

Determinants of Claims for Takaful Householder and Houseowner Policies

Amirul Afif Muhamat¹, Siti Nurhidayah Sulaiman²,
Mohamad Nizam Jaafar³

^{1,2}*Faculty of Business & Management, Universiti Teknologi MARA, Selangor*

³*Arshad Ayub Graduate Business School,
Universiti Teknologi MARA, Shah Alam*

ABSTRACT

Takaful operators are expected to process claims submitted within a reasonable period and to disburse claims accordingly once the requirements have been met. Nevertheless, a large number of claims will affect the financial position of takaful operators since the compensation will be paid out from the participants' special fund (PSA). If a takaful operator does not address the factors that affect takaful claims, then this will interrupt the takaful operator's business expansion. Therefore, this paper aims to appraise the factors that influence takaful claims, particularly for householder and houseowner policies, based on the experience of one takaful operator in Malaysia. Data from 2010 until 2016 was gathered and non-parametric tests were used to analyse them due to the short period of observation. Findings in this study indicate that fire, flood and fraud cases did not significantly influence the payout claims, although in terms of correlation, all factors had positive relationship with the takaful claims of houseowner and householder policies, except for claims due to floods. The data also revealed the magnitude of claims in terms of amount and value that the takaful operator processed for the past seven years, which showed a significantly high cost of payouts.

Keywords: General Takaful, Householder Policy, Islamic Insurance; Insurance Claim, Takaful Claims

Correspondence: amirulafif@salam.uitm.edu.my



INTRODUCTION

A takaful claim is a demand from a policyholder to a takaful operator requesting compensation to be issued according to the terms and conditions of the takaful policy. The “crux of transactions” for a bank’s depositors is depositing and withdrawing money, while for insurance or takaful policyholders it is the buying of a policy and submitting a claim.

There has not been much research on the factors that influence houseowner and householder policy claims even though the impact from this is significant since it can be detrimental to the financial position of the takaful operator, can interrupt the takaful operator’s business expansion in the future as well as affect the capability of the company to issue compensation.

To put the issue into perspective, too many takaful claims will affect the takaful operator because the compensation will be paid out from the participants’ special fund (PSA), and if the PSA fund is depleted or insufficient, then the takaful operator, through the shareholders, has a fiduciary duty to be performed – that of granting interest-free financing to top up the deficit in PSA. The interest-free loan will be recovered from future premiums paid by policyholders or from the future investment profits of the PSA.

Therefore, this paper aims to appraise the factors that influence takaful claims particularly for householder policies,

based on the experience of one takaful operator, TO1, in Malaysia (this name is used due to the confidentiality of the data).

The paper is organized as follows: the next section is the literature review discussing the features of householder and houseowner policies, the nature of takaful claims, and the factors that influence householder and houseowner policies. The next section covers the research method, followed by the findings and conclusion.

LITERATURE REVIEW

Features of Householder and Houseowner Takaful Policies

Householder and houseowner takaful policies are products or policies that come under the general takaful category and are specifically designed to compensate policyholders against identified perils. In general, both policies concern the house. However, a houseowner policy covers the building or its structure against loss or damage, while a householder policy covers the contents in the house including fixtures and fittings. Therefore, choosing the right policy is essential so that the policyholder knows which items have been insured for claims in the future if an unfortunate event occurs.

These types of takaful policies cover property against catastrophe events, either natural disasters or “man-made disasters”. The list of perils covered are (examples from Syarikat Takaful

Malaysia Berhad¹, Takaful Ikhlas Berhad² and Etiqa Takaful Berhad³):

- Fire
- Lightning
- Explosion
- Aircraft Damage
- Impact Damage
- Bursting and Overflowing of Tanks
- Theft (forcible entry into the house)
- Hurricane, Typhoon, Cyclone, Windstorm
- Loss of Rent

The protection can be extended according to the additional contribution that the policyholder is willing to make. These three major takaful operators offer competitive rates in order to attract new clients by offering 15% cash back or return if there is no claim during the coverage period.

