

جامعة حمدان بن محمد الذكية Hamdan Bin Mohammed Smart University

مركز دبي للصيرفة والتمويل الإسلامي







H.H. Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum
Crown Prince of Dubai and Chairman of the Dubai Executive Council
President of HBMSU



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H.E. Essa Kazim
Secretary General, Dubai Islamic Economy Development Centre

The launch of this landmark report comes at a time when takaful is more relevant and necessary than ever before across the world. As a concept based on noble values that prioritise human welfare and social cohesion, takaful is significant not only as a business model but equally for the ethical and transparent culture it perpetuates.

Today there is a consensus that we are in urgent need of a world order built on strong bonds where respect, equality and justice prevail and intricate relationships among varied segments of society ensure social cohesion and stability.

Admitting the fact that globalisation has brought to the surface critical differences between cultures, ethnicity and nationalities, leads us to the concur that the concept of identity has been redefined. Individuals, business communities, and indeed even governments are now being pushed to transcend their differences and find common ground – forging a human connection and collaborating for a better future.

Nevertheless, now more than at any time in history the world is witnessing divisions, polarisation and fanaticism as alien and often undesirable values spread rampantly leading to recurrent crises of instability - manifested primarily in the widening gap between rich and poor countries.

The Takaful: Sustainability and Growth (2015-2025) Report reveals that over the past 12 years, takaful formations grew at an impressive 13.4% CAGR – meaning, the establishment of as many as 17 new takaful operators (or 'windows') every year! However, in the seven-year period from 2008 to 2015, that growth rate declined to 8.2%, and more importantly, during the five years period (2010-2015), new takaful establishments stalled to a nominal growth of 4.6% per annum.

The report elaborates on the reasons for the decline across its chapters, in addition to providing an extensive outlook on the future of the industry. However, if we delve deeper into the challenges the world has been struggling with since 2008, we can confidently say that there was a general decline in the prevailing global value system that triggered various repercussions in the financial landscape – sparking the global financial crisis. Fear and uncertainty about the future played a big part in shaping this scenario.

Given the rising fortunes of Islamic economy today, takaful is considered one of the key drivers not only to economic growth and sustainability but also to social cohesion and stability that countries across the globe seek desperately. Interestingly, this concept that dates back more than 1,000 years, is working to better the lives of people and societies in the 21st century and beyond!

The age-old concept of mutual risk sharing is a key pillar of the future economy where financial institutions, products, laws and transactions are the outcomes of one common vision of mutual social justice.

We commend the efforts of our partners Hamdan Bin Mohammed Smart University and the Dubai Center for Islamic Banking and Finance for leading these comprehensive studies that highlight the importance of takaful as a security blanket for individuals today and advocate the vital need for change in the economic culture – from risk transfer to risk sharing. The report will undoubtedly serve as an important value-addition and ready-reckoner on takaful and the Islamic economy.

H.E. Essa KazimSecretary General,Dubai Islamic Economy Development Centre



Dr. Mansoor Al Awar

HBMSU Chancellor

Chairman of the Governing Board,
UNESCO Institute for Information Technologies In Education

The DCIBF strategies are carefully planned and implemented with reference to "Dubai: The Capital of Islamic Economy" Initiative launched by His Highness Sheikh Mohammed Bin Rashid Al Maktoum, the UAE Vice-President, Prime Minister and Ruler of Dubai. These strategies take inspiration also from the Dubai Plan 2021 that highlights knowledge economy, talent growth, modernization of education and sustainable socio-economic development.

Since its inception, the DCIBF has carved a leading role for itself in creating and disseminating knowledge that would go a long way in creating a positive impact on Islamic economic development of the UAE. It has strived to influence governmental and social stances on Islamic banking and finance, and it has taken a lead for generating useful ideas and projects that could be integrated into policies and strategies across the various aspects of the industry.

Therefore, the DCIBF role in society has been quite visible and remarkable. It has led many initiatives, most notably the development of a rigorous research framework. This in turn leads to several research reports to promote islamic banking, finance and Takaful, to foster the creation and dissemination of vital information, and to develop academic programs that can flourish and reach out to all levels of society from within the UAE. The recent remarkable growth of the global Takaful industry and its prospects is the focus of this scientific report published by the DCIBF. The report provides an opportunity for different stakeholders to engage with DCIBF and its experts to exchange views on the strategic issues pertinent to the Takaful model and realization of its potential over the next 6 - 8 years. The report identifies key pressing issues facing Takaful and makes useful suggestions and recommendations for effectively addressing those issues in policymaking.

Dr. Mansoor Al Awar

HBMSU Chancellor Chairman of the Governing Board, UNESCO Institute for Information Technologies In Education



Professor Nabil Baydoun
Vice Chancellor for University Advancement

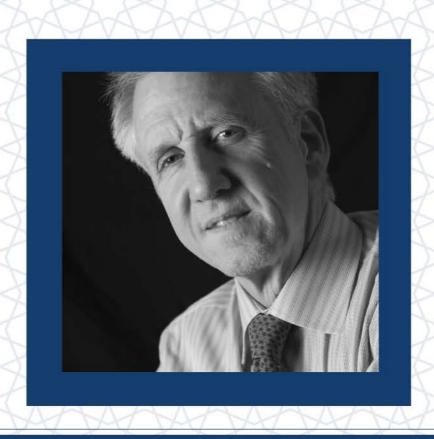
With the Takaful sector demonstrating deeper significance in today's global business environment, the remarkable growth of Islamic finance over the last two decades, and the initiative of H.H. Sheikh Mohammed bin Rashid, Vice President of the UAE and Ruler of Dubai for Dubai to become the "global capital" of the Islamic economy, comes this well-researched DCIBF Report: "Takaful: Sustainability and Growth 2015 to 2025" which concisely provides an assessment of the current status of the sector, its ability to stabilize during times of economic downturn (2008-2011) and the current slow-growth as well as its prospects into the future.

Takaful aims to address the needs of more than 20 percent of the world's population either in Muslim countries or in the increasing number of Muslims residing in Western countries such as Australia, the USA, Canada, Germany, the UK, France, and parts of Europe. The real potential of Takaful is not limited to Muslims, as it extends also to those outside the Islamic faith who hold similar values and business ethics.

Previously, DCIBF Takaful Report of 2015 on "Takaful: Global Challenges to Growth, Performance and Governance" gives convincing evidence that Takaful is permanently within the landscape of worldwide insurance. This current Takaful Report probes the issues of sector sustainability, the changing demands of regional insurance markets, a persistent scarcity of skilled manpower and financial performance. Nevertheless. Takaful worldwide growth since 2012 is impressive according to the figures herein. No doubt, there is still much work to be done to attain the objectives for sustainable growth for this sector. Many Takaful companies are operating in a mixed Islamic-conventional insurance system environment. The increasing global competitive insurance environment and its continuously changing pricing and risk structure represent serious challenges for Takaful sector, which this Report addresses with policy recommendations.

Professor Nabil Baydoun

Vice Chancellor for University Advancement



Dr. Omar Fisher Chief Editor This Report describes in detail the remarkable and consistent global growth of Takaful since 2005. One could predict that as disenchantment swells with conventional insurance in Emerging markets, and more public scrutiny is placed on good corporate governance, ethics, and "best practices" of mutual risk systems, this worldwide expansion will likely persist. Takaful operators should be favored due to their sharing of annual surplus (if any), in built transparency, conservative investment policies, strong protection of "consumer rights" of policyholders, and ethical business orientation.

Given a trend sweeping across the global financial services industry for "socially responsible" investing and an awakening to benefits of the Islamic Economy with expansion of islamic banking and finance, it is safe to assume that over time the current preference being expressed by consumers for Takaful will drive its sustainability and will push up Takaful Penetration and Density (utilization) rates to surpass global norms. Eventually by capturing 1%-2% of global risk coverages, Takaful annual gross contribution volume can achieve \$60 Billion in revenues, which will guarantee that Takaful becomes a permanent "fixture" in worldwide insurance.

Data compiled for this Takaful Report makes clear that the industry is barely 4 decades young and yet has spread into 44 countries. Annualized growth—during the early 2000s flying high at more than 20% per annum in many regions – has slowed somewhat to approximately 11-13% but still outstrips growth rates of conventional insurance.

Among this Report's recommendations to overcome the inhibiting factors that challenge Takaful's sustainability are:

- Supportive regulatory environments harmonizing rules and regulations with Takaful fundamental principles which provides confidence to consumers and credibility to the system
- Policies that encourage Islamic banking and finance transactions to be protected by Takaful services and products
- Market-driven regulations encouraging new Takaful entities and conducive to a fair balance between Shareholders and Policyholders rights and interests
- Flexibility in accounting practices and standards that recognize the unique features of Takaful while safeguarding transparency
- Promoting an Islamic investment platform which permits diversification among Shari'ah compliant assets and presents a range of risk exposures and asset-backed rates of return
- Reshaping existing dependence by Takafuls on in-house salesforces, and instead to cultivate a network of insurance agents or brokers to extend marketing reach
- Encourage cross-border regionalization of Takaful companies along with inter-national cooperation, associations and adherence to a Code of Ethics

 Strengthen the licensing of Takaful agents as well as the training of skilled manpower in the sector to boost supply of personnel to fill the large gap (some 40,000 positions) in the workforce forecast over the coming 8 to 10 years.

In addition, the popular "hybrid" business model of Takaful needs to be re-visited by practitioners and Islamic Scholars alike to build consensus on revised practices to fairly balance all stakeholder rights and interests. Evidence suggests a mis-alignment of shareholder and policyholder rights that threatens to undermine the long-term financial viability of hybrid Takaful entities. Historical models of Takaful were purely mutual risk-sharing, without shareholders. Heightened attention to resolving these and other issues identified in this Report will most assuredly strengthen Takaful businesses worldwide and certainly propel enduring growth for years well into the 21st century.

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Part I

Chapter 1

Overview: Structure of Supply and Demand

1.1. The Concept of Takaful

It can be asserted that concept of Takaful pre-dates conventional insurance by at least one thousand years and that is why it is not surprising if aspects of systematic risk sharing appear quite similar—especially when viewed in the context of modern concept of corporate mutual insurance.

Modern "Takaful" business as an Islamic alternative to insurance business is based on the concept of mutual risk sharing consistent with Shari'ah principles, avoiding involvement of any element of interest or gambling as defined in Islamic law. Essential attributes of the Takaful based insurance are:

- The mutual indemnification is done through a pool of Takaful fund built up from the donations contributed by participants for this purpose
- Under Takaful business, all contracts, operations and investments must be Shari'ah compliant
- Members join Takaful Fund seeking fulfillment of noble goals of solidarity, brotherhood and community well-being
- The risk-sharing contractual relationship is Shari'ah compatible in which the participants (or policy holders) mutually indemnify other participants in the spirit of cooperation and not in the spirit of gambling and commercial exchange
- The Takaful operations can be managed under Agency contract for professional management of common risk pool owned by participants
- The management is guided by the principle of Wakala, Mudarabah, or Waqf and receives a service fee for managerial duties
- Takafuls must to the fullest extent possible share risk prudently with Re-Takafuls rather than conventional reinsurers
- The objective of Takaful Fund in the Takaful Business is "self-sustaining operations"
- Advisory board of Islamic scholars supply direction on adherence to Shari'ah regulations and precepts

1.2. Takaful Operators

Takaful business, as an alternative to conventional insurance, is emerging rapidly worldwide. From just a handful of players in the 1980s, the number of Takaful operators climbed to 58 in 2003, and swelled to 269 established operators in 44 countries worldwide as of 2015. This includes full-fledged Takaful operators (TOs), Takaful "windows" within conventional Insurance companies, Cooperatives and Re-Takaful (reinsurance) operations. In the last 10 years alone the number of companies has expanded 4-fold. A comprehensive directory¹ of Takaful companies worldwide (as of 2015) appears in the Appendix and reveals currently:

- 234 primary Takaful companies and Takaful "Windows"
- 35 Re-Takaful Businesses Of which:
- 64 as Takaful Cooperatives (including 14 in Iran, 37 in Saudi Arabia and 13 Sudan, and
- 11 closed or merged Takaful businesses

	2012	2015	Delta	% change
Total Takafuls	244	269	+25	10%
Primary Takaful	215	223	+9	4%
Re-Takaful	22	35	+13	59%
Closed /Merged	-7	-11	+4	

Table 1.2.1: Global Takaful -- Expansion 2012-2015

	2012	2015	Delta	% change
Total Active	238	258	+20	8%
Takafuls				
Pure Takaful	129	139	+10	8%
Cooperatives	62	64	+2	3%
Takaful "Windows"	25	20	-5	-20%#
Re-Takaful	22	35	+13	59%

Table 1.2.2: Global Takaful Growth by Type of Institution 2012-2015

Note: result here is due to more information available to classify Takaful type and shift within Indonesia from Takaful "Windows" to independent operators.

¹ Directory compiled from GCC Insurance Directory, World Islamic Insurance Directory 2005-2014 (ARIG/Takaful RE), ICMIF Mutual Directory 2015 (London) and Dr. Fisher's data sources.

When examined from a regional perspective, there are presently seven (7) major geographical groupings, which shall be used throughout this report:

- Indian Sub-Continent/Near Asian Region India, Pakistan, Bangladesh
- North Africa and Levant including Jordan and Syria
- Africa Sub-Sahara and other Africa
- Islamic Republic of Iran
- Gulf Cooperation Council Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and UAE
- ASEAN and Pacific: Indonesia, Brunei, Malaysia, Thailand, Singapore, and Philippines
- Other: EU/Trinidad//Turkey/Kazakhstan/Yemen/USA

Due to their relative importance and influence on global Takaful, the countries of Malaysia, Iran and Saudi Arabia will be discussed sometimes separately as well. Throughout this report best efforts have been made to assure accuracy of the data yet because many Takaful businesses are privately held, their data could not be included in the report. Some inferences and extrapolations of their data were necessitated for regional comparison purposes.

