



# ANALYSIS OF CLAIM RATIO, RISK-BASED CAPITAL AND VALUE-ADDED INTELLECTUAL CAPITAL: A COMPARISON BETWEEN FAMILY AND GENERAL TAKAFUL OPERATORS IN MALAYSIA

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#### Introduction





Participants contribute money to a pooling platform in order to insure one another from liability or damage in accordance with the Islamic concept known as Shariah

Takaful operators who do not fulfill the level of capital required by BNM which is about 130% capital will undergo stricter supervisory actions or restructuring measures

In the Malaysian Takaful business, insurance penetration steady increase is extremely low among health insurance and family takaful within the bottom 40% of income level known as B40 compared to general insurance and takaful

With the advent of the current B40 plan, mySalam, both conventional insurance and takaful protection coverage has been improved



#### Objective





To evaluate the financial performance of Takaful operators in Malaysia through Claim Ratio, Risk-Based Capital (RBC) and Value-Added Intellectual Capital (VAIC) approaches.





#### Overview of Malaysian Takaful Operators

Akhter and Khan (2015)

- With more than 60% of Muslim residents, Malaysia is opening up a large market sector for the Takaful business. Considered the undesirability of conventional insurance among Muslims, Takaful operators arose to suit their needs
- Malaysia, demand in both conventional and Takaful insurances was influenced by income, financial sector and urbanization while the dependence ratio has the reverse effect

Husin (2019)

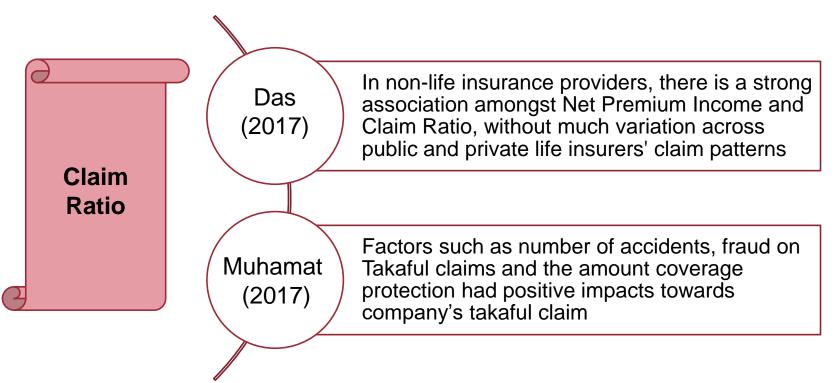
- Some concerns were identified that might impede the country's takaful progress
- The takaful market in Malaysia has witnessed substantial development despite being relatively new

Takaful has a significant influence on Malaysia's economic growth and requires considerable enhancement in order to remain competitive with conventional insurance.





Approaches Used in Assessing Financial Performance of Insurance Industry

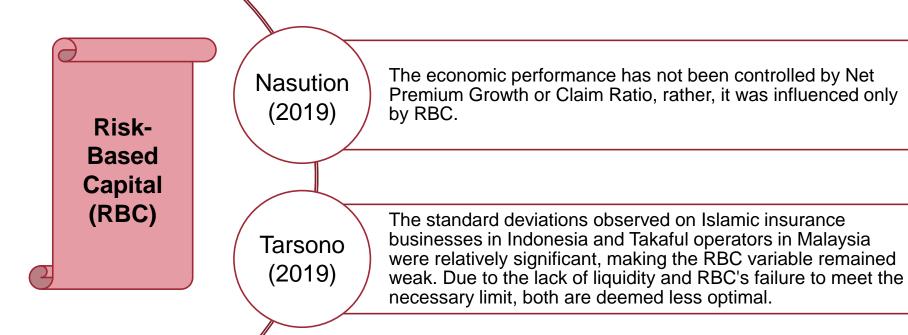








Approaches Used in Assessing Financial Performance of Insurance Industry



RBC's level must be taken serious considerations depending the requirement level authorized by BNM towards insurance industry





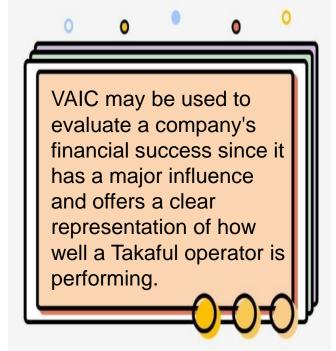
#### Approaches Used in Assessing Financial Performance of Insurance Industry

Value-Added Intellectual Capital (VAIC) Nasir & Idris The relationship between IC's productivity and corporate performance may not seem to be well-defined.