Takaful Claims

In the conventional insurance claim process, the payout or compensation will be distributed from the insurer's coffer; however, for a takaful company, the payout will be from the participants' special fund (PSA) that is solely for compensation. The main difference is that for a conventional insurer, too many claims will affect the insurer's financial performance while for a takaful operator, too many claims will cause the PSA to be depleted and if it becomes insufficient, the Islamic Financial Act (IFSA) 2013 requires the

takaful operator to grant *qard hassan* (zero interest loan) to the PSA for the claims purpose. In other words, claims management is important for both conventional insurance companies and takaful operators. Gongg and Sasaka (2007) emphasise that a lower loss ratio indicates a stronger financial performance of the insurance company or takaful operator.

Nevertheless, claims from policyholders must be honoured and processed timely since they are the crux of the insurance business. In general, most takaful operators in Malaysia state that for general takaful claims like the houseowner and householder policies, they require 14 days to process the documents and conduct investigation. The minimum 14 days' period is still viewed as "too long" since the underlying motive for buying insurance or a takaful policy for most people is to ease their burden during an unfortunate event. The minimum period can be longer (Gomez, 2018). The period will be extended if the takaful operators require additional documents or if the catastrophe is a mass disaster such as floods that affect a large number of people.

Tardiness in processing the claims will affect the takaful operator's image as well as the image of the industry as a whole (Muhamat, Jaafar, & Alwi, 2017).

¹<https://www.takaful-malaysia.com.my/products/general/Pages/myhouseowner.aspx>, 30 April 2018.

²<https://www.takaful-ikhlas.com.my/our-products/personal/home-solution/ikhlas-houseowner-householder-takaful>, 30 April 2018.

³<http://etiqa.com.my/en/houseowner-takaful>, 30 April 2018.



Joji Rao and Pandey (2013) clarify that general insurers in India received three times more complaints than life insurers due to the slow claim process.

Therefore, it is clear that takaful operators need to address the determinants that potentially affect takaful claims for houseowner and householder policies, and at the same time ensure the claims will be processed timely. Thus, based on previous literature, the three factors postulated to influence houseowner and householder policy claims in the context of the situation in Malaysia are flood cases, fire cases, and fraud cases.

Factors that Influence Takaful Claims for Householder and Houseowner Policies

- Flood Cases

According to the Insurance Information Institute, the term “catastrophe” in the property insurance industry refers to a natural or man-made disaster that is typically severe. A natural disaster is expected to have a variety of serious consequences, some of which will have long-term impacts, such as the spread of disease and sea level rise, while some have immediate short-term impacts like extreme rain and flooding (Anderson, 2006). Natural disasters can be in the forms of drought, earthquake, flood, landslide, wildfires, extreme temperature, hurricane and cyclone, to name a few (Tschoegl, 2006).

Mills (2007) suggests that extreme weather will bring negative impact to

the economic activities of the country, which Botzen and Bergh (2008) describe as inflicting the insurance industry in terms of high compensation or significant payout issuances. Viscusi and Born (El-Gamal) concur with Botzen and Bergh (2008) by emphasising that natural disaster brings about harmful effects on the insurance firm as well as the insured party. Increased natural disaster cases inflict pressure on insurance companies or takaful operators. Hence, a natural disaster is a “business problem” for the insurance industry because the insurer may face insufficient resources to cover for the misfortunes arising from the insureds’ demands (Dlugolecki, 2006). Mills and Evan (2005) cautions insurance companies and takaful operators on rising claims from property insurance policies due to natural disaster as compared to other types of losses. This scenario, as mentioned before, will affect takaful operators’ or insurance companies’ plans to grow and expand their businesses if they do not address this issue urgently.

The financial implication of natural disasters can be seen in the natural disaster cases in the United States that have cost US\$20 billion per year, borne by US the government as well as the insurance industry (Masozera, Bailey & Kerchner, 2006). In the context of Malaysia as presented in this study, Table 1 shows the natural disaster that commonly occurs in Malaysia, which is flood, and the flood cases recorded

Table 1: Flood Cases and Claims

Year	Total Claims (RM)	Flood Claims (RM)	Flood Cases
2010	287,793,000	8,600,000	2,300
2011	218,351,000	792,000	192
2012	472,790,000	9,400,000	2,900
2013	479,313,000	31,770,000	5,500
2014	501,268,000	101,000,000	11,000
2015	648,027,000	320,000	104
2016	603,225,000	515,000	185

from 2010 until 2016 as well as the compensation issued throughout the period against the total claims of general takaful business of TO1.