Since 2003, a total of 210 new Takafuls were established. The GCC region promoted establishment of 67 new Takafuls, including the restructuring of the insurance industry within Kingdom of Saudi Arabia in 2006- which re-licensed 37 new cooperative companies and 1 ReTakaful. South East Asian/Pacific/ASEAN countries were second highest rate of expansion in formation of 26 new Takaful Operators. The GCC remains home to the largest number of Takaful Operators 88, with 66 calling South East Asia/Pacific/ASEAN their home. Refer to the following table and charts for breakout:

Region	Takafuls 2015	Takafuls 2003
Indian Sub-Continent and Near Asia	15	1
North Africa and Levant	68	13
ASEAN and Pacific	66	13
GCC	88	17
Iran	14	11
Other-	9	3
EU/Trinidad/Turkey/Kazakhstan/Yemen/USA		
Totals	260	58

Table 1.2.3: Takaful Expansion 2003 – 2015: Geography

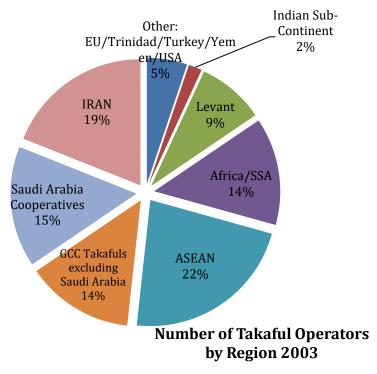


Chart 1.2.1: Number of Takafuls by Region 2003

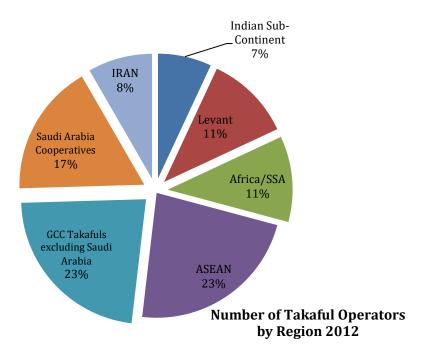


Chart 1.2.2: Number of Takafuls by Region 2012

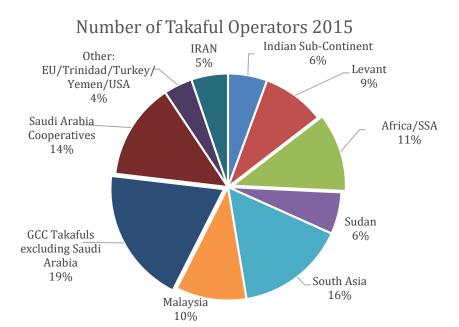


Chart 1.2.3: Number of Takafuls by Region 2015

Over the past 12 years, the expansion of Takaful institutions is quite impressive with a worldwide annualized compound growth rate of 13.4%. Since 2012, proliferation worldwide of Primary Takafuls has slowed to 3.4% annually (+17 new) while more ReTakafuls have sprouted up (+9% annualized growth or 8 new), presumably to service the demand build up for Islamic reinsurance capacity and underwriting assistance.

GCC region dominates the volume of global Takaful business, even with its modest population. Southeast Asia and Africa are the next dominant regions due to their large Muslim populations of 357 Mil and 314 Mil respectively. Their Emerging economies contain GDP of \$1.92 trillion and \$1.10 trillion. However, these charts may also confirm the highly fragmented nature of Takaful insurance markets that dominate in GCC's six countries where 88 companies are fiercely competing for similar risk business with combined population of only 49.5 Mils, yet strong GDP of \$1.66 trillion.

At individual country level, the three countries Kingdom of Saudi Arabia, Islamic Republic of Iran and Malaysia, host the highest number of Takaful and Re-Takaful Operators: Saudi Arabia (37) Iran (14), and Malaysia (24). Moreover, Takaful companies and Takaful "windows" are cropping up in diverse markets labeled Other (8 net as: Luxembourg, UK, Maldives, USA, Yemen, Kasakhstan, Trinidad-Tobago and Turkey.

From Table 1.2.4 below, it is apparent that within these regional markets, Takaful operators have carved out a competitive institutional foothold that varies from 3% of total

number of licensed insurers in EU/Other markets, 10% in Levant, 46% in Malaysia and nearly 100% in Iran and Saudi Arabia.

	2015	2012	2010	2010	2008	2003
	Takaful Cooperatives	Takaful Cooperatives	Total Insurance	Takaful Cooperatives	Takaful Cooperatives	Takaful Cooperatives
Total Global Active Takaful	260	237	781	207	150	58
Indian Sub-Continent and Near Asian	15	15	60	15	11	1
Republic of Iran	14	16	20	18	18	11
North Africa and Levant	25	24	221	24	12	5
Africa- Sub-Sahara and other	43	35	99	23	23	8
ASEAN/Pacific (excluding Malaysia)	42	29	69	24	24	9
Malaysia Takafuls	24	25	25	19	10	4
Saudi Cooperatives	37	35	34	34	10	9
GCC Takafuls (excluding Saudi Arabia)	52	50	153	44	36	8
Other: EU/Trinidad/Turkey/Yemen/USA	8	8	100	6	6	3
Global Takaful Non-Iran	246	221	761	189	132	47
Percent of Global Takaful						
Indian Sub-Continent and Near Asian	6%	6%	8%	7%	7%	2%
Republic of Iran	5%	7%	3%	9%	12%	19%
North Africa and Levant	10%	10%	28%	12%	8%	9%
Africa- Sub-Sahara and other	16%	15%	13%	11%	15%	14%
ASEAN/Pacific (excluding Malaysia)	16%	12%	9%	12%	16%	15%
Malaysia Takafuls	10%	11%	3%	9%	7%	7%
Saudi Cooperatives	14%	15%	4%	16%	7%	15%
GCC Takafuls (excluding Saudi Arabia)	20%	21%	20%	21%	24%	14%
Other: EU/Trinidad/Turkey/Yemen/USA	3%	3%	13%	3%	4%	5%

Table 1.2.4: Active Takaful and Re-Takaful Operators Worldwide

Sources: Dr. O. Fisher's research. #Note: data in 2003 was limited and thus may not account for all Takaful in operations.

1.3. Time in Business

Since 1979 when Takaful mutual risk sharing was re-discovered in Sudan, it can be inferred that this young industry must contain numerous youthful players that are striving to penetrate and sustain in the competitive insurance markets and struggling hard to make a pathway for scaling up operations. Charts 1.3.1/2/3 below paints a portrait of the global Takaful industry from data gathered on establishment dates for both Takaful and Re-Takaful businesses.

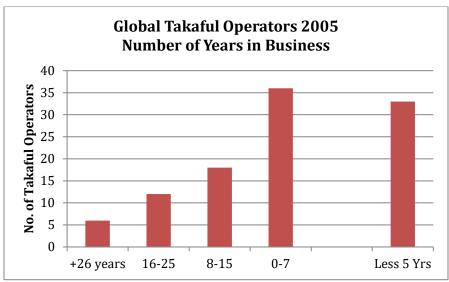


Chart 1.3.1: Time in Business (sample 122)

Sources: Dr. O. Fisher's research

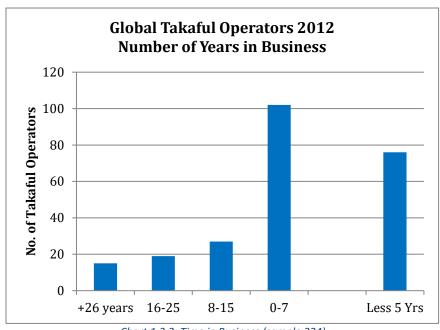


Chart 1.3.2: Time in Business (sample 224)

Sources: Dr. O. Fisher's research

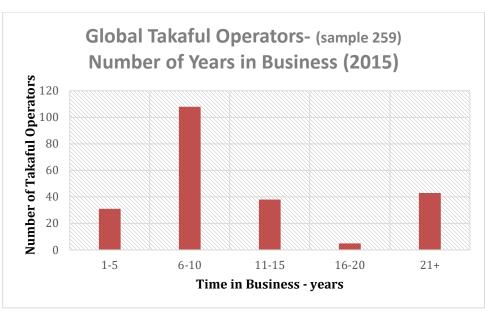


Chart 1.3.3: Time in Business (sample 259)

It is remarkable to note that 75% of Takaful companies in 2005 were in business for less than 15 years and 46% operated for less than 5 years. One-hundred and twelve (112) new Takaful and ReTakaful companies were launched between 2003 and 2015 end. Due to such rapid expansion of new Takaful Operators, by 2012, 80% were in business less than 15 years, with 47% having less than 5 years of operating experience. Ending in 2015, 79% are in business less than 15 years and 62% have operating experience less than 10 years.

Global Average Time in Business for a sample of 259 Takafuls shows 11.1 years. When eliminating the outliers of oldest Sudan State Coops and Iran Insurers (numbering 8), the Global Average Time in Business drops to 9.6 years. Hence, one can easily understand that the whole Takaful Industry worldwide is quite youthful as compared with conventional insurers possessing a history +300 years long.

It is noteworthy that in the 5 years of period 2003 – 2008 some 108 Takafuls were born. Moreover, in the ensuing 8 years of period between 2008-2015, there were another 108 net Takafuls established worldwide. Thus, during the first 2 decades since 1983, 58 Takafuls were set up in 21 countries, followed by no less than 211 new Takaful companies formed in 23 countries over the next 12 years. Of these some 11 Takafuls were also closed up or merged. The global dominance of GCC Region in Takaful business production is gradually eroding as more Takaful operators come on-stream in Africa, Levant, Near East and ASEAN/Pacific regions as well as scattered operators in the Other: EU/etc. region. Of the newest 124 Takafuls, 55 were established in GCC states, yet 69 Takafuls were launched in other regions.

Clearly the locus of impact is shifting away from the birthplace of Takaful in Arabian Peninsula and towards Takaful awakening and penetration into Emerging Markets of Africa, Indian Sub-Continent and ASEAN. African continent is home to over 33 new Takaful enterprises. South Asia/Pacific welcomed over 35 new Takafuls and Takaful "windows" since 2003.

1.4. Analysis of Regional Expansion Patterns and IOC

Over the extended period of 12 years (2003 to 2015) there is a steady expansion of Takaful institutions worldwide at an establishment rate of 13.4% annualized growth. However, the rate of annual growth is clearly slowing down overall: Compound Annual Growth Rate since 2010 is 5.3% and since 2012 is 3.6%. Of course, fewer new Takafuls over a larger base figure accounts for part of this slowdown in growth rate. While the past 8 years hosts no less than 112 new Takafuls, yet regional growth is most remarkable only in Levant/North Africa with +13 (108% increase), Africa/SSA/Other +20 (88% increase), ASEAN/Pacific/Indonesia with +18 (+75%) and Malaysia +17 (170%).

After a burst of new Takaful players in Indian Sub-Continent 2003 thru 2008, their regional annual growth slowed to approximately 5%, and in GCC (excluding Saudi Arabia) sustained only 6.3% growth. It is noted especially that the 16 new Takafuls across the GCC entered five (5) markets already stacked with other Takafuls; hence adding to already fierce competition there and a downward pressure on pricing. Consequently, the GCC region hosts the highest per country concentrations of Takafuls; Other concentrations exist in Indonesia, Malaysia and Iran:

Country	Number of Takafuls 2015
Bahrain	11
Kuwait	13
Oman	2
Saudi Arabia	38
UAE	14
Indonesia	35
Malaysia	24
Iran	14

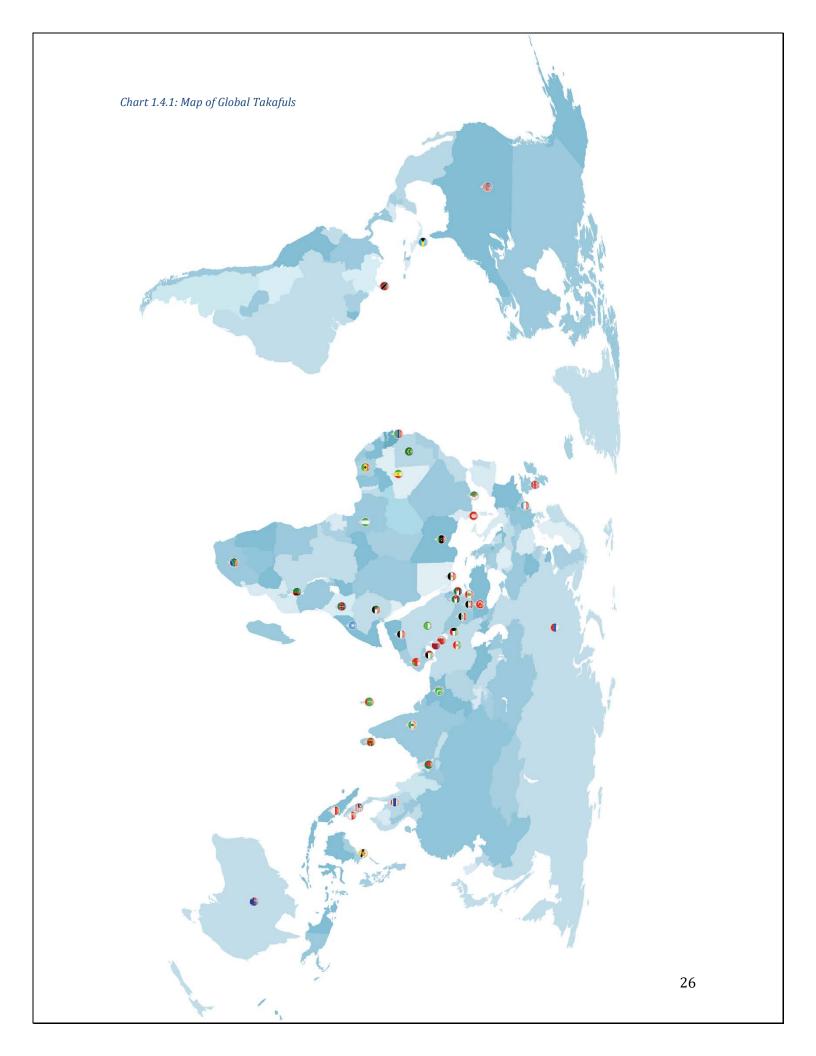
Table 1.4.1: Concentrations of Active Takafuls

Region	Compound Annual Growth Rate Institution Expansion Rate 2003- 2015
Indian Sub- Continentand Near Asia	25%
North Africa and Levant	14.3%
Africa-SSA/other Africa	19.6%
ASEAN/Pacific/S. East Asia	19.4%
Malaysia (alone)	17.2%
GCC (excluding Saudi Arabia)	16.9%
Saudi Arabia Cooperatives	12.2%
Iran	2.0%
Other: EU/Trinidad/Turkey/Yemen//USA	8.5%
Global Takaful Growth Rate	13.4%

Table 1.4.2: Regional Growth Rates in Spawning Takaful Institutions

Logically the Muslim majority populations of Organization of Islamic Conference (OIC) countries would be home to Takaful businesses as well as Islamic Banks. The image on the next page shows the geographical dispersion of Takaful entities across the globe with the clusters of new Takafuls taking roots in 51% of the 57 OIC countries over the past 30 years. Islamic Banks are present in a similar number of OIC countries. One observation: of the worldwide 269 Takaful entities established since 1979, 90% were established in OIC member countries.

Whereas only 15 of 32 African nations are home to Takaful enterprises. This strongly suggests that future growth in new Takaful businesses across Africa is highly likely due to untapped demand there. Significant new sales should also arise in high populations countries of India, China, Indonesia and others of ASEAN region: Philippines, Thailand, Malaysia. In addition, once the current migrant crisis in Europe calms, we can expect to see substantial new sales in other EU countries with concentrations of migrant communities; namely UK, France, Germany, Spain.



1.5. Re-Takaful

Primary Takaful companies are constrained by their adherence to Shari'ah compliant operations to prudently manage risk exposures by sharing them with (re)insurers that possess a larger capital base, more diversified portfolio of risks and generally more technical sophistication and actuarial skills. With the re-birth of Takaful, came the establishment of mutual risk-sharing mechanisms for Re-Takaful. Until some 10 years ago, there were only three (3) Re-Takaful companies. As to be expected, the emergent growth of primary Takaful players spawned risk sharing thru Re-Takaful (equivalent to reinsurance), whereby 20 full-fledged Re-Takaful and "windows" of Re-Takaful capacity were established by 2012 and another 11 new ReTakafuls have joined the global group by 2015. One ReTakaful was merged with the consolidation in 2004 of BEST RE and Islamic Takaful and ReTakaful Co. of Saudi Arabia.

