observation that the market is not maturing as swiftly as desired raises implications for collaborative efforts. The commitment of regulators to engage in dialogue with the industry, as expressed by the Executive Director of the Insurance Division of MMA, suggests a proactive stance toward facilitating growth. On the other hand, the notion of the regulator, promoter, and developer being the same entity, as pointed out by a Former Governor of MMA, underscores the need for a nuanced approach. The recommendation for a clearer distinction between regulatory functions and developmental roles aligns with international best practices. The implication is that a well-defined regulatory framework, coupled with effective collaboration and a responsive regulatory body, is essential for fostering a dynamic and thriving insurance market in the Maldives.

5. Recommendations and Conclusion

Based on the findings of this study, several key recommendations emerge:

- **Diversify Investment Platforms:** Exploring investment in a regulated platform where private companies can raise funds through accredited private investors without listing on the stock exchange is a viable option. This approach can diversify insurers' investments and improve returns.
- **Develop Corporate Debt Structure:** The option of developing a corporate debt structure should be explored to expand investment opportunities for insurers while ensuring sound regulation.
- **Expand the Role of Fund Managers:** Encourage and expand the profile of fund managers to operationalize the development of investment instruments, allowing insurers to opt for solutions through outsourcing arrangements.
- **Update Regulations:** The implementation of the Insurance Act should be pursued to provide a safety net for the development and growth of the insurance sector, addressing concerns related to investments. Subsequent regulations should be crafted to be responsive to new market developments, with a focus on suitable Solvency Regulations aligned with the investment climate.
- **Establish Collective Representation:** Insurers should establish a formal industry forum or association to collectively address the challenges associated with investments.
- **Market Development Initiatives:** Policymakers and the Maldives Monetary Authority (MMA) should undertake market development initiatives to support and propel the insurance sector. Bridging private sector fundraising requirements through available market options will benefit the industry by creating a climate for aggressive participation in investment opportunities while balancing risks.
- **Explore Real Estate Investment:** In diversifying investments, exploring real estate investment may be a viable option. Advocating the introduction of Real Estate Investment Trusts (REIT) in the Maldives can open up new avenues for insurers.

- **Simplified Regulations:** Streamlined and transparent regulations are needed to facilitate the structured process of addressing defaults. These will instill confidence in subscribing to the fund requirements in the market.

In conclusion, this study emphasizes the critical role of investment performance in shaping the financial landscape of Maldivian insurance companies. The findings underscore the need for strategic interventions to enhance investment sustainability and overall industry performance. To achieve this, it is imperative to address challenges such as low-yielding product portfolios and limited investment avenues. The recommendations put forth, including diversifying investment platforms, developing corporate debt structures, and exploring real estate investment, present actionable steps for bolstering investment returns. Furthermore, the study highlights the importance of updated regulations, collective industry representation, and market development initiatives to create a favorable environment for insurers. A balanced approach, incorporating supportive regulations and responsive market development, will be pivotal in navigating market risks and volatility. By implementing these recommendations, the insurance sector in the Maldives will be able to strengthen its investment strategies, promote growth and make a significant contribution to the overall financial health of the industry.

It is clear that more opportunities can be explored to improve investment returns, and investment diversification through innovative platforms and instruments is essential. A balanced approach of supportive regulation and responsive market development initiatives will help the insurance sector to achieve better investment outcomes.

Despite the limitations of this study, such as the small sample size and lack of international comparisons, the research provides valuable insights into the financial performance of Maldivian insurers and provides a basis for future research and policy making. Further studies can focus on comparing the investment performance of the insurance and banking sectors to understand and address disparities driven by macroeconomic variables.

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