Table 1 depicts the overall total claims and flood claims experienced by one takaful operator over a period of seven years. The figures are varied as during an “extremely bad period”, the claims can go up to more than RM100 million and this is just for flood claims which are equivalent to 20.1% of the total claims made by policyholders in 2014. The year 2014 was categorized as the worst flood disaster for Malaysia since 1969, and states like Johor, Kelantan, Terengganu, Pahang, Kedah, Perlis and Sabah were severely affected. In Kelantan alone, more than 1,500 houses were destroyed (Mohd Dan, 2015). Importantly, Table 1 indicates flood claims for one takaful operator only and there are several other takaful operators that provide flood or houseowner policies which means that the claims figures for flood disaster are expected to reach millions

of ringgit every year. The average claim as per the observation period is more than RM21 million.

• Fire Cases and Takaful Claims

Fire is a catastrophe event that is in the “common list of disasters” in Malaysia. This can be a natural disaster like wildfires as a result of La Nina or a drought season in the country or this can be a man-made disaster which happens either with or without intention (Rahim, 2015). Fires can cause fatalities and severe injuries to dwellers of the affected building and inflict serious damage to the property and its contents (Ramachandran, 1999). While claims of fire cases are not as numerous as claims for motor takaful (Ismail, 2013), statistics for fire break-outs in Malaysia indicate an upward trend year by year (Tan, Akashah, & Mahyuddin, 2016). An average of 6,000 premises are destroyed every year (Masriwanie, 2016). This means that in terms of claims, claims for motor takaful policies are higher but fire cases (for houseowner and

Table 2: Fire Cases and Claims

Year	Total Claims (RM)	Fire Claims (RM)	Fire Cases
2010	287,793,000	48,110,000	184
2011	218,351,000	8,500,000	86
2012	472,790,000	928,000	18
2013	479,313,000	11,000,000	58
2014	501,268,000	64,800,000	140
2015	648,027,000	74,300,000	252
2016	603,225,000	619,000	10

householder policies) show additional cases with more compensation to be issued with RM5 billion losses due to fire as at 2017 (Bernama, 2018). It is also reported that child deaths occur every two weeks due to fire and burn injuries (Moh, 2017).

Therefore, takaful operators need to assess the property value to determine how much the insured must be reimbursed and how the payments are apportioned (Cabrera, Armengol, & Jackson, 2003). Table 2 indicates the fire cases and claims from 2010 until 2016 against the total compensation issued throughout the period for the general takaful business of TO1. The highest number of claims issued was in 2015, which were more than RM74 million and the lowest was in 2016, at RM619,000. Even though the figures fluctuated, the average claim during the period was more than RM29 million.

- Fraudulent Claims and Takaful Claims.

A fraudulent claim is a serious problem

in the insurance sector. Fraudulent takaful claims occur when a formal claim procedure is submitted with additional financial implication. The Insurance Information Institute (2017) estimates that in general, about 10% of the property or casualty insurance industry incurs losses and loss adjustment expenses each year due to fraud. Derrig (2002) suggests the use of the Electronic Fraud Detection (EFD) system to mitigate fraud attempts during the insurance or takaful claim process. Donald Cressy's Triangle Fraud Theory categorizes fraud attempts into three components: pressure, opportunity and rationalisation (Powell, 2017). Muhamat et al. (2017) describe the Triangle Fraud Theory as:

"The financial pressure that the policyholders faced in their lives might prompt the policyholders to commit the act, or opportunity to dishonestly claim for compensation on damages which do not occur as a result of the accident because they are confident they will

Table 3: Fraud Cases and Claims

Year	Total Claims (RM)	Fire Claims (RM)	Fire Cases
2010	287,793,000	121,765	4
2011	218,351,000	65,000	1
2012	472,790,000	90,000	3
2013	479,313,000	316,500	9
2014	501,268,000	89,700	2
2015	648,027,000	140,500	6
2016	603,225,000	727,000	12

not be caught, and the policyholders will tend to rationalise this by using the excuse that they have paid premium for the takaful service or protection.”