Malaysia and Labuan Offshore hosts 9 ReTakafuls, Bahrain hosts 2, Republic of Iran has 1, 3 Re-Takaful "windows" are in Indonesia, 3 in Tunisia, 3 in Sudan and 3 in UAE.

As of 2015, the 30 ReTakafuls for which is there some data had an average Time in Business of generally 11.5 years. Yet setting aside the State reinsurance operators in Sudan (which began in 1979), average business life of ReTakafuls drops to 9.5 years. With the exception of four "Islamic windows" for Re-Takaful by Munich RE and Swiss RE and the plus +100 Mil capitalization of ACR Takaful and Takaful RE, other Re-Takaful businesses are modestly capitalized and localized in their scope of coverage.

Name of Company - Country	Time in Business	Type of Re- Takaful Model	Estimated Gross Takaful Cessions 2014	Est Capital Mils \$
Islamic Takaful & Retakaful (Bahamas)	29 years			\$25
Hannover RE (Bahrain)	9 years	Mudarabah	\$125 Mil	50
ACR MEA Takaful (Bahrain & Malaysia)	7 years	NA	NA \$85 Mil	
Africa Re (Egypt)	5 years	Window	NA	35
GIC Life Reinsurer (India)	2 years	Window		
TUGU Reindo (Indonesia)	11 years	Window	NA	
PT Reasuransi National (Indonesia)	6 years	Window		
PT Maskapai RE (Indonesia)	2 years	Window		
AMIN Reinsurance (Iran)	12 years	Window	NA	
Labuan RE (Malaysia)	7 years	Window	\$2 Mil	60

ACR Re-Takaful- NL (Malaysia)	7 years	NA		15
ALLIANZ- SE Life RE	5 years (W-	Window		
(Malaysia) ARIL -ASEAN RE (Malaysia)	2) 18 years	Mudarabah	\$45 Mil	25
Best RE Life and Non-Life (Malaysia)	5 years			80
MNRB Holdings RE-Takaful (Malaysia)	8 years			
Swiss RE (Malaysia)	6 years	Window	NA	50
Munich RE (Malaysia)	5 years	Window	NA	50
Al Khaleej Takaful- ReTakaful (Qatar)	3 years			15
Saudi RE – (Saudi Arabia)	7 years		\$43 Mil	65
Tokio Marine Nichido ReTakaful (Singapore)	8 years		NA	75
Sheikan Islamic Insurance & Reinsurance (Sudan)	32 years		\$25 Mil *	20
National Insurance & Reinsurance (Sudan)	42 years	Window (20 yrs)	\$14 Mil *	
Sudanese Insurance & Reinsurance	48 years	Window (20 yrs)		
BEST RE – (Tunisia)	30 years	Mudarabah	NA	120
Tunisia RE (Tunisia)	6 years	Window (2 yrs)		
ISIK Sigorta v Reasurar (Turkey)	3 years	Window		
Takaful RE (UAE)	10 years		\$225 Mil	125
Dubai Islamic Insurance & Reinsurance (UAE)	16 years	Mudarabah	\$34 Mil *	75
Emirates ReTakaful (UAE)	2 year			50
Al Fajr (Kuwait)	7 years	Wakala	\$62 Mil	85
Note* assumed 20% to 30% of total premiums written as cession //		rators and "Windows"	\$660 Mils	\$1,245 Mils

Table 1.5.1: Re -Takaful Operators and "Windows" – (as of 2015)

Source: Dr. O. Fisher's research.

ReTakaful and ReTakaful "windows" are established in 15 countries (up from 11 in 2012), with nearly one-third of this number hosted by Malaysia because of the lucid Takaful regulations and favorable tax status of Malaysia, as shown below:

Country	Number of Re- Takaful & Windows 2015	ReTakafuls 2008 #
Bahamas	1	1
Bahrain	2	2
Egypt	1	0
India	1	0
Indonesia	3	1
Iran	1	1
Kuwait	1	1
Lebanon	1	1
Malaysia	9	4
Qatar	1	0
Saudi Arabia	1	1
Singapore	1	0
Sudan	3	1
Tunisia	2	1
Turkey	1	0
UAE	3	2
Total	35	16

Table 1.5.2: Number of Retakafuls 2008 and 2015

By a rough estimation rounding up the figures in Table 1.5.1, total Re-Takaful premiums ceded in 2014 could reach \$0.660 to \$1.0 Bil dollars; if so, this represents maximum of only 7% of the global Takaful primary premiums underwritten in that year. As reference, typically a Non Life insurer would cede 30% to 50% of its primary risks to reinsurance, depending upon the category and its own risk appetite. This demonstrates the preference that primary Takaful companies are electing to re-insure Takaful risks with conventional reinsurers (rather than ReTakaful) possibly due to their large capital base, brand recognition and sophistication of software and underwriting expertise.

Until 2005 there is only 4 <u>pure</u> Retakafuls (ARIL, Islamic Takaful & ReTakaful, BEST RE, Sheikan) with risk sharing capacity of \$ 300Mils approximately (2X their paid capital). During the past 10 years, 27 new ReTakafuls have been established which expanded the global ReTakaful risk sharing capacity to roughly \$ 1,860-2,490 Mils (based upon 1.5 X to 2 X paid capital for underwriting capacity). Based upon global Takaful primary coverage of \$15.1 Bil, current ReTakaful capacity is estimated at only 33% of resources needed to address potential Takaful cessions of \$7.5 Bil, assuming an average 50% retrocession rate. Such an observation implies that Re-Takaful capacity currently available is more than adequate and that primary Takafuls are failing to tap this capacity for their annual cessions.

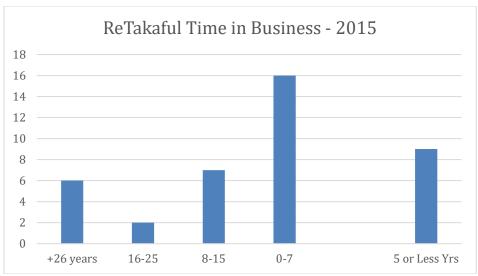


Chart 1.5.1: ReTakaful Time in Business (2015)

Despite moral imperatives to maintain Shari'ah compliance, clearly many Takaful operators elect to conclude risk- sharing treaties with conventional reinsurers. One plausible explanation here is that few primary Takaful operators carry any a financial rating (e.g. From AM Best, S&P or Phelps & Dodge) and "A" rated Re-Takaful companies are rare. Emirates ReTakaful and ACR ReTakaful are highest rated by A.M. Best rating agency at B++ (Good), Takaful RE BBB. Hence, Takaful management prefers to share risk management with reputed, financially sound and rated conventional reinsurers with stable operating history much longer than ReTakafuls.

As with any new financial service enterprises, young Takaful companies must identify and capture a "niche" market segment, bring new products and/or technologies to customers or perfect pricing of risks and business process efficiencies in order not simply to survive, but flourish. Overall, the rate of introduction worldwide of new Takaful entities between 2003 and 2012 (17.2% Compound Annual Growth Rate (CAGR) increase) far outstrips the 4.4% increase in number of conventional insurers in same markets [as per sample of our data]. In addition, between 2012 and 2015 another 26 Takaful and Re-Takaful companies were established (+11% increase). However, ramping up the "supply side" of Takaful services certainly does not guarantee long-term success. Stimulating "demand side" from prospective customers is certainly a critical focus.

Moreover, widening supply is more likely causing "head-to-head" heated competition in selected markets where multiple Takaful operators have added further to fragmentation of insurance business. Perhaps the massive population, sheer size and geography of Indonesia requires +31 Takaful Primary operators, and Sudan 16, yet it is questionable that a UAE market requires 14? Does Kuwait market requires 12 Takaful companies? or Bahrain 6? or Iran 14? or Malaysia 17? or Saudi Arabia 36? or Qatar 8 Takafuls? Consolidation of Takaful companies may actually spur future growth by engendering greater confidence in larger size underwriters and help reduce competition among similar offerings to stabilize a downward spiral of pricing risks.

Chapter 2

Timeline of Takaful Evolution

Today only six (6) countries formally recognize Takaful as its own standard form of insurance and regulate it separately with reference to Shari'ah principles ²: Bahrain, Brunei, Pakistan, Qatar Financial Center Regulatory Authority, DIFC/UAE, and Nigeria. Refer to Table 2.1.1, which displays key dates and highlights of evolution of Takaful in areas of: Shari'ah guidance, regulatory milestones, and pioneering Takaful Operators by country.

Hence most Takaful operations are compelled to choose a hybrid model to become licensed within prevailing insurance regulations and commercial laws that commonly recognize a stock capital structure (i.e. a share company as distinct from a mutual or cooperative legal structure). In actual fact, modern day Takaful business is evolving away from its pure mutual roots into hybrid systems — combining agents/managers/operators that are stock companies with "unincorporated" risk pools or funds which contains the risk exposures, contributions and investments plus reserves. Many Takaful operators run these risk pools as separate accounts or funds yet without an independent legal status. Consequently, the governance process and the rights of Takaful holders to influence operations are opaque at best, or entirely absent.

HIGHLIGHTS OF											
		1979	1980	1981	1983	1984	1985	1989	1990		1993
Snana Esterno (Outstann)	Fiqh Council Mekkah Saudi & Interl Confer						OIC Fiqh Academy Fatwa No. 9 re Takaful			AAOIFI established in Bahrain	
Takaful Rules/Regs						Malaysia Takaful Act					
Pioneer Operators			Takaful in Saudi Arabia/UAE	Takaful in Switzerland/Bahra mas/DMI			Re-Takaful in Tunisia	Takaful in Bahrain			Takaful in Jordan
GCC		UAE	Saudi/UAE					Bahrain			
LEVANT/MENA							Tunisia-ReTak				Jordan
ASIA						Malaysia					
AFRICA		Sudan									
EUROPE/USA/ Other				Switz/Bahamas	Luxemb						

² Details can be read in many articles or refer to <u>www.takaful.coop.com</u>

								IFSB established i Malaysia	n		
								Islamic Financial Services Board- IFSB-Malaysia starts		Takaful Rulebook Bahrain/SECP Pakistan Takaful Rules	Cooperative Regs in Saudi Arabia
Takaful in Indonesia	Takafuls in Qatar/Singapore	First Takaful US/ / U.S.	A. Takaful in Sri Lanka/Islami Insur - Bangladesh			T&T Frie Society Trinidad. Takaful	- '	Al Aman- Lebanon/Yemen/ Saudi Insur.House Egypt Takaful/ AMAN- UAE Takaful	Takaful in Pak-Kuwait Takaful- Pakistan/Mauratania	Takaful-Senegal/ Takaful RE - UAE/Bahrain	Hannover ReTak/Bahrain
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				Algeria	9			Lebanon/Yemen/ gypt	Е		
Indonesia	Singapore		Bangladesh					Pibr	Pakistan		
			SriLanka						Mauritania	Senegal	
		USA				Trinidad	d				
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Table 2.1.1: Highlights Of Takaful Milestones Timeline

Since inception in 1976 with a FIQH council ruling on Islamic Insurance, the Takaful sector has rapidly expanded into 44 countries. This chart displays in brief the chronology of this growth, the promulgation of special Takaful regulations, and timeline for establishment by country.

Chapter 3

Mutual Insurance and Regional Economic Growth

3.1. Current State of Conventional Mutual Insurance Premiums and Takaful Contributions

In as much as Takaful is a close cousin to mutual insurance, an examination of mutual insurers economic results can provide a valuable foil to Takaful activities. A review of public reports from ICMIF ³ yields a worldwide profile of this sector and a useful perspective on mutual risk sharing: 2,900 mutual organizations and 2,100 cooperatives span 75 countries and underwrite \$1.29 Trillion in gross premiums annually 2014, or 27% of total global insurance. Since 2007, mutual conventional insurance has increased double (2X) over the growth rate of the insurance market as a whole. Mutual insurance captures 30.4% of total conventional Non-Life insurance market and 24.3% of conventional Life insurance. Total global Assets reached \$8.3 Trillion dollars, realizing 37% growth over 2007. Worldwide policyholders/members number 995 Million and global employment is approximately 1.1 million staff—up 20% from the mutual staff of 860,000 in 2007. This represents roughly 20% of the total global employment including direct insurers, brokers, agents and and third party administrators (TPAs). Mutual insurance entities count in USA is 1,770 with over 362,000 staff writing \$474.5 billion in gross premiums, for a local market share of 37%⁴.

Mutual employment in major markets is shown in Table 3.1.1 below. Note also that some 65,000 sales force personnel in Malaysia serve 11 Takaful operators. Hence it can be appreciated by comparison with mutual insurance that the global Takaful sector is undermanned and quite evidently at an early "start-up" phase of development of its manpower.

% Mutual Market Share	Country	Total Mutual Gross Premiums \$ Billion	Employees	No. Mutual Companies
7.7%	U.K.	\$28.8	25,706	81
47.4%	France	\$140.8	183,579	523
44.4%	Germany	\$112.9	98,134	1104
23.9%	Italy	\$48.6	18,200	11
51.0%	Netherlands	\$48.9	21,021	61
12.3%	Algeria	\$0.198	2,858	
5.5%	Nigeria	\$0.088	230	
40.8%	Japan	\$184.8	197,578	47

³ ICMIF Annual Mutual Market Share Report 2014, UK

⁴ IBID pages 3-5

37.1%	U.S.A.	\$474.5	362,714	1770
39.2%	Norway	\$15.4	4,384	50
19.1%	Canada	\$24.0	27,936	126
44.1%	Hungary	\$1.5	8,848	
	Turkey	\$3.4 Bil	3,857	na
	Saudi Arabia	\$1.6	3,000 est.	39
Source: ICMIF Market Share Annual Report 2014, p.34		\$1,285 Bils	1,112,121	

Table 3.1.1: Mutual Market Share in major Markets – 2014

It is noted that on average for the 3,812 mutuals displayed above the manpower size per mutual is about 292 employees.

Region	2014	2013	2012	% Mutual	%Change in
				Growth	market*
				2013-2014	
Europe	542.8	504.6	462.2	+7.6%	+4.8%
North America	498.9	485.4	464.7	+2.8%	+1.7%
Asia& Oceania	220.4	257.4	305.8	-14.4%	+2.0%
Latin America	22.5	20.6	19.9	+8.8%	+5.4%
Africa	1.3	1.3	1.2	+0.4%	-2.6%
Totals	1,285.8	1,269.4	1,253.9	+1.3%	+3.0%

Table 3.1.2: Regional Conventional Mutual Premium Income and Growth 2012 – 2014 (USD Mils)

On regional basis, mutual insurance premiums outpaced the general conventional market between 2012 and 2014 in Europe, North America, and Latin America. An intermittent trend toward de-mutualization of insurers in Asia & Oceania region—this mirrors a trend in USA and EU markets -- explains the sharp drop in gross premiums written by mutuals in this period. One market exception is Malaysia, where the total insurance written increased by 3.7% yet the premiums increase is outstripped by Takaful contributions up 19% annually during this same period – partly pushed up by a broader acceptance of Takaful.