Kweh (2019) In terms of firm performance, IC has a positive influence on business performance and is critical in enhancing firm performance, with HCE and CEE being more significant than SCE.

S. Mohamad & Bujang (2019)

There tends to be an association between VAIC and return on investment (ROI), with a greater VAIC number indicating a higher ROI. Firms with higher levels of CEE, HCE, and SCE have a beneficial impact on financial performance.





# Methodology



- Secondary data
- Obtained from audited financial statements of Takaful operators
- Study period: 2015-2019
- Included 15
   listed Takaful
   operators under
   BNM

#### DATA COLLECTION

- Analyzed according to each type of fund for every Takaful operators, family takaful which have 11 Takaful operators and general takaful which have 6 Takaful operators
- A total of 55 and 26 financial data were gathered according to family and general takaful business respectively



# Methodology

LISTED TAKAFUL OPERATORS IN MALAYSIA



#### General Takaful Fund

- Etiga General Takaful Berhad Hong Leong MSIG Takaful Berhad
- Prudential BSN Takaful Berhad
- Syarikat Takaful Malaysia Am Berhad
- Takaful Ikhlas General Berhad
- Zurich General Takaful Malaysia Berhad



**FWD Takaful Berhad** 

AIA Public Takaful Berhad

AmMetLife Takaful Berhad

Etiqa Family Takaful Berhad

Great Eastern Takaful Berhad

Etiga General Takaful Berhad

Hong Leong MSIG Takaful Berhad

Prudential BSN Takaful Berhad

Sun Life Malaysia Takaful Berhad

Syarikat Takaful Malaysia Am Berhad

Syarikat Takaful Malaysia Keluarga Berhad

Takaful Ikhlas Family Berhad

Takaful Ikhlas General Berhad

Zurich General Takaful Malaysia Berhad

Zurich Takaful Malaysia Berhad



#### AIA Public Takaful Berhad AmMetLife Takaful Berhad

- Etiga Family Takaful Berhad
- FWD Takaful Berhad
- Great Eastern Takaful Berhad
- Hong Leong MSIG Takaful Berhad
- Prudential BSN Takaful Berhad
- Sun Life Malaysia Takaful Berhad
- Syarikat Takaful Malaysia Keluarga Berhad
- Takaful Ikhlas Family Berhad
- Zurich Takaful Malaysia Berhad







Claim ratio

 Assess how much actual money insurers or Takaful operators spend out from the total premiums or contributions they received from policyholders.

Claim ratio = 
$$\frac{Net\ claim\ incurred}{Net\ contributions}$$

Risk-based Capital (RBC)

- To compute the RBC ratio, each insurance company will be ranked using the Capital Adequacy Ratio formula (CAR). This formula determines if there is enough accessible capital to support the required capital, which may be found within that form of businesses and shareholder funds.
- The financial capability of the operator will be assessed using CAR to see if it meets the regulatory minimum capital by computing total capital available (TCA) and total capital required (TCR).

$$CAR = \frac{TCA}{TCR} * 100\%$$

Value-Added Intellectual Capital (VAIC)

- VAIC made up of three components which are VACA, VAHU and SCVA.
- VACA stands for value addition to capital employed, whereas CA stands for capital employed equal to
  gross asset book value minus intangible asset. Meanwhile, VAHU is a computation of the human capital
  expenditure that shows the benefit associated with each dollar paid as a worker's wage and SCVA is a
  measure of structural capital efficiency.

$$VAIC = VACA + VAHU - SCVA$$

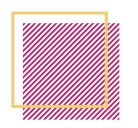


## Results (Claim Ratio)



- Prudential BSN's incurred claim ratio is the lowest among family takaful funds, implying that this firm makes a significant profit after paying claim amounts during a five-year period.
- ➤ Prudential BSN, on the other hand, had a significant loss in general takaful in 2018, with the highest incurred claim ratio among the ratios analyzed.
- Since their claim ratio for family takaful funds are greater, Etiqa Berhad, Hong Leong MSIG, and Takaful Ikhlas Berhad experience reduced earnings.