Moreover, policyholders have the chance to utilize their informational advantage about the occurrence of misfortune that never happened (Schiller, 2002). Insurance fraud is a worldwide economic problem that threatens the financial strength of insurers and threatens the existence of the insurance institution (Yusuf & Babalola, 2009). Derrig (2002) describes insurance fraud as a major issue in the United States towards the start of the 21st century. The aggregate cost of insurance fraud is assessed to be more than 40 billion US dollars every year (Federal Bureau Investigation, n.a.). Viaene and Dedene (2004) state that insurance fraud is detrimental beyond insurance companies or takaful operators since it affects the whole process or ecosystem in the industry which, at the end of it, affects the country's economy.

Table 3 depicts the number of fraud cases from 2010 until 2016, as well as claim amounts which are categorized as fraud and detected against the total claims for the general takaful business of TO1. It can be concluded that in general, fraud claims can reach up to RM100,000 each year and this is only based on the cases that were detected by TO1. The actual amount could be higher than that.

RESEARCH METHOD

This study employed secondary data gathered from TO1. TO1 was chosen due to its significant size and experience as a takaful operator in the country. TO1 is one of the composite takaful operators in Malaysia. Permission to publish the data was requested and approved by the TO1 on the condition that the takaful operator's name was not disclosed. Accordingly, it is referred to as TO1. The data was tested with several non-parametric tests due to the short period of observations and the data was normally distributed

Table 4: Kolmogorov-Smirnov Test

	Year	FIRE	FLOOD	FRAUD
		7	7	7
	Mean	7.0135	6.6471	5.1879
Normal Parameters ^{ab}	Std. Deviation	.85772	.95749	.36833
Most Extreme Differences	Absolute	.211	.211	.258
	Positive	.174	.211	.258
	Negative	-.211	-.189	-.154
	Kolmogorov-Smirnov Z	.558	.559	.682
	Asymp. Sig. (2-tailed)	.579	.913	.741

but the non-parametric tests were able to provide rigorous analysis comparable to the parametric tests. A previous study by Boadi, and Opoku (2017) on factors affecting outstanding claim provision of non-life insurance also used limited observation data for only six years (2007-2012) but managed to present meaningful findings. Muhamat et al. (2017) also faced the same constraint and thus employed only descriptive and correlation tests. However, the study managed to achieve its objective and produced significant findings albeit at the expense of more rigorous analysis.

Accordingly, for this study, the Chi-Square test, the Kolmogorov-Smirnov test and Spearman's rho correlation were employed.

FINDINGS

i. Kolmogorov-Smirnov Test

Data is considered as good and decent for research when it is normally distributed (Brother SPSS, 2015), and Kolmogorov-Smirnov provides the test for goodness of fit for the data. Based on the output of the Kolmogorov-Smirnov test above, it can be concluded that the data was normally distributed since all values are more than 0.05 (0.558 for fire, 0.559 for flood and 0.682 for fraud. This indicates that even though the data was quite limited in terms of the observation period, in this study, it meets the requirement of normality for non-parametric test which is needed for small sample size to ensure stability of the model.

ii. Chi-Square Test

Table 5 shows that all factors depict p to be more than 0.05. Hence it is not significant and fails to reject the null hypothesis. Therefore, the three factors

Table 5: Chi-Square Test

	FIRE	FLOOD	FRAUD
Chi-Square	.000 ^a	.000 ^a	.000 ^a
df	6	6	6
Asymp. Sig.	1.000	1.000	1.000

which are fire, flood and fraud do not have significant influence on the claims of houseowner and householder policies as per this research which is seemingly at odds with the literature. Martz (2013) describes that failing to reject the null hypothesis does not mean totally accepting the null hypothesis but rather to indicate that as per this study, the availability of the data failed to reject the null hypothesis. Therefore, further data is required for this in future analysis.