3.2. Takaful as Companion to Islamic Banking Assets

According to the State of Global Islamic Economy 2015/16, published by Thomas Reuters and Dinar Standard, worldwide Islamic banking assets in 10 major markets comprising 90% of banking assets were \$1.23 Trillion dollars in start of 2015. At a forecast 9% Compound Annual Growth Rate (CAGR) rate these assets swell to \$2.0 Trillion by 2020. These same countries host \$15.1 Bil of Takaful contributions as of 2014 (some 94% of global Takaful business). Assuming that a significant portion of such Islamic Assets require risk protection, then the current take-up of Takaful averages a meager 1.2% capture and is quite minimal indeed. One strategy to gain higher scale of operations is for primary Takafuls to partner with Islamic Banks and generate BancaTakaful products — both property, liability coverages as well as savings and Family Takaful plans — to solidly connect Takaful future growth to the sustained growth of Islamic Banking assets. Based

upon current capture rates within these respective markets, Takaful presently ranges from 0.15% to 4.4% coverage only of such financial and other assets held by Islamic Banks.

Country	Islamic	Conventional	Est. Takaful	Takaful	Est. Takaful
	Banking	Insurance	Contributions	Capture of	Capture of
	Assets \$	Premiums \$Mils	\$Mils	IB Assets	Reported
	Mils				Conventional
					Insurance
					Premiums
Iran	329,000	7,400	1,118	0.35%	15.1%
Saudi Arabia	300,000	8,100	6,809	2.27%	84.1%
Malaysia	174,000	15,800	3,025	1.74%	19.1%
UAE	127,000	9,100	1,314	0.23%	14.4%
Kuwait	88,000	1,000	205	0.23%	20.5%
Qatar	70,000	2,200	354	0.51%	16.1%
Bahrain	52,000	600	155	0.30%	25.8%
Turkey	45,000	11,500	75	0.17%	0.7%
Bangladesh	23,000	1,300	34	0.15%	2.6%
Indonesia	27,000	15,300	964	4.38%	6.3%

Table 3.2.1: Takaful Contributions compared with Islamic Banking Assets 2014

Source: State of Global Islamic Economy 2015/16, T. Reuters and Dinar Standard, Oct 2015 and Dr. O. Fisher's analysis.

In event that Takaful operators partner with Islamic Banks aggressively and increase their capture ratios plus encourage customers to deepen their Density Spend on Insurance (see Section 3.3.3__ following) with special concentration on Savings and Retirement/Pension Plans, a reasonable forecast for new volume of Takaful contributions in 2025 could reach upwards of \$15 Bil worldwide as yet untapped demand.

3.3. Volume and Mix of Risk Business

3.3.1. Global Mix of Life- Family Takaful and Non Life/General Insurance Business 2014

According to extensive research and data analysis by Swiss RE SIGMA group, insurance spend as a percent of GDP per capita follows an "S" curve shape, whereby low wealth and income limits household spending on risk protection (i.e. insurance or Takaful). As wealth and disposable income rises above \$5,000 per year, the households utilization of insurance spend (called Density) rises sharply until it reaches a "saturation point" and levels off. The chart below displays this phenomenon.

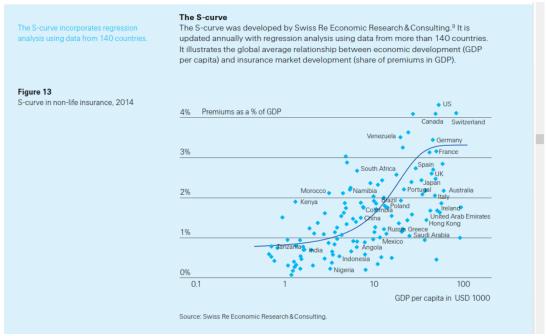


Chart 3.3.1: S-Curve by Swiss RE

Thus in Developed markets with relatively high per capita incomes, Insurance Density has shown only modest growth over the past 5 years and generally tracks with positive or negative GDP results (+3% in 2015). Conversely, in Emerging markets with millions of under-insured people and per capita income levels below the World Average, innovations in micro-insurance, delivery via mobiles and rural distribution through agricultural cooperatives have boosted insurance premium more through absolute new business growth rather than marked increases in economic growth or in Density spend figures.

3.3.2. Lines of Business

Worldwide examples of Lines of Business by country are shown in chart 3.3.2.2 and demonstrate that more than 50% of coverages written are Life business in developed OECD markets. Note the worldwide average is 38%.

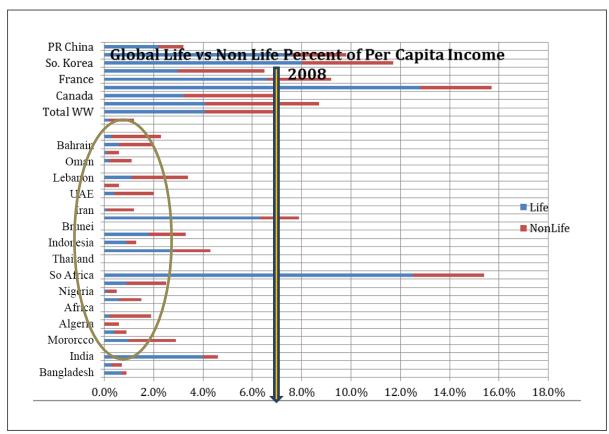


Chart 3.3.2.1: Global Life vs. Non Life as Percent of Per Capita Income 2008

Insurance Density (insurance per capita as percent of annual income) is shown above for major Muslim countries worldwide and for OECD countries for comparison. Note the worldwide average is 7.1%, equivalent to \$661 dollars per annum, where 4.1% is expended on Life and 2.9% on Non Life coverage in 2008. By 2012, the worldwide average decreased to 6.5%, equivalent to \$657 dollars, where 3.7% is Life and 2.8% is Non Life. It is apparent that Emerging markets generally have neither adopted insurance savings plans nor group risk protection (i.e. Life) coverage as essential financial services to be secured with family disposable income.

Developed markets average insurance spend in 2014 is \$3,666 per capita, up from \$3,574 in 2013. Of this, 57% is Life business. Emerging and Muslim markets average insurance spend is a mere fraction of Developed spend in 2014 at \$136, up from \$127; where 43% is Life business.

However, as the Chart 3.3.2.2 below clearly shows there is wide divergence is mix of insurance business in Emerging markets. Upon reflection, the higher than World Average resort to Life insurance in ASEAN and Pacific markets results from family emphasis on savings and traditional use of Life insurance (often government sponsored) unit-linked saving schemes. By contrast, the extremely low use of Life insurance in Middle East and MENA nations derives from a common belief in the "haram" prohibition against conventional insurance (vs the relative young re-entry of Family Takaful as from 1983)

and traditional expectations in governmental social and pension largesse that substitute for accumulated private savings. It is noteworthy that cultural factors are more significant than Islamic tenets in influencing behaviors in these regions because Muslims in ASEAN and Pacific have reconciled Islamic beliefs with insurance savings plans, which have accelerated remarkably with the advent of Family Takaful alternative programs as from 1984.

Summary charts that follow show the aggregate insurance gross premiums by Target Regions as compared to the Worldwide figures for Life vs. Non-Life business for 2011 and 2014. We can understand that worldwide average written business in 2011 favors Life risk protection and long term Savings plans (57.2%) vs for Non Life/General coverages (42.8%). As lingering impact of the global financial crisis in 2008-2011 begins to fade, it is not surprising to witness a pick up in Non Life coverage of business and personal assets and properties: figures for 2014 show Life (55.5%) vs. Non Life (44.4%) coverages.

Examining the data in 2014 more closely for individual Countries with Muslim majority populations, it becomes clear that:

- ASEAN countries notably Malaysia, Thailand and Indonesia are strong savers using Takaful and conventional insurance: Life 64% vs. Non Life 36%
- Indian Sub-Continent and Near Asia likewise depends heavily on insurance as a Savings tool: Life +70% vs. Non Life 30%
- GCC countries by contrast are slow to adopt Family Takaful and Life insurance: Life <10% vs Non Life >90%; with exception of UAE Life 24% vs. Non Life 76%
- Arabic North Africa/Levant mirror the GCC results except Egypt and Morocco: Life is 33% to 45% vs Non Life 67% to 55%
- Africa Target countries show mixed results ranging from 26% to 51% Life vs. non Life 74% to 49%, with amazing exception of South Africa which is one of the world's highest savers through Life insurance: 81% Life vs. Non Life 19%.
- Worldwide average is Life 57% vs. Non Life 43%.

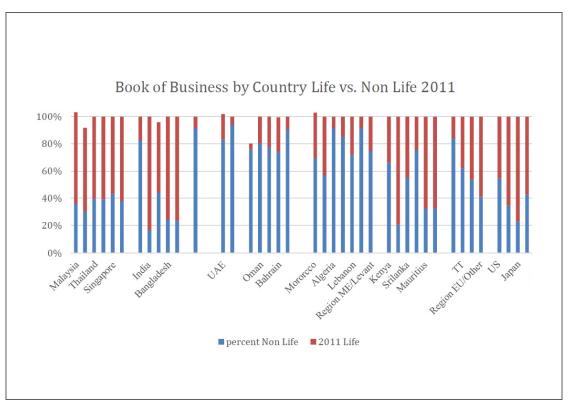


Chart 3.3.2.2: Book of Business by Country Life vs. Non Life 2011

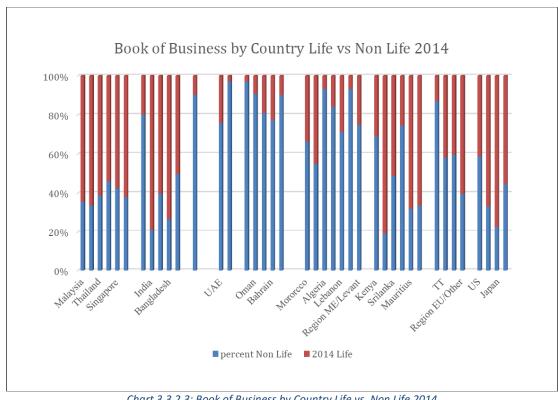


Chart 3.3.2.3: Book of Business by Country Life vs. Non Life 2014

Data from reports of World Islamic Insurance Directory (2013) by Takaful RE and ARIG and World Takaful Reports (2010 to 2014) by Ernst and Young indicate that General (non-life Takaful) business is, generally, in the ratio 40:1 to Life (Family) Takaful [except in Malaysia]. This may perhaps be reflecting a strong cultural and traditional public aversion to the concept of life insurance. As youth in Emerging markets age and step up their savings rates, it is anticipated that Life/Family Takaful demand for savings plans will accelerate. Given the strong propensity in mature insurance markets of OECD countries to use Life insurance as an important form of personal and corporate savings—especially for pensions and retirement goals—the expectation for global demand is considered robust in future for Family Takaful/Life products, as shown in Chart 3.3.2.4 below.

Thus, future product mix between Non-Life and Life business could shift to thirty-to-one ratio in 2020. Realization of such optimistic forecasts will depend heavily upon building public awareness and acceptance of Takaful, leading to rise in primary demand for private sector unit-linked Takaful instruments that promote long-term savings, private retirement and pension plans. However, a primary demand driver in mature markets for such protection plans is the tax-advantaged feature of insurance, which element is totally absent in parts of MENA and less pronounced in other Emerging economies.

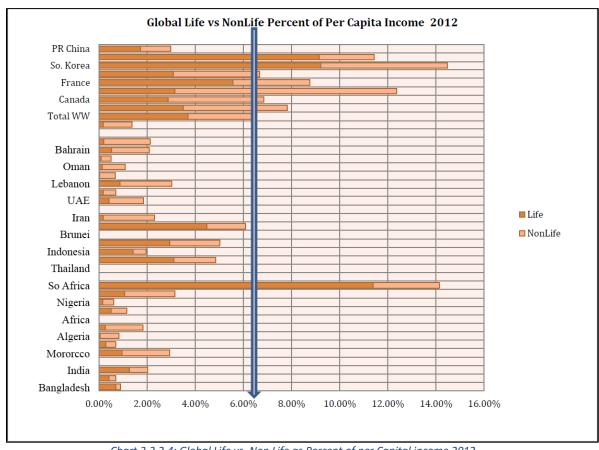


Chart 3.3.2.4: Global Life vs. Non Life as Percent of per Capital income 2012

By contrast, in Emerging markets Takaful General/Non-Life lines of business dominant such as motor, fire and personal accident coverages, with exception of Malaysia and Indonesia as shown in Chart 3.3.2.4.

Furthermore, from Chart 3.3.2.4. above, one can see that the dominant usage of insurance coverage across the Arab world is General/ Non-Life, for protection of assets and property. Typically, the Life/Family Takaful insurance accounts for 5 per cent to 15 per cent of total insurance sales only. Morocco is an exception where the utilization of Life insurance exceeds 25 per cent of total annual insurance premiums. Malaysia, where Muslims represent 50 per cent of local population, presents an anomalous picture because Family (life) Takaful and savings plans in 2012 were 64 per cent of total annual premiums nationwide (\$331 of \$515 per capita), in reaction to the central bank's active encouragement of savings habits and because payroll deduction schemes make it convenient to do so.

Four years later, the MENA book of Takaful business gives similar picture. Medical/Life insurance has expanded in importance to 47% (up from 35%) due to the advent of mandatory medical benefits and worker's compensation coverage introduced in 2011.

Table 3.3.2.1 makes clear that the dominant book of business for Takaful operators is Motor and Property/Misc. Accident which relates mostly to Personal Lines, rather than larger corporate risks or coverage associated with infrastructure or massive construction projects, ships, aviation or large assets. In MENA region, mandatory medical and healthcare coverage has triggered a significant expansion of General/Group Life and medical insurance—rapidly approaching 50% of business written for the regional composite insurers. However, with the exception of the mono line medical insurers (e.g. BUPA/MEDGULF) other insurance companies are struggling to generate consistent profits from this volatile type of risk exposure: especially in extremely price sensitive markets across Middle East.

	M. East Non-Arab	MENA	Far East	Indian Sub Cont.	Global Totals
Motor	53%	25%	29%	11%	37%
Property/ Misc.					
Acc.	19%	19%	19%	6%	19%
Marine/					
Aviation	2%	7%	2%	3%	4%
Family					
Takaful/Medical	26%	49%	49%	80%	39%

Table 3.3.2.1: Mix of Insurance Business by Region 2012

Source: World Takaful Report 2014 Takaful RE

Despite this record of remarkable growth of Takaful enterprises globally, the cold fact remains that, of \$4.77 trillion in global insurance gross premiums written in 2014, only \$21.2 billion (or 0.4 percent) were written on Takaful basis worldwide.

Revenue growth in regional markets of Asia/Pacific are heavily influenced by the Family Takaful/ Life take-up as compared with General/ Non Life usage which dominates in MENA/ GCC regions. In the latter, Auto and Property, including General Accident protections, clearly account for 30% to 50% of books of business written whereas Engineering/Construction, Marine and Aviation are limited typically to less than 15% annual exposures. One plausible explanation is that these large asset value exposures require sophisticated underwriting and significant balance sheet to support the desired large sum assured. By contrast, Takaful operators are aggressively underwriting Medical risks, which often have Life coverages embedded in such policies, because group medical coverages are now mandatory for workers and staff of companies across the GCC beginning 2011 to present. Estimates are for Lines of Medical/healthcare coverage to double in annual contributions in Saudi Arabia and UAE in the coming six (6) years.