Company	Year	Claim Ratio		Company	Year	Claim Ratio		
		Family	General	1		Family	General	
		Takaful	Takaful			Takaful	Takaful	
AIA	2015	62.93%		Prudential BSN	2015	29.28%	3.35%	
	2016	65.51%			2016	31.54%	10.01%	
	2017	68.13%			2017	32.96%	8.95%	
	2018	64.55%			2018	32.49%	2272.73%	
	2019	74.01%			2019	33.26%	NA	
AmMetLife	2015	62.50%		Sun Life	2015	54.04%		
	2016	82.78%			2016	50.67%	7	
	2017	76.04%			2017	64.11%	7	
	2018	76.52%			2018	49.14%	┪	
	2019	74.10%			2019	84.71%	7	
Etiga	2015	70.26%	63.81%	Syarikat Takaful	2015	66.12%	26.49%	
0000000	2016	79.50%	55.59%	Malaysia Berhad	2016	64.21%	36.94%	
	2017	90.26%	56.79%	1	2017	53.89%	45.90%	
	2018	73.17%	58.65%	1	2018	52.90%	49.14%	
	2019	108.70%	62.28%		2019	41.65%	47.08%	
FWD	2015	63.61%		Takaful Ikhlas Berhad	2015	77.35%	40.65%	
	2016	67.80%			2016	111.86%	60.15%	
	2017	56.81%			2017	94.52%	49.32%	
	2018	72.79%			2018	70.69%	60.93%	
	2019	123.30%			2019	93.62%	30.52%	
GreatEastern	2015	44.08%		Zurich Takaful Berhad	2015	70.10%	70.84%	
	2016	46.08%			2016	56.77%	71.81%	
	2017	49.61%			2017	73.09%	NA	
	2018	48.86%			2018	51.77%	63.69%	
	2019	69.99%			2019	68.69%	67.46%	
Hong Leong	2015	79.49%	17.72%				· · · · · · · · · · · · · · · · · · ·	
MSIG	2016	77.99%	26.43%	]				
	2017	75.07%	36.62%	]				
	2018	69.38%	NA	]				
	2019	82.54%	NA	]	1			



#### Results (RBC)

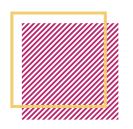


Company	RBC (%)											
	Family Takaful							General Takaful				
	2015	2016	2017	2018	2019	Average	2015	2016	2017	2018	Average	
AIA	35.99	24.89	23.91	68.76	61.64	43.04	-					
AmMet Life	100.48	115.35	61.30	55.47	45.32	75.58	-					
Etiga	342.84	482.75	384.56	221.61	214.72	329.30	528.58	767.50	610.23	78.78	496.27	
FWD	299.18	297.61	349.21	389.46	397.49	346.59	-	•	•		•	
Great Eastern	29.93	45.47	36.83	40.37	8.53	32.22	-					
Hong Leong MSIG	162.91	126.23	91.96	80.21	115.90	115.44	229.61	332.58	339.32	327.96	307.37	
Prudential BSN	12.05	12.00	102.62	95.14	84.02	61.17	156.86	160.35	157.45	143.45	154.53	
Sun Life	142.82	135.74	87.93	135.30	122.75	124.91	-		•			
Syarikat Takaful Malaysia Berhad	171.71	173.90	175.74	139.18	183.97	168.90	250.96	321.78	307.73	260.53	285.25	
Takaful Ikhlas	39.62	34.67	28.23	21.19	23.78	29.50	192.63	159.66	84.28	175.96	153.13	
Zurich Takaful	132.67	332.83	866.18	500.14	381.24	442.61	116.12	258.58	1202.55	374.46	487.93	

For both general and family takaful company, Etiqa Berhad, Syarikat Takaful Malaysia Berhad, and Zurich Takaful Berhad accomplish the satisfied level of capital mandated by BNM in RBC frameworks, which is 130%.

FWD is deemed to obey the criterion of regulatory minimum capital level with the CAR amount of 346.59% for companies that primarily offer family takaful protection.

For general industry, the average CAR amount over a five-year period is regarded excellent having more than 130% capital are considered acceptable.