iii. Spearman's (Rho) Rank Correlation

Table 6 shows that claims have a positive but low correlation with fire at 0.286 with a non-statistical significance relationship, $p = 0.535 > 0.05$. Furthermore, claims have a low and negative correlation with flood at -0.286 and have a non-statistically significant relationship, $p = 0.535 > 0.05$. On the other hand, claims have a moderate correlation with fraud at

Table 6: Spearman's (Rho) Rank Correlation

		CLAIMS	FIRE	FLOOD	FRAUD
CLAIMS	Correlation Coefficient	1.000	.286	-.286	.607
	Sig. (2-tailed)	.	.535	.535	.148
	N	7	7	7	7
FIRE	Correlation Coefficient	.286	1.000	.071	-.179
	Sig. (2-tailed)	.535	.	.879	.702
	N	7	7	7	7
FLOOD	Correlation Coefficient	-.286	.071	1.000	-.321
	Sig. (2-tailed)	.535	.879	.	.482
	N	7	7	7	7
FRAUD	Correlation Coefficient	.607	-.179	-.321	1.000
	Sig. (2-tailed)	.148	.702	.482	.
	N	7	7	7	7



0.607 but a non-statistically significant relationship at $p = 0.148 > 0.05$. From the correlation results, all the variables except flood have positive correlation. In addition, fire and fraud show higher p-value that exceeds 0.05.

In this research, the p-value for fire is 0.535 and with a positive correlation. If the fire factor is increased by one per cent, takaful claims will increase by 0.286 per cent. The positive relationship of fire and claims as shown in this research is further supported by the study by Zurich Municipal (2014) that reveals that fire and insurance claims are positively related and that claims will increase as arson cases increase. The p-value for flood is 0.535 with negative correlation, signifying that takaful claims will decrease by -0.286 per cent for every one per cent increment of flood factor. This factor looks at odds with others; however, it can be put into perspective that even though submission for claims due to flood increases, it does not necessarily mean that payout (claims) for this will also increase since it will depend on the amount of coverage as stated in the policy. Next, the p-value for fraud is 0.148 with positive correlation. If there is an increment by one per cent, takaful claims will increase by 0.607 per cent. The finding for the fraud factor concurs with the findings of Muhamat et al. (2017) that the relationship between insurance fraud and claims is highly significant and has a positive impact on general takaful claims.

CONCLUSION

The conclusion from the findings in this study indicates that fire, flood and fraud cases did not significantly influence the payout claims of TO1, although in terms of correlation, all factors had positive relationship with houseowner and householder takaful claims except in the case of flood. The limitation of this study is that the period of observation was only seven years and confined to one takaful operator. Therefore, for future studies, the observation period needs to be extended so that more rigorous analysis can be done but this needs the consent of the takaful operator since such data is confidential.

Regulators as well as takaful operators need to monitor the claim amount from time to time so that any anomalies can be detected at an early stage. While it is the policyholders' right to submit claims, as discussed earlier, too many claims will affect the financial performance of the participants' special fund (PSA) and this will put pressure on the shareholders and management of the takaful operator.

Thus, education on the prevention of calamity is needed and protection should be the last resort after every alternative has been considered.

Nevertheless, this study reveals the determinants that will influence houseowner and householder takaful claims although consideration needs to be given to the limitation of the

study. The data gathered from TO1 also signified the magnitude of claims in terms of amount and value that the takaful operator processed for the past seven years, which is a significantly high cost of payouts.

Moreover, this suggests that the takaful industry needs to give immediate attention to this issue because if this issue is not managed properly, it will cause negative financial implication to takaful operators. ■