3.3.3. Insurance Density 2010 -2015

Insurance density is calculated as the ratio of premium underwritten in a given year to the total population (per capita premium). Insurance Density is a measure of a broad utilization by the population of risk management coverages. **Insurance penetration** is a measure, as the percentage of **insurance** premium underwritten in a given year to Gross Domestic Product (GDP), which reflects the relative per capita spend on insurance when compared to other expenditures.

Both are useful tools to compare across countries how insurance is important and utilized by citizens.

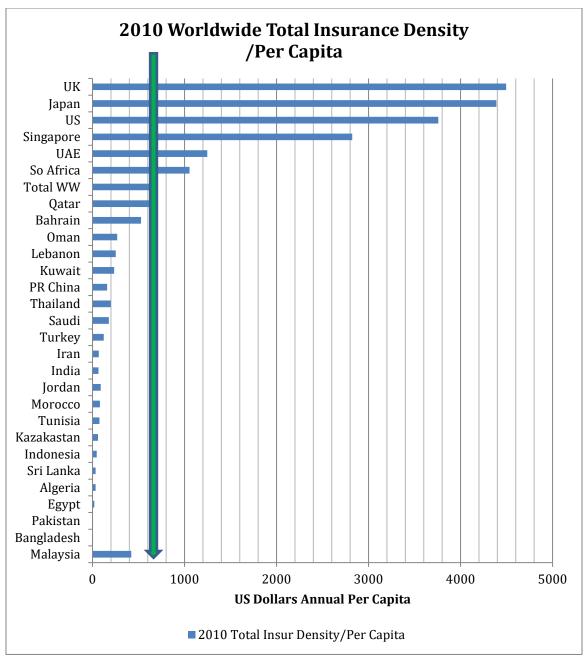


Chart 3.3.3.1: Global Insurance Density in 2010

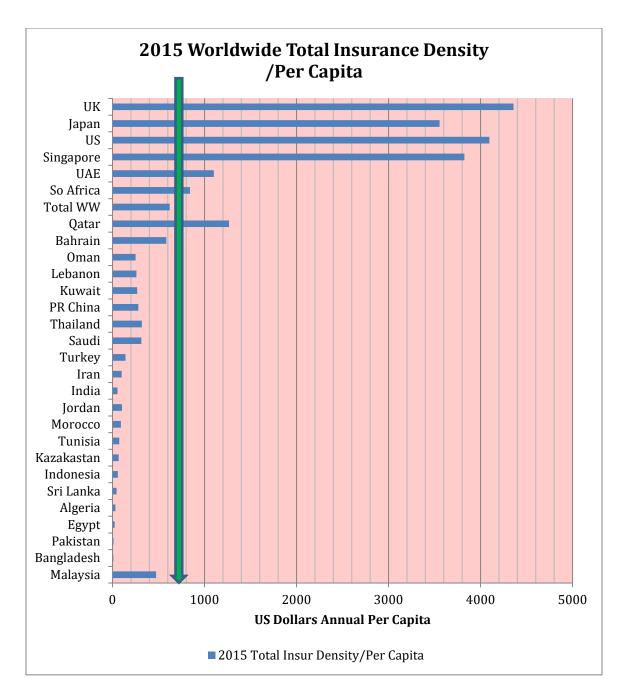


Chart 3.3.3.2: Global Insurance Density 2015

Chapter 4

Manpower

4.1. Profile of Manpower in Global Takaful

According to a representative sample of Primary Takaful Operators (203) from Thompson Reuters Zawya database and Dr. Fisher research, the total Employee manpower in the Primary Takaful sector worldwide is estimated at 98,400 as of 2015. The chart 4.1.1 below shows estimated numbers of employees by region as of 2011, while chart 4.1.2 shows comparative data for 2015⁵ [data from 189 Takaful companies]:

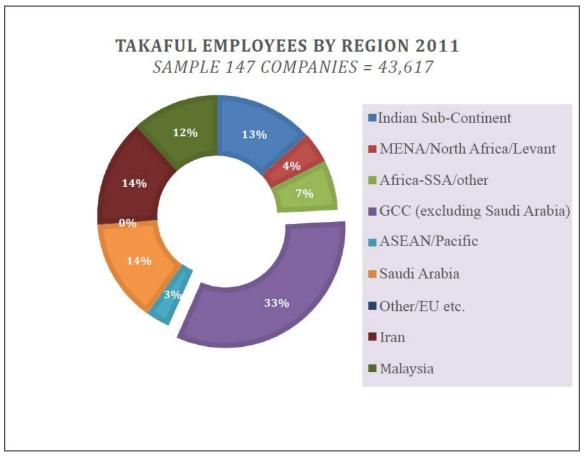


Chart 4.1.1: Takaful Employees Distributed by Region 2011

Source: Data from T. Reuters/Zawya; supplemented by Dr. Fisher's research.

⁵ Note that a portion of employee growth during the period 2013-2015 results from a larger sample size, because more Takaful companies provided data.

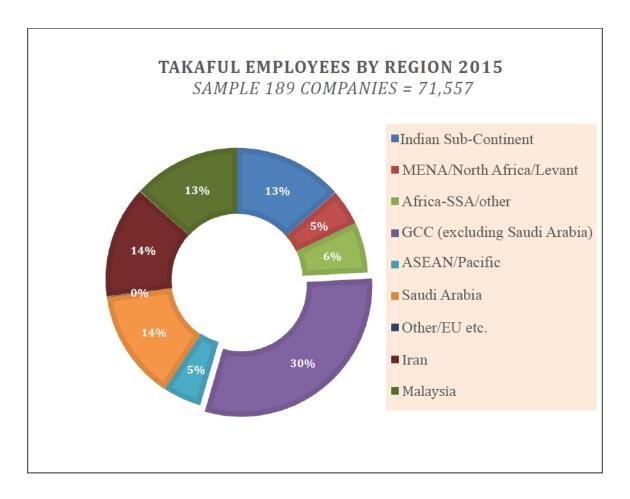


Chart 4.1.2: Takaful Employees Distributed by Region 2015

From the data available, Far East/Pacific/Malaysia consists of 30% of global Takaful employees, whereas GCC/Saudi Arabia has 15%, Iran 14% and the Indian Sub-Continent 13%. Africa – home to 23 Takaful – has only 6% (3,967 employees), hence holds great potential for employment creation as Takafuls deepen penetration into the emerging markets of Africa.

Global Takaful employees in 2011 were approximately 63,356 through extrapolation of data available for up to 211 Takafuls. Whereas Global Takaful employees in 2015 are about 98,400 for the 263 Takafuls active worldwide, representing twelve (12%) percent annual growth. In the same period the number of new Takafuls increased by 49, for a 6% annual growth rate.

According to statistics from Bank Negara (Malaysia), there are also some 62,000 independent Agents and brokers registered in Malaysia to supply Takaful products from the licensed companies but not direct employees. It is reported that 21% of Agents work for banks (16,585) and hence might be added to the number of total employees. Hence,

a better reflection of Takaful employee manpower worldwide might rise to an estimated 98,400.

By eliminating the "outliers" large size conventional insurers with Takaful "windows", we can see that median number of employees worldwide is 104, which evidences the relative small size of newly established Takaful companies. By contrast conventional medical insurers also offering Takaful products have manpower 700 strong (BUPA), 850 (MEDGULF), some Takafuls are 1600 (Sheikan), 2080 (Pak-Qatar) and 1055 (Pru Indonesia) — which clearly are strong multiples 7X to 10X of manpower.

Although partial data, a profile of total employees in the global ReTakaful segment number about 3,617.

Part II

Chapter 5

Assessment of Financial Performance of Takaful

To assess comparative performance of Takaful across the globe, consideration can be given to three (3) dimensions: Top Line Takaful Revenues, Conventional Insurance trends in same markets and Takaful Financial Ratio performance along with Employee Productivity.

5.1. Takaful Revenue Top Line

Revenue growth is evaluated in multi-year time series and also in contrast to conventional growth rates in same markets. Ultimately, revenue growth cannot be evaluated in isolation, rather analysis must be linked also to overall financial ratio performance and fiscal health (including net income, surplus, policyholder reserves, etc.) because Takaful companies might be "buying" market share (shows top line revenue growth) with lower underwriting prices yet thereby sacrificing profitability. But for a few notable exceptions, an examination shows that in fact Takaful outcomes portray repeated annual operating deficits and weaker underwriting ratios. This clearly jeopardizes long-term stability and postpones any solid financial ratings due to a lack of prudent reserves; thereby further delaying a potential buildup of surpluses which are so vital to sound Takaful operations and to enhancement of Policyholder loyalty.

	2008	2009	2010	2012	2013	2014
Grand Total Takaful	9,617	11,152	13,409	16,980	17,156	21,054
Global Takaful (excluding Iran)	5,315	7149	8504	12,067	12,323	15,452
Indian Sub-Continent	123	193	202	244	298	328
North Africa and Levant	33	39	79	197	240	258
Africa- SSA/ other	295	377	413	400	392	401
ASEAN/Pacific	1,110	1,480	1,951	3,390	3460	4283
GCC all	3,753	4,886	5,683	7,808	7854	10,088
GCC (excluding Saudi Arabia)	842	990	1,313	2,310	1759	2053
Saudi Cooperatives	2,911	3,896	4,370	5,498	6095	8035
Other:					80	95
EU/Trinidad/Turkey/Yemen/USA	2	8	12	28		
Iran	4,302	4,003	4904	4913	4832	5601

Table 5.1.1: Global Takaful Revenues by Region 2008 – 2014 (all figures in the table are in US Dollars Millions)

Source: E&Y World Takaful Reports 2011-2014, SWISS RE/SIGMA 3 plus Author's research. Iran data is interpolated.

As compiled from Ernst & Young World Takaful Reports 2009-2012, the recent average annual growth rates per country were as follows:

	Growth Rate Total Market %	
	2009-2011	Aver/3 Yrs
Malaysia	44.3%	14.8%
Indonesia	21.7%	7.2%
Iran	75.5%	25.2%
UAE	21.5%	7.2%
Saudi	27.6%	9.2%
Lebanon	28.3%	9.4%
Qatar	24.3%	8.1%
Oman	23.7%	7.9%
Kuwait	37.9%	12.6%
Bahrain	8.6%	2.9%
Jordan	21.0%	7.0%
Morocco	10.7%	3.6%
Egypt	9.5%	3.2%
Algeria	12.8%	4.3%
Tunisia	7.3%	2.4%

Table 5.1.2: Takaful Revenues Growth 2009 – 2011 by Country

For comparison, the Global Insurance Report of the International Insurance Institute (III-April 2014) in New York shows that Property Casualty (P/C) insurance sector in USA had uneven growth in the same period:

Sector	2009	2010	2011	2012
USA P/C	-4.2%	1.0%	2.6%	4.3%
Mutuals, global	14.6%	NA	NA	12.2%

Table 5.1.3: Growth Comparison Mutuals Vs P/C Insurers 2009-2012

Average increase in top line revenues for USA P/C sector between 1987-2012 is 7.6%, and 8.8% for Life insurers.

From the Table 5.1.2 above it is apparent that certain Takaful markets are expanding by double-digit growth and surpassing growth rates of conventional insurance. However, due to the impacts of global financial crisis and the turmoil of "Arab Spring", the Arab MENA Emerging markets display insurance growth rates only at or slightly above conventional benchmarks.

Nonetheless, individual Takaful Operators as shown below are chalking up impressive growth in top line revenues, which indicates rapid gains in popular acceptance in selective markets as of 2011:

Takaful Malaysia \$456 Million, up 64.8% [Malaysia]
Etiqa Takaful Berhad \$617.3 Million, up 43.7% [Malaysia]
Tawwuniya \$1,114 Million, up 3.6% [Saudi Arabia]
Salama \$541.7 Million, up 26.5% [UAE]
Prudential BSN Takaful \$125.8 Million, up 12.7% [Malaysia]

Such significant growth rates are partly explained by the small revenue base of Takaful Operators upon which growth is built up-- consistent with their relative youthful phase of development. Average Size for Takaful players is actually quite modest as Table 5.1.4 demonstrates below. Analysis of average volume of revenues for Takaful sector in selected countries (noting the number of Takaful being analyzed) generates a comparison of relative weight and size in respective markets:

	Ave	rage Size Ta	kaful by Cor	ntributions (Gross Premium	ns)		
		J	,	•		ls USD \$	
		2014				201	.2
Gross Premiums		age Takaful s Premiums	No. Operators			erage Takaful oss Premiums	No. Operators
\$8,085.0	\$	218.51		Saudi	\$	145.00	
¢2.064.0	۸.	140.20	37	Malaysia	\$	145.00	34
\$2,964.0	\$	148.20	20	Malaysia	>	145.00	11
\$2,028.0	\$	39.76		GCC	\$	34.00	
			51				43
\$1,168.0	\$	29.20		ASEAN	\$	22.00	
			40				29
\$ 102.0	\$	2.55	40	Indian Sub-Continent	\$	18.00	12
\$ 22.0	\$	0.67	40	Africa- SSA/other	\$	13.00	12
Ψ 22.0	Ψ	0.07	33	Annea Sory Series	Ţ	13.00	36
\$ 68.0	\$	2.62		North Africa -Levant	\$	10.00	
			26				9
* Source E&Y Insigl	hts 20	13; SIGMA 3	_2016				

Table 5.1.4: Average Size of Gross Contributions for Takafuls (2012/2014)

The sample in Table 5.1.4 above accounts for 95% of the Takaful Directory's 263 active Takaful and Re-Takaful Operators. Malaysia has enjoyed +30 years of building acceptance for Takaful so it seems natural that the average size of gross premiums is on a larger size

at \$148 Million. This compares to the quite new African markets that average \$22 Million in Takaful premium production (2014).

By comparison, the average size of gross premiums written in 2010 by mutual companies in Europe is \$2,081 Million (210 Mutuals), in North America is \$1,796 Million (225 Mutuals), in Asia Oceania \$4,733 Million (54 Mutuals) \$306.3 Million in Latin America (8) and \$136.7 Million in Africa (3).

It is not the main purpose of this chapter to conjecture on this relatively slow adoption rate of Takaful. However, three important challenges confront the global Takaful industry which, like a nettle, must be seized and neutralized if the optimistic revenue forecasts so widely circulated are to be realized: a) expanding the reach of and gaining depth in distribution channels; b) innovation in products and services and c) resolving corporate governance weaknesses and issues. [more in Section 7]

5.2. Conventional Insurance Landscape 2012-2015

As Takaful business subsists within a global conventional insurance industry, a careful examination of conventional insurance data and trends will be a helpful foil and contrast to assess Takaful developments in the similar period. Special focus is to be given to Emerging Markets, rather than to Developed OECD markets which dominant industry statistics, because Takafuls reside largely within these Emerging Markets.

Summary of Global Insurance 2012 to 2015

Typically, the global insurance industry is characterized as separated into "Developed/Advanced" markets, consisting of USA, Europe, Japan, and Russia (accounting for 81% of global insurance volumes) and "Emerging" markets, consisting of Latin America, Africa, Levant, parts of ASEAN, Middle East and Turkey, possessing the reminder of 19% of global premium volumes. In recent years, Advanced markets have grown at an annualized rate of 2.5% vs. Emerging markets robust annual growth of 9.8%. Across the Emerging markets these figures mask widely divergent data as of 2015: Life business is 12% annual growth, while Non-Life is 7.8%. Plus, some Emerging markets of Africa and Middle East are experiencing much slower growth or even negative results (contraction).