# Results (VAIC)



Year	Company	Value Added Intellectual Capital (VAIC)									
		Family Takaful				General Takaful					
		VACA	VAHU	SCVA	VAIC	VACA	VAHU	SCVA	VAIC		
2015	AIA	-0.7074	1.0791	0.0733	0.4450	-					
	AmMet Life	-1.1029	1.4769	0.3229	0.6968	-					
	Etiga	-0.5593	15.7758	0.9366	16.153	-1.4269	254.2975	0.9961	253.8667		
	FWD		1.1820	0.1540	1.3360	-					
	Great Eastern	-2.2987	2.5533	0.6083	0.8629	-					
	Hong Leong MSIG		1.1708	0.1459	1.3166		1.3374	0.2523	1.5896		
	Prudential BSN	9.7954	-2.8051	1.3565	8.3469	-2.8202	1.0377	0.0363	-1.7461		
	Sun Life	0.3436	4.2571	0.7651	5.3658	-					
	Syarikat Takaful Malaysia	-3.2809	3.4926	0.7137	0.9253	-1.6330	1.7383	0.4247	0.5301		
	Takaful Ikhlas	0.4017	1.5165	0.3406	2.2588	2.3288	1.6100	0.3789	4.3176		
	Zurich Takaful	-2.4818	1.0317	0.0307	-1.4194	NA	1.1430	0.1251	1.2681		

VAIC value in 2015

- With a VAIC score of 16.1531, Etiqa outperformed the other 14 Takaful operators, followed by Prudential BSN and Sun Life scoring 8.3469 and 5.3658 respectively for family takaful business.
- Conversely, Etiqa tops the list of six general Takaful operators with a score of 253.8667, trailed by Takaful Ikhlas and Hong Leong MSIG with scores of 4.3176 and 1.5896, correspondingly.



## Results (VAIC)



		Value Added Intellectual Capital (VAIC)									
Year	Company		Family T	General Takaful							
		VACA	VAHU	SCVA	VAIC	VACA	VAHU	SCVA	VAIC		
2019	AIA	-0.0791	0.4048	- 1.4704	-1.1447	-					
	AmMet Life	-0.8311	1.7199	0.4186	1.3074	-					
	Etiga	-0.8448	22.3426	0.9552	22.4531	-1.5152	1.8842	0.4693	0.8382		
	FWD	13.3360	1.0064	0.0064	14.3487	-					
	Great Eastern	-1.0464	2.1040	0.5247	1.5823	-					
	Hong Leong MSIG	0.1048	1.3842	0.2775	1.7665	0.0325	1.1893	0.1592	1.3810		
	Prudential BSN	16.8787	-5.9184	1.1690	12.1292	-2.5638	1.2052	0.1703	- 1.1883		
	Sun Life	0.2964	3.2308	0.6905	4.2177	1					
	Syarikat Takaful										
	Malaysia	-2.8669	6.7069	0.8509	4.6910	-0.3084	1.6673	0.4002	1.7592		
	Takaful <u>Ikhlas</u>	0.6643	1.6368	0.3890	2.6901	2.4136	1.3905	0.2808	4.0849		
	Zurich Takaful	0.0863	- 306.6216	1.0033	-305. 5320	-0.7510	2.8801	0.6528	2.7819		

VAIC value in 2019

- Etiqa, FWD, and Prudential BSN maintain to be the top achievers in the family takaful fund, with scores 22.4531, 14.3497 and 12.1292 respectively.
- On the other side, Takaful Ikhlas, Zurich Takaful, and Syarikat Takaful Malaysia Berhad are the best achievers in general takaful.



#### Conclusion



It is beneficial for insurance companies to monitor their Claim Ratio as it allows them to forecast if their company would be able to retain adequate capital in the upcoming to satisfy their clients' protection needs.

In order to avoid any supervisory authorisation by BNM, all insurance operators must fulfil the RBC indication.

Takaful operators and other industries must also employ the Intellectual Capital approach to evaluate their company's success since it includes all elements of the business, not just the financial aspect.

Preferable to observe the performance of Takaful operators from various aspects, such as profitability and management aspects.

Further research is needed in many more diverse contexts, such as extending the study time to generate more precise results and incorporating additional financial ratios to evaluate Takaful operators' operational and financial success in the short and long term.





# THANK YOU

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MATHEMATICS AND STATISTICS