REFERENCES

- Anderson, J. (2006). Climate Change and Natural Disasters: Scientific Evidence of a Possible Relation Between Recent Natural Disasters and Climate Change. *DG Internal Policies of The Union*, 1-30.
- Bernama. (2018). Fires caused RM5b in losses nationwide in 2017, statistics show. *The Malay Mail Online*. Retrieved from <http://www.themalaymailonline.com/malaysia/article/fires-caused-rm5b-in-damages-nationwide-in-2017-statistics-show#UDoUquYlsjE3upFh.97>
- Brother SPSS. (2015). (2018, April 30). How to test normality with the Kolmogorov-Smirnov Using SPSS. Retrieved from <https://www.spsstests.com/2015/03/how-to-test-normality-with-kolmogorov.html>.
- Boadi, L. A., Tee, E., & Opoku, R. T. (2017). Analysis of Factors Affecting Outstanding Claim Provision of Non-Life Insurance Firms in Ghana. *IOSR Journal of Economics and Finance*, 08(04). doi:10.9790/5933-080204 (Jul. -Aug. 2017), 26-34.
- Federal Bureau Investigation. (n.a.). Insurance fraud. Retrieved from <https://www.fbi.gov/stats-services/publications/insurance-fraud>
- Insurance: Speeding up the claims process. (2018, January 15). Retrieved from <http://www.theedgemarkets.com/article/insurance-speeding-claims-process>
- Ismail, M. (2013). Determinants of Financial Performance: The Case of General *Takaful* and Insurance Companies in Malaysia. *International Review of Business Research Papers*, 111-130.
- Martz, E. (2013). Bewildering Things Statisticians Say: "Failure to Reject the Null Hypothesis". Retrieved from <http://blog.minitab.com/blog/understanding-statistics/things-statisticians-say-failure-to-reject-the-null-hypothesis>
- Masriwanie, M. (2016, September 17). About 6,000 premises destroyed by fire annually in Malaysia. *New Straits Times*. Retrieved from <https://www.nst.com.my/news/2016/09/176607/about-6000-premises-destroyed-fire-annually-malaysia>
- Moh, J. (2017, November 30). A burning issue. *New Sunday Times*. Retrieved from <https://www.nst.com.my/opinion/leaders/2017/11/304224/burning-issue>



- Mohd Dan, Z. (2015). Rangkuman kejadian banjir terburuk dalam sejarah negara. *Utusan Malaysia*. Retrieved from <http://www.utusan.com.my/video/rangkuman-kejadian-banjir-terburuk-dalam-sejarah-negara-1.47499>
- Muhamat, A. A., Jaafar, M. N., & Alwi, S. F. S. (2017). General *Takaful* claims: An experience of takaful operator in Malaysia. *Journal of Emerging Economies & Islamic Research*, 5.
- Powell, W. (2017). *A Phenomenological Study of SAS No. 99 and Auditors' Perception of the Fraud Triangle Theory*. Northcentral University (doctoral dissertation). Retrieved from ProQuest (accession number 10260269)
- Rahim, M. S. N. A. (2015). The Current Trends and Challenging Situations of Fire Incident Statistics. *Malaysian Journal of Forensic Sciences*, 6(1), 63-78.
- Ramachandran, G. (1999). Fire safety management and risk assessment. *Facilities*, 17(9/10), 363-377. doi:10.1108/02632779910278782
- Schiller. (2002). The Impact of Insurance Fraud Detection System. *Working Papers on Risk Insurance* 1-20.
- Tan, Y. R., Akashah, F. W., & Mahyuddin, N. (2016). The analysis of fire losses and characteristics of residential fires based on investigation data in Selangor, 2012-2014. *MATEC Web of Conferences*, 66, 00109. doi:10.1051/mateconf/20166600109
- Tschoegl, L. (2006). An Analytical Review of Selected Data Sets on Natural Disasters and Impacts. *CRED*, 1-19.
- Viaene, S., & Dedene, G. (2004). Insurance Fraud: Issues and Challenges. *The Geneva Papers on Risk and Insurance - Issues and Practice*, 29(2), 313-333. doi:10.1111/j.1468-0440.2004.00290.x
- Viscusi, W. K., & Born, P. (2006). The Catastrophic Effects of Natural Disasters on Insurance Markets. doi:10.3386/w12348
- Olalekan Yusuf, T., & Rasheed Babalola, A. (2009). Control of insurance fraud in Nigeria: an exploratory study (case study). *Journal of Financial Crime*, 16(4), 418-435. doi:10.1108/13590790910993744
- Zurich Municipal. (2014). (2018, April 30). *Factors influencing insurance premiums*. Retrieved from <http://zurichmunicipalcrif2014.co.uk/presentation/Factors%20Influencing%20Insurance%20Premiums.pdf>