A composite picture of the global landscape looks like the chart below against which to measure the actual financial and operating performance of the Takaful sector:

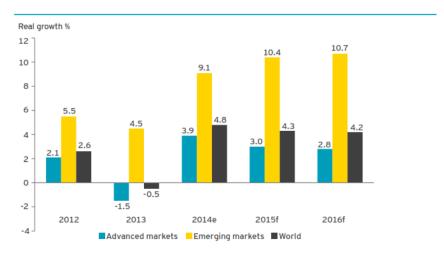


Chart 5.2.1: Real Growth of Life Direct Premiums 2012-2016

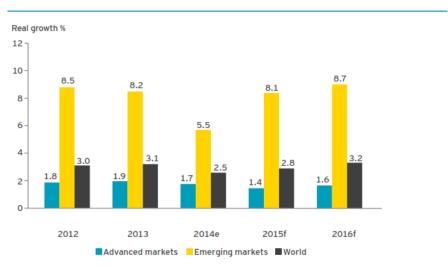


Chart 5.2.2: Real Growth of Non Life Direct Premiums 2012-2016

Source: E&Y Malaysian Takaful Dynamics Compendium 2015 and Swiss RE Sigma.

Conventional Developed/Advanced insurance markets exhibited slow GDP economic growth in 2014 and 2015: USA/UK 2.5%, Japan 0.7%, EU 1.5%, as compared with Emerging markets solid growth of 5%. Historically there is a strong correlation between GDP growth and higher Insurance Premiums. However, in the MENA region with sharply reduced GDP earnings due to lower petroleum and commodity prices for the period 2015-2017, there is likely to be a drop-off in total premium growth, yet anomalously some modest insurance premium increases can be expected for mandatory coverages of group Health and Motor Liability insurance.

Analysis of the Non-Life/General business reveals an increase by 3.0% in 2015 overall across Developed markets. Emerging Markets' Non-Life showed faster growth of 5.6%

⁶ Ensuing data is from Swiss RE Global Insurance Trends Report 2015.

(yet lower than 6.3% achieved in 2014). Asia/Pacific shows a highlight of 12% Non-Life growth. These results were possible due to low catastrophe and disaster Losses that produced a Combined Ratio (CR) of 90%. However, profit margins eroded due to softening of insurance rates. Top Line Gross Premiums Written (GPW) decreased in Developed markets by -1.5% generally (vs. +2.8% in 2014), while Emerging markets increased 8.7% (up from 5.6% 2014). Swiss RE forecasts Non-Life revenue growth for Developed markets through 2017 of 3.2% as compared with 8-9% growth in Emerging markets.

Return on Equity (ROE) for Developed/Advanced market Insurers dropped to 7% in 2015 (from 9% realized in 2014 and 2013) whereas ROE for Emerging markets is 12% on average. Swiss RE forecast through 2017 is 6-6.5%, one-half the 2013 level, assuming historically average annual Losses. In response to lower operating results, developed markets insurers sustained positive financial results by releasing redundant reserves the past two years, which otherwise would have pushed up their CR to 100%.

Among the headwinds constraining conventional insurance growth in 2014-2017 period are:

- Low interest rates at 3.5% on fixed-income investments generating "below-average returns"
- Weak operating results due to intense competition and "soft" rate pricing
- Capital expenditures required to upgrade software and reach for competitive edge

For Emerging markets insurers there are two additional major constraints to growth:

- Limited supply of bonds or fix income investments especially for Takafuls seeking Islamic securities like sukuks
- Necessity to revise financial and core operations to adopt Basel II and a risk-based solvency regime.

This final point is particularly critical for full-fledged Takaful Operators because many have not yet integrated an enterprise risk culture and risk-weighted capital approach to their core business. In absence of compliance with a risk-based solvency regime (implementation due in most Emerging markets 2017-2018), these Takafuls must take a capital charge and thus set aside capital that cannot be utilized in underwriting new business. Thus, capital reserves will both retard its planned growth and prevent competitive pricing of new business.

By contrast, the dominant sector of global Life business (including Family Takaful) returned highly mixed results in 2014-2015. Developed Life markets recovered from 2013 downturn of -2.5%, to 3.3% growth in 2015 (vs. 4.2% in 2014). Emerging Life markets showed strong growth throughout: +4% 2013, 7.4% in 2014 and 10.7% in 2015. Forecasts call for robust Life growth of 5% to 7% annually in MENA and parts of Africa, yet perhaps one-half this growth in Asia regions.

ROE for Developed Life markets is heavily dependent upon bond yields, due to their close matching of assets and liabilities. Return on Investments (ROI) in 2002 was 5.5%, lowering in 2008 to 4.5% and again in 2014 to 3.0%. Swiss RE forecasts ROI to remain low in 2017 to 2020 at 3.5% to 4.0%. Nevertheless, Developed Life market insurers are sustaining their overall ROE at approximately 13% per annum, because their investment portfolios still are dominated by corporate and government bonds purchased years ago that yield generally above 5%. Emerging Life market insurers – especially Takafuls – will remain at a competitive disadvantage in such investment earnings due to two facts: i) relatively youthful portfolios contain mostly low "interest" or "profit" rate instruments, and ii) predilection for Equities (+30% of investments vs. 4% to 10% for conventional insurers) which have shown high volatility and mostly lower values during 2013-2015 in GCC and MENA stock exchanges.

Trends visible among the leading conventional insurers — which certainly pose a competitive threat to Takafuls in Emerging markets — are:

- Rapid adoption of cloud computing and hosting of insurance software in the cloud [this is crucial development for conventional insurers many of whom are held back due to cumbersome and inefficient legacy insurance software]
- Harnessing of social media and convergence of mobile, analytics and instantaneous data collection
- On-going innovation of products and systems that respond to cyber-security risks

Early in 2016, SAP company announced the first insurance enterprise platform solution with AGEAS of Philippines, which augers for a massive shift towards 3rd party outsourced data computing.

In Emerging markets, mobile phone applications are clearly a wave of the future: 80% of the local population does not have a bank account, yet 70% have access to mobile phones⁷ Linking insurance with mobile phones produced amazing outcomes in Sub-Sahara Africa and South-East Asia where 28 million previously uninsured people living on less than \$10/day were provided with micro-insurance since 2013.⁸

5.3. Regional Insurance Economic Growth Patterns 2010 - 2015

One main consistent driver of insurance utilization is the condition of the general economy. When comparing demographic and economic data over the last five (5) year from 2010, an interesting landscape unfolds of considerable <u>uneven</u> regional growth as a backdrop for Takaful evolution:

⁷ Swiss RE Global Insurance Report 2015, p. 37

⁸ IBID, p.37

2010	Population	%	GDP PPP USD \$ Bils 2015	%
Indian Sub-Continent	369.6	5.3%	321	0.5%
Africa- SSA/other	251.9	3.6%	652	1.0%
North Africa - Levant	173.5	2.5%	575	0.9%
GCC including Saudi Arabia	39.6	0.6%	1046	1.7%
ASEAN/Pacific	516.6	7.5%	1801	2.9%
Iran	75.1	1.1%	425	0.7%
Other: EU/Trinidad/Turkey	93.3	1.3%	895	1.4%
Totals	1,520	22.0%	5715	9.1%
% of Worldwide	6,917		63,014	

Table 5.3.1: Regional Population and GDP Growth 2010 and 2015

Source: Swiss RE SIGMA 3/2016

A high rate of growth in population across these Emerging markets added 413 million people and an additional \$10.03 billion of gross domestic production. Islamic Republic of Iran stands out as lagging economy, whereas remarkable five years average annual growth for Emerging markets is 2X the worldwide average. Data by region is:

Region	2010	2015
Indian Sub-Continent	0.1%	15.0%
Africa- SSA/other	5.5%	9.7%
North Africa - Levant	9.3%	7.7%
GCC including Saudi Arabia	6.6%	8.4%
ASEAN/Pacific	1.5%	6.0%
Iran	1.1%	-1.9%
Other: EU/Trinidad/Turkey	1.1%	0.6%
Regions Average	2.8%	6.1%
Average of Worldwide	1.2%	3.2%

Table 5.3.2: Regional GDP Economic Growth Rates 2010 and 2015

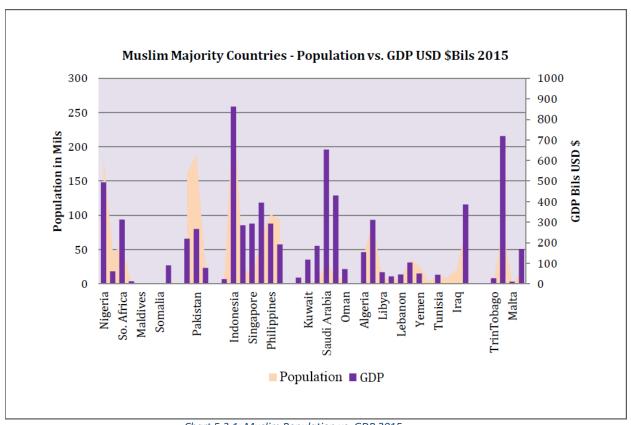


Chart 5.3.1: Muslim Population vs. GDP 2015

Between 2010 and 2015, population and economic expansion were 2X faster than the global average. However, the economy of Republic of Iran contracted at a rate of -2% annually for this period. Whereas, Indian Sub-continent economies enjoyed robust annual growth of 15%, 5X the world's average.

Table 5.3.3 below displays the overall regional economic picture for 2014 and 2015 which shows the distortions in economic outcomes for Emerging economies heavily dependent upon commodities and raw materials as well as crude oil and petroleum products. Again, such adverse general economic conditions can be expected to negatively impact financial results of insurers, including Takaful players.

Region	GDP	Population	GDP \$	%	Population	%
	\$Bils	2014 Mils	Bils	Change	2015 Mils	Change
	2014		2015			
Indian Sub-Continent	523	365.1	562.5	7.6%	370.6	1.5%
North Africa -Levant	880.1	256.2	796.3	-9.5%	253.9	-1%
Africa-SSA/other	1100.9	314.3	968	-12.1%	320.7	2.0%
So.East Asia/ASEAN/Pacific	2401.3	546.1	2339.2	-2.6%	556.5	1.9%

Of which: Malaysia	328	30.2	284.2	-13.4%	30.4	0.5%
GCC	1665.4	49.6	1486.1	-10.8%	52.6	6.0%
Of which: Saudi Arabia	752	29.4	653.4	-13.1%	31.5	7.1%
Iran	387	78.5	385.5	-0.4%	79.1	0.8%
Other:	1040	94.2	922.7	-11.3%	98.3	4.4%
EU/Trinidad/Turkey/Yemen/USA						
SubTotal and % of Worldwide	7,997.7	1,704.2	7,460.3		1,731.7	
	(10.3%)	(23.6%)	(10.2%		(23.6%)	
Worldwide	77,394	7,218	73,050		7,330	

Table 5.3.3: Regional Population and Economic Growth 2014 And 2015

Source: Swiss RE SIGMA 3/2016

From the above, it is clear that Indian Sub-Continent nations steadily outperform other regions with 7.6% year-on-year growth; while Levant and Africa slip backwards economically -9.5% and -12.1% respectively in 2014-2015. Saudi Arabia's economy seems hardest hit with -13.4% shrinkage among the GCC region with -10.8% reduction in economic activity. Even the typically buoyant economies of ASEAN-Pacific region were negatively affected over the past 2 years: -2.6%.

Highlights of Regional Insurance Trends GCC 5.4.

According to the detailed study of GCC Insurance Industry⁹ total insurance premiums in 2014 were \$22.2 Bil (up front \$13.3 Bil 2010) and can double to reach \$49.1 Bil in 2020 at the current conservative annual growth rate of 14%. General insurance is more widely used, with Life insurance usages ranging from some 3% to 13% of annual premiums. This result may likely drive the insurance Penetration rate from 1.4% to 3.3% in 2020. Worldwide Average Penetration is 6.2% and Emerging Markets average is 2.7%.

Despite the significant decline in the market price of crude oil which dampens economic activity in this region, on-going infrastructural development, new train systems, Expo 2020 and FIFA World Cup 2022 projects assure a sustained level of robust economic spending to underpin insurance growth. However, the high concentration of insurance business in a few companies – some having regional scope – will likely dominate financial results to benefit these leaders, heighten competition among the other lesser players, and perpetuate a lack of innovation in the field.

⁹ GCC Insurance Industry 2015, Alpen Capital.

Distribution channels remain narrow – some +70% of written premiums come thru agents and brokers. Yet bancassurance and upstart online comparison web portals are showing signs of inroads to mark new points of insurance distribution.

Country	Gross Premiums 2014 \$	% Market Share
UAE	\$9.1 Bil	41%
Saudi Arabia	\$8.1	36%
Qatar	\$2.2	10%
Kuwait	\$1.0	4%
Bahrain	\$0.7	3%
Oman	\$1.0	4%
Totals	\$22.1	

Table 5.4.1: GCC Market Share of Gross Premiums 2014

Takaful Business in GCC

Estimates mark total Takaful contributions across GCC in 2014 at \$8.9 Bil, representing about 63% of global Takaful business. Of this, Saudi Arabia consists of \$6.8 Bil, UAE \$1.3 Bil, Qatar \$0.36, Kuwait \$0.21, and Bahrain \$0.16, with less than \$50 Mil written in Oman, which opened to Takaful only in 2013. Takaful Lines of Business in 2014 are dominated by Medical 47%, Motor 25%, Property/Accident 21% and Marine/Aviation/Other 7%. Personal Lines out-weigh Group and Corp business most probably 55% to 45%, given the relatively modest levels of capitalization featured by Takafuls. The six (6) GCC nations host +275 insurers, so that any single Takafuls must confront fierce competition from conventional companies as well as 87 other Takafuls with similar Shari'ah compliant offerings.

<u>Saudi Arabia</u>: Due to mounting losses, eight (8) insurers re-capitalized their businesses taking shareholder equity in Saudi Arabia to \$2.7 Bil. Gross Premiums in 2014 were \$8.1 Bil vs. UAE's \$9.1 Bil, yet over the next five (5) year Saudi Arabia should overtake UAE as the GCC's largest insurance market. Since 2010, insurance in Saudi Arabia has Compound Annual Growth Rate (CAGR) of 16.8% annually, rising from \$4.4 Bil to \$8.1 Bil. General coverage dominates with over 97% market shares whereas Life/Family Takaful growth is virtually flat. Insurance Density of Saudi Arabia is \$264 per capita well below the GCC average of \$433, indicating substantial headroom for future growth. Life expenditures are \$8. Per capita and Non-Life covers combine for \$256. Mandatory insurance for Motor and Medical introduced in 2006/07 are propelling use of insurance with +20% annual increases in each category.

Because there are no captive Agents established yet in Saudi Arabia and only a few independent international Brokers, such as Marsh and Aon, the top three (3) companies write nearly 60% of all insurance (Tawuniya, BUPA and MEDGULF). Retention ratio across the industry increased to 80% in 2014, up from 75% in 2012, demonstrating less reliance on reinsurance for the dominant sectors of Motor and Medical.

SAMA, the Central Bank of Saudi Arabia, is the regulatory authority and has issued numerous guidance notes and new regulations to tighten supervision over insurers, mandate use of actuarial-approved pricing, enhanced underwriting practices and risk control, improved corporate governance practices and to clarify solvency requirements.

<u>UAE</u>: Total premiums written in 2014 was \$9.1 Bil, up 13.8% from 2013 and above a CAGR path of 11% since 2010. Life/Family Takaful accounts for 25% (\$2.3 Bil) where General-Non Life coverage is 75% of insurance. Life business in UAE is growing rapidly at annualize rate of 15%, up from \$1.63 Bil in 2012. In 2014, Life Density is \$237 per capita vs. Non Life of \$742. Demand for Savings, Pension and Retirement insurance plans is strong to satisfy large expat community in UAE and a growing middle class seeking alternative methods to social insurance for personal savings.

General insurance demand derives from medical program mandated in 2013 for employers and residents pushing up premiums from \$1.78bil in 2012 to \$3.03 Bil in 2014a robust 23% annualized gain. UAE is home to 60 insurers and reinsurers – 11 pursue Takaful principles and 49 are conventional. Liberal regulations have encouraged the setup of 168 brokers and 18 Agents since 2000; although more stringent capital and bonding requirements have trimmed the number of active brokers to +72 as of 2015. There are only 2 Life-only insurers: Zurich and METLIFE. Thirty-seven companies offer General-only coverages and all others are composite companies. Since UAE's population is about 9 mil, there is considerable choice of pricing and offers from the 60 insurers – hence, 29 companies posted negative underwriting and financial results in 2014. In general, the Expenses Ratio for the sector is a modest 15% (nearly half the figure for ASEAN insurers), which can be explained by the dominance of an outside brokerage network in UAE as contrasted with in-house salesforce featured in other markets. The average combined ratio was 102.2%, as compared with 97.4% in 2013. 10 Overall, ROE for the sector was very modest 5.6% vs the 10% from prior year as weaker pricing for rates and low investment returns depressed financial results.

Average Retention ratio for all types of insurance in 2014 was 54% General/Non-Life, unchanged from 2013 but slightly lower than 55% posted in 2012. Retention of Medical insurance runs higher at 62% (2014) and for Motor at about 70%. Business Line mix favors coverages of Motor 22%, Medical 44% and Personal Accident/Liability 12%. Total Employees in the Insurance sector at 2014 were 9,269, up from 8,586 in 2012. Their Employee Productivity calculates at \$270,000 premium per employee in 2014 vs. \$230,000 in 2012.

Total Takaful contributions in UAE were \$707.4 Mil, which represents an insurance market share of only 8%. Overall performance is uneven for Takaful: sharply up +22% in 2013 (\$769 Mil vs. \$630 Mil) yet declined 8% into 2014. Family Takaful/Life consists of

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¹⁰ GCC Insurance Industry Report 2015, Alpen Capital.

21% of total contributions at \$145 Mil in 2014 whereas Non-Life business is 79% at \$562 Mil. An estimate 1,074 employees staff the Takaful operators in UAE; hence Employee Productivity works out at \$659,000 revenues per employee, which is nearly 3X the productivity of UAE insurers generally yet only 60% of the productivity of the best conventional insurers in the GCC region.

UAE Insurance Authority has issued in 2015 new regulations that apply to both Takaful and conventional insurers pertaining to capital, solvency, technical provisions, accounting and disclosure reporting, restrictions on investment securities and market discipline. A new minimum guarantee fund for every insurer is mandated as of January 2018, to be not less than one-third of solvency capital, to assure greater protection for consumers. The stated goal is greater transparency across the UAE marketplace.

5.5. Entry into new Territories- to meet untapped demand

There are major markets hosting Muslim minority communities which once opened can engender substantial new Takaful sales. Presently there are <u>no</u> full Takaful operations established in countries of:

- Morocco
- Europe countries Germany, France, Spain, Albania(OIC), Maldives (OIC)
- Former Russian republics Ukraine, Uzbekistan, Turkmenistan, Kyrgyzstan (OIC), Kazakhstan (OIC), Tajikistan (OIC), Azerbaijan (OIC)
- India and China
- North America USA and Canada
- Latin America Argentina, Guyana (OIC) and Suriname (OIC)
- Africa OIC: Benin, Burkina Faso, Cameroon, Comoros, Chad, Gabon, Guinea-Bissau, Ivory Coast, Mali, Niger, Sierra Leone, Togo, Uganda

It is highly probable that Takaful entry into these virgin markets can propel the global industry to double or triple its annual contributions. Based upon a conservative Penetration Rate of less than 2% and per capita spending on insurance in the range from \$50 annually for CIS region, to \$105 annually in Turkey and to \$1800-2250 annually across EU, and \$51 annually for the African nations named above, then the potential future Takaful market expands to add roughly \$16 billion as a potential latent demand-- with a possible \$16 Bil revenues increment added once the United States market can be opened.

In summary, major future Takaful markets over the coming 10-15 years that might expand are:

- Turkey \$700 Million revenues arising from 5 Mil participants of 75 Mil population, or increase of Penetration Rate from 1.5% to 2.2%
- Morocco \$510 Million revenues arising: from 5 Mil participants of 33.5 Mil population, or increase of Penetration Rate from 3.2% to 3.8%

- CIS \$457 Million revenues arising: from 61 Mil population
- EU \$14.4 Billion revenues arising: from 8 Mil Muslim participants of 345 Mil population, or increase in Penetration Rate from 10.6% to 11.2%
- Africa \$770 Million revenues arising: from 20 Mil Muslim and other participants of 345 Mil population, or increase of Penetration Rate from 1.3% to 1.8%
- USA \$16.5 Billon revenues arising: from 6 Million Muslim participants of 319 Mil population, or increase of Penetration Rate from 7.3% to 8%

5.6. Forecasts of Future Global Takaful

Worldwide gross annualized Takaful contributions (gross premiums) of approximately \$750 million in 2000 have grown impressively to \$2.5 billion in 2005 and then to an estimated \$15.1 billion (and up to \$21.6 billion including all Iran Cooperatives) in 2014, representing an annualized growth rate of 13% per cent. In the five years (between 2007-2012) the compound annual growth rate of gross contributions in the industry seems to have accelerated in many diverse markets—rising above 9.8% per cent CAGR. However, the period 2012-2014 evidenced a marked slowdown of global Takaful growth to an average of only 6% increases annualized in new business. Many observers forecast Total Global Takaful volume of contributions possibly to exceed \$27 Billion by 2020 (up to \$37 Bil including all of Iran's Cooperatives) assuming an average 12% annual growth rate worldwide.

Our forecast is global Takaful contributions can reach to \$55.6 billion by 2025 given an average Compound Annual Growth Rate (CAGR) of 10% worldwide in Emerging markets. Major components of these forecasts are as follows:

- Global Takaful \$18.8 billion
- Saudi Arabia Cooperatives \$19.2 billion
- Iran Cooperatives and Islamic Insurance \$17.6 billion

Global forecasts for Takaful also appear in section below.

Baseline for the forecast uses the actual compounded growth rates for the period 2009 to 2015 by region as follows:

Region	Growth Rate
	2009-2015
Indian Sub-Continent	7.5%
North Africa - Levant	5.2%
ASEAN/Pacific	14.3%
GCC all	9.99%
Saudi Cooperatives only	15.8%
Iran	10.8%
Total Global Takaful	29.8%

USA	1.9%
UK	-3.1%
South Africa	2.2%
Turkey	4.5%
Worldwide Emerging	9.1%
MidEast-Central Asia	9.7%
Asia – Emerging	14.8%
ASEAN	13.5%
Africa	3.7%

Table 5.6.1: Forecasts of Global Takaful 2009 – 2015

Source: Swiss RE SIGMA 2015/4, World Insurance Report 2015.

Takaful growth has occurred in the populous region of South Pacific due to its moderate per capita income levels, acceptance of insurance and propensity for savings and pensions. The significant size of Takaful in GCC region is due to higher GDP and per capita incomes despite its limited population. Future Takaful growth may restart in 2018 and could very likely accelerate in populated regions of Africa and Levant (782 mils and 777 mils respectively) as the economies, heavily dependent upon commodities, expand further and their household per capita incomes resume their rising trends.

Regional growth in Takaful business can be forecast by projecting off the baseline of 2014 figures. However, to be conservative, we have cut the expected future growth rate by 1/3—using a standard of 10.5% CAGR figure, which results appear in Table 5.6.2

Based upon a ten (10) year projected compound growth rate (CAGR) of 10.5%, using the baseline of existing regional Takaful markets in 2014, projections for 2015, 2020 and 2025 will arrive at \$23.7 Billion for Total Global Takaful Contributions (2015) rising eventually to \$59.3 Billion (2025). Approximately 32% of this Islamic insurance business will be underwritten on cooperative basis in Iran: \$7.5 Billion (2015), \$13.1 Billion (2020) and reach to \$18.8 Billion (2025).

Detailed forecasts through 2025 using these compound growth rates produces the tables and charts below:

Region	CAGR 2015-2020	CAGR 2020 - 2025
Indian Sub-Continent	20%	15%
North Africa - Levant	15%	12%
Africa- SSA/other	5%	5%
ASEAN/Pacific	10.5%	10.5%
GCC (excluding Saudi Arabia)	6.5%	6.5%
Saudi Arabia Cooperatives	12%	5%
Iran	7.5%	7.5%
Other: EU/etc	10%	20%
Turkey alone	12.5%	18.7%

Table 5.6.2: Forecasts of Global Takaful 2015 – 2025

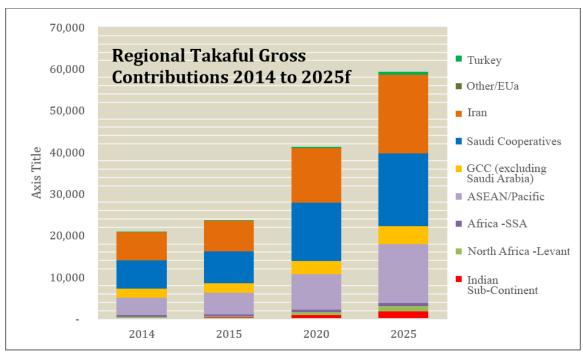


Chart 5.6.1: Forecasts of Regional Takaful Gross Contributions 2014-2025

Sources: E&Y World Takaful Reports 2010-2014, Sigma World Insurance data 2015 and Dr. Fisher's estimates.

The above forecast foretells that GCC region including Saudi Arabia will dominate the Global Takaful business with roughly 60% of the written business, excluding Iran (which steadily represents about 32% of Total Global Takaful premiums). Again, Saudi Arabia's influence however will wane from 68% of Global non-Iran Takaful premiums in 2010 to 58% in 2015 and finally to 55% in 2025f. Whereas it is expected that the Non-Iran, Non-Saudi and Non-Malaysian vanguard markets of Indian Sub-Continent, Africa, Levant and Asia/Pacific regions combined will expand dramatically from 9% of Total Global Takaful premiums in 2009 to swell to nearly 30% share by 2025.

An analysis of Muslim majority countries worldwide and their GDP in Billions USD\$ (2012), given below, scopes the potential regional markets for Takaful using disposable per capita income as a proxy for potential new business.

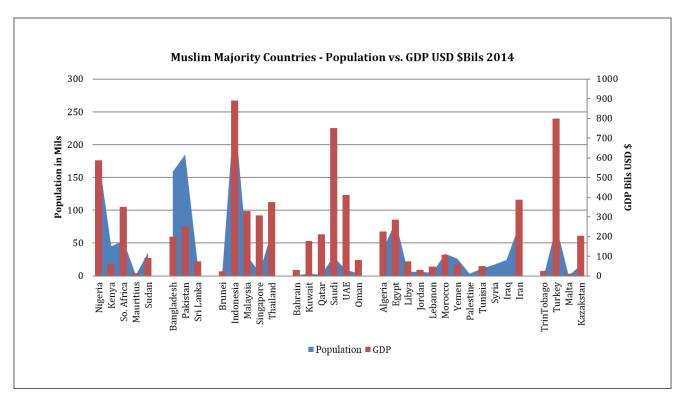


Chart 5.6.2: Muslim Majority Countries – Population vs. GDP 2014

Source: SIGMA4/2015, CIA Factbook 2014.

From the economic data is it obvious that the Muslim Majority countries form the Emerging Markets segment of the world and approximately 21% of global population yet only 9.4% of GDP. Thus, the individual GDP Per Capita is relatively low vs Developed/ EU Markets [\$ 662 vs. \$ 1902], or for USA [\$4,017], which means that Takaful products in these markets should properly focus on capturing smaller size insurance purchases – called micro-Takaful which can generate annual volumes that scale to bigger operations. Thus, regional Target Emerging Markets stack up as follows:

Region	Population Mils	% of Global	GDP PPP USD \$ Billions	% of Global
	2014		2014	
Indian Sub-Continent *	365.1	5.1%	523.0	0.7%
Africa- SSA/other	314.3	4.4%	1,100.9	1.4%
North Africa - Levant	256.2	3.5%	880.1	1.1%
GCC including Saudi Arabia	49.6	0.7%	1,665.4	2.2%
ASEAN/Pacific	357.1	4.9%	1922.3	2.5%
Iran	78.5	1.1%	387.0	0.5%
Other: EU/Trinidad/Turkey	77.6	1.1%	835.0	1.1%
Totals	1,498.4	20.8%	7,313.7	9.4%
Worldwide	7217.9		77,393.0	

Table 5.6.3: Regional Emerging Markets Population vs GDP 2014

Source: SIGMA 4/2015 Note: Excludes *India and #PR China

5.7. Assets and Financial Profile

5.7.1. Total Assets and Profile of Major Takaful Markets:

In 2005, a sample of 69 insurers in GCC shows that average Total Assets for Takaful Operators was \$58 Million vs. \$113 Million for conventional insurers. ¹¹ Takaful median assets were merely \$17 Million vs. \$63 Million for their conventional counterparts. Using more recent data, the major markets selected below represent 59% of global Takaful contributions (or 80% excluding Iran), a picture emerges of Total Assets of Takaful operators in 2014-15.

Saudi Arabia – Gross Contributions \$8,035 Mil (2014)

Saudi Arabia represents 37% of worldwide Takaful/Coop revenues in 2015. There are 38 operating companies and one (1) Re-insurance-ReTakaful- SaudiRe. Published data indicates Total Assets in 2015 are \$14.02 Bil; of which \$3.3 Bil is Shareholders' equity capital. Total Top line contributions written in 2015 were \$9.62 Bil, up from \$8.03 Bil in 2014 [+19%], yet this Leverage Ratio is equivalent to only 66% of assets in comparison to typical leverage ratios of 1.5X to 2X assets of conventional insurers.

Saudi Arabia as of July 2016, of the 13 listed companies on the Tadawul Exchange six (6) are insurance companies that are flagged for substantial loss of capital:

- 4 lost more than 50% of contributed capital
- 1 lost more than 75%
- 1 lost more than 100%

Published financial results for 2014 and 2015 demonstrate that cooperative/takaful companies in Saudi Arabia are performing largely with positive results- 21 of 35 companies reporting. However, of the 14 Takafuls with poor outcomes, 6 have lost 50% or more of their original paid capital. Moreover, only 5 companies report positive results for Policyholders greater than 5% surplus, 12 have greater than 1% surplus and fully 23 of 35 companies report zero or less than 1% surplus. Whereas, 16 companies report profits to Shareholders greater than 5% ROE.

Median figures for this data shows Policyholder's Surplus returns were 0.5% in 2015 and 0.3% in 2014 whereas Shareholder's profits were 2.8% in 2015 and 3.7% in 2014. Median ROE for Shareholders in 2015 is 4.5%. One conclusion is overall finance performance of the Insurance Sector in Saudi is barely self-sustaining perhaps due to the fragmentation of the marketplace and large numbers of competitors. There are four (4) dedicated Family Takaful/Life only operators and more than 34 companies offering General, Non-Life and Medical products. One clear observation is that Cooperatives are being operated

¹¹ Dr. O. Fisher unpublished PhD thesis (2005).

to favor short-term profits to Shareholders rather than with an eye towards buildup of reserves that can benefit risk management and security for Policyholders.

Malaysia - Gross contributions \$3,024 Mil (2014)

Malaysia first entered the Takaful industry in 1983 and under injunctions of a Takaful Act 1984 of parliament expanded over the next 32 years to host 24 Takaful and ReTakaful companies—representing 9% of global Takaful institutions and 8% market share of worldwide takaful revenues in 2014. Of the 12 Takaful operators, Total Assets in 2014 were \$6.15 Bil, or 9% of total assets in the insurance sector of Malaysia, with an increase of 19% over 2012. With top line revenues in 2014 of \$1.71 Bil grew 7.5% since 2012, yet is Leverage Ratio equivalent to only 28% of total assets, whereby Malaysian Takafuls seem to have considerable under-utilized capacity. Despite the robust growth and popularity of Takaful, its overall penetration rate is modest – about 10% vs 40% for conventional insurers ¹². Because Muslims form 50% of Malaysian population, a higher capture rate for Takaful is anticipated. Also, non-urban areas of Malaysia may hold huge untapped potential for micro-Takaful coverages.

In 2014, 75% of Takaful revenues were Family Takaful (Life) business while only 25% was Non-Life/General business (per Bank Negara 2015). Takaful has successfully captured 14% of total gross insurance premiums written in Malaysia (2014) up from 9% in 2009. CAGR for the past five (5) years for revenues growth is 12.4% (vs. 7.8% for conventional insurance).

Published data¹³ points to re-structuring of the Takaful market between 2012 and 2014 where total employees declined from 3,162 to 2,720 (-14%), number of Agents dropped from 105,552 to 78,979 (-25%) and number of Offices decreased from 213 to 129 (-39%). Three Takafuls were successfully merged. Registered individual Takaful Agents (Family) were 63,913 or 81% of all Agents. Growth of bancassurance offerings has resulted in 21% of these Registered Agents being connected with banks. Widespread use of internet and online availability of Takaful across Malaysia might account for part of this contraction of Takaful channels and suppliers, yet heightened competition among the 12 pure Takaful operators surely explains a part also.

Family Takaful enjoys sustained profitability with a favorable total expenses and Claims ratio of 64.1% in 2014. Total Income went up 10.2% between 2012 and 2014. Underwriting Profits posted a gain of 4.2% in 2014 and Net Operating Profit/Surplus of 5.8%, including Investment gains/Losses.

 $^{^{12}}$ "Takaful: A Review on performance, issues and challenges in Malaysia", Journal of Scientific Research and Development No. 3, 2016.

¹³ IBID., p.74.

General Takaful is dominated in Malaysia by a Motor business line – some 60% of the product mix (2014). All major NL areas have enjoyed CAGR above 15% since 2009:

Motor – 23% RM 1,294 M
 Fire 16.1% RM 431
 Personal Accident 16.5% RM 219
 Medical 14.6% RM 6
 Marine, Aviation, Transp. RM 52

Published financial results for 2014 indicate that more than two-thirds (8) of the Takaful players booked annual gains in top line contributions of +6% to10%, 2 had 5% or less, 6 had gains above 15%. Similarly, 3 booked a profit margin of less than 5%, 12 booked profits between 6% to 15%, and 4 Takafuls showed profit gains above 16%. Again, one-half of Takafuls earned an ROE of 8.1% in 2014 and 2 reported ROE between 11% and 20%.

UAE – Gross Contributions \$1,314 Mil (2014)

UAE hosts 64 insurers for its population of 9 Mil, of which 13 are following Takaful principles—including 2 ReTakafuls. Total Gross written premiums in UAE show impressive annual growth over the past 3 years (+12%), rising from \$7.2 Bil (AED 26.3 B) in 2012 to \$9.2 B (AED 33.5 B) in 2015. General-Non Life business dominants with 72% share, yet Life policies gained 3% over this period with 440 thousand new insureds.

Medical insurance captures 44% of Non Life premiums (33% of total 2015 premiums vs. 25% in 2012) and has doubled in volume since becoming mandatory to businesses announced in 2011. However, overall Loss ratio for Medical in 2015 climbed to 88% with a Combined Ratio exceeding 100% for the industry, resulting in poor profitability for this line of business.

Although the market shares of Takaful business in UAE reached 9.5% in 2013 (AED 2.8 B \$769M), by 2015 its market share declined to 7.7% due to negative growth of 8% in top line revenues of AED 2.6 B (\$707 M). Non Life Takaful business is AED 2.05 B (\$561 M), whereas Family Takaful eeked out revenues of only AED 530 M (\$145 M). Takaful General business of Motor, Fire and Accident/Liability covers mirror UAE's_overall Loss Ratio of 79%, whereas Family Takaful Loss Ratio is 32%, a usual result for Life book less than 7 years young.

5.8. Underwriting Leverage and Retention Ratios

An additional measure of technical risk management and financial health is the ratio called "Underwriting Leverage", which describes the efficient use of capital by insurers. The ratio is calculated, as a percentage, by dividing the Retained Premiums by the Total Assets. Typically, percentages below 100% indicate inefficient use of Total Assets whereas

highly efficient deployment of assets might yield ratios of 200% to 300%. The next Table 5.8.1 shows an average Underwriting Leverage ratio for key Takaful markets worldwide based upon a small sample size of financial data using top line revenues (as statistics on net retained premiums were unavailable).

	Sample		
Takaful Markets	Takaful Operators	2011	2010
Kuwait	10	0.56	0.52
Jordan	3	0.66	0.68
Malaysia	8	2.10	1.64
Pakistan	5	1.29	0.89
Qatar	3	058	0.58
Saudi Arabia	18	1.63	1.46
UAE	6	0.88	1.30

Table 5.8.1: Selected Underwriting Leverage Ratios

Source: Dr. O. Fisher research

It is noteworthy that within selective markets for year 2015, certain Takaful Operators are achieving Underwriting Leverage ratios comparable to professional conventional insurers; e.g. Arabian Shield/Saudi 102%, Malath Takaful/Saudi 100%, BUPA/Saudi 119%, and TakafulMalaysia- Family 209%, with widely divergent results elsewhere: Eqita Takaful/Malaysia 0.13, Iklas Takaful/Malaysia 26% and TakafulMalaysia - General/Malaysia 26%.

By contrast, those Takaful Operators whose Leverage Ratio is under 100% are failing to realize efficient use of risk bearing capital and a sufficient scale of operations that can underpin basic profitability.

Overall Takaful Operators retain more risk exposure than conventional insurers due to their focus on less complex forms of business classes and due to excess capacity, as Takaful are still building up their book of business. Given Takaful's relatively more modest capitalization, their Net Underwriting Leverage seems suboptimal. Across GCC Region, Takafuls tend to cede higher percentage of risks to reinsurers as many have traditionally acted as "brokers" that pass along the risks rather than perform careful underwriting and statistical analysis required for exact risk pricing and risk retention of larger commercial risks.

Total global Takaful assets were estimated to be \$33.39 Bil, up from \$31.60 Bil in 2012.¹⁴ When compared alongside gross contributions, we can see the underwriting leverage employed as calculated on a global basis:

¹⁴ Finance Forward, T.Reuters-Dinar Standard and E&Y Takaful Reports, 2014-2016.

	2014	2013	2012
Total Assets Est.	\$33.39 Bil	\$30.47	\$31.60
Contributions	\$21.05	\$17.15	\$16.98
Leverage Ratio Takaful Sector	0.63	0.56	0.54

Table 5.8.2: Leverage Ratios 2012-2014

Source: Finance Forward World Takaful market Report 2016, Global Advisors, April 2016

By contrast, the leverage ratios of selected Coops operating in Saudi Arabia are:

BUPA 1.19 Arabian Shield 1.02 Al Malath 0.98 Salama 0.80 0.76 Wataniya Al Rajhi Coop 0.76 AXA Coop 0.74 MEDGULF 0.72 AlJazira Tak 0.15 Sanad 0.03

Thus, the Takaful industry worldwide would appear to be operating with substantial under-utilized capacity to leverage its total assets for more risk business. The case of AlJazira Takaful Taawuni (0.15) is explained by suspended sales for an extended period pending public stock listing in Saudi and a strong capital base. Whereas accumulated losses due to high claims by Sanad Coop Insurance have eroded their capital base to a point of being flagged by Tadawul Exchange and a halt to trading of its shares.

Historically, Non-Life/General insurers strive to balance volume of underwriting risk exposures with technical- general reserves and shareholder capital in order to determine optimal "profitability" points by line of business for retention vs. cession of risks to reinsurers (ReTakaful) in exchange for an agreed portion of gross premiums. Hence, retention ratio, also called earned premiums, is an indicator of how aggressive that insurer is in risk appetite and confident about their underwriting risk assessments; i.e. pricing each risk. Commonly, high value assets such as airplanes, ships, office buildings and residential towers are protected by insurers with somewhat lower retention ratios because claims may far exceed the requested premium price and cause significant losses to the insurer (viz. destruction of World Trade Towers in 2001 with claims exceeding \$4 Bil). Likewise, medical insurers generally retention higher ratios of small groups but cede a big portion of large corporate medical groups.

By contrast, Life/Family Takaful insurers retain big portions of risk exposures because statistical analysis and risk modelling enable them to underwrite for an annual surplus,

once the set up expenses and sales commissions are fully recovered (usually over 4-7 years).

Observation: it is difficult for insurer to generate profitable business when the majority of its written business is ceded away along with premium to a reinsurer/ReTakaful company, which then manages that risk.

Sample data on retention ratios for the Middle East are displayed below:

Retention Ratios Takaful	No	on Life da	ta
Retention rates	2011	2010	2009
GCC conventional insurers	0.50%	0.48%	0.53%
GCC Takaful Operators	0.66%	0.66%	0.53%
Saudi Cooperatives Sample	0.73%	0.63%	0.68%

Table 5.8.3: Retention Ratios Takaful 2009-2011

Takaful average retention of gross contributions was 58% in 2005 vs. 46% for conventional insurers, climbing to 66% retention by Takaful in GCC region in 2011 vs. 50% for conventional insurers. This demonstrates that Takaful are typically underwriting Personal Lines with less severity and catastrophic risks, whereby permitting higher retention rates that also assures more internal funds available for investments whereby earnings can lead on to more favorable Combined Ratios.

Recent data from specific Cooperative Takaful companies in Saudi Arabia shows a median Retention Ratio of:

- 0.63 in 2015
- 0.67 in 2014
- 0.59 in 2013

Which is consistent with earlier data in the above Table. Salient data from selected cooperatives is below:

Takaful	2015	2014	2013		ROE to Shareholders 2015
				Strong Underwriters	
Arabian Shield	1.01	0.60	0.63		11.7%
Al Malath	0.92	0.73	0.86		-3.8%
BUPA Arabia	0.92	0.80	0.82		11.2%
AXA Coop	0.88	0.82	0.83		5.9%
				Weak Underwriters	
Al Ahlia	0.80	0.96	0.63		-44.5%
Enaya Coop	0.37	0.93	0.25		-25.6%
Gulf General	0.48	0.52	0.45		-18.1%
Watanyia	0.40	0.44	0.49		-19.5%

Table 5.8.4: Retention Ratios 2013 – 2015 in Saudi Arabia

Although al Ahlia Cooperative chose high retention ratios in 2014 and 2015, its high expense ratio, poor underwriting and claims experience resulted in Combined Ratios of 125% (2015), 124% (2014) and 119% (2013), accumulating losses nearly equal to 100% of shareholder capital.

Against a Median figure for Retention of 0.63 in 2015 up from 0.59 in 2013, the following table displays break-out data for selected Takaful operators in UAE and Malaysia.

	2015	2014	
AMAN – Dubai Islamic Insur. Total	1,147 Mil	1,032 Mil	
Assets (AED)			
Total Takaful Revenues	442.7 Mil	378.9 Mil	
Retained Revenues	173.2 (39%)	138.9 (37%)	
Leverage Ratio	0.38	0.36	
Net Claims Incurred	118.8 Mil (69%	110.6 Mil (80% Ratio)	
	Ratio)		
Accumulated Losses in	-48.6 Mil	-13.5 Mil	
Policyholders Account			
Dar Al Takaful Total Assets (AED)	324.2 Mil	253.9 Mil	
Total Takaful Revenues	208.3 Mil	151.4 Mil	
Retained Revenues	81.5 Mil (39%)	39.7 Mil (26%)	
Leverage Ratio	0.64	0.59	
Net Claims Incurred	92.7 Mil (113%)	56.3 Mil (141%)	
Accumulated Losses in	-83.2 Mil	-63.9 Mil	
Policyholders Account			
Salama Takaful Total Assets (AED)	3359.2 Mil	3591.6 Mil	
Total Takaful Revenues	993.3 Mil	764.1 Mil	
Retained Revenues	699.8 (70%)	544.6 (71%)	
Leverage Ratio	0.29	0.21	
Net Claims Incurred	455.8 Mil (65%)	297.1 Mil (55%)	
Accumulated Losses in	-231.8 Mil	-98.4 Mil	
Policyholders Account			
Takaful Emarat Total Assets (AED)	439.3 Mil	232.3 Mil	
Total Takaful Revenues	402.8 Mil	169.5 Mil	
Retained Revenues	319.8 (79%)	98.2 (58%)	
Leverage Ratio	0.92	0.73	
Net Claims Incurred	219.8 Mil (69%)	54.1 Mil (55%)	
Accumulated Losses in	-58.1 Mil	-43.9 Mil	
Policyholders Account			

Table 5.8.5: Retention and Leverage Ratios UAE 2014-2015

	2015	2014
Takaful Malaysia Total Assets	7,053 Mil/ 4,778 Family	6,743 Mil / 4,549 Family
(RM)	,	
Total Family Takaful Revenues	1,260 Mil	1,150 Mil
Retained Revenues	986.9 (78%)	892.3 (78%)
Leverage Ratio	0.26	0.25
Net Claims Incurred	626.1 Mil (69% Ratio)	537.9 Mil (80% Ratio)
Accumulated Profits in	4,545.8 Mil	4,350.6 Mil
Policyholders Account		,
Takaful Malaysia- General	225 Mil	207 Mil
Assets (RM)		
General Revenues	472.4 Mil	446.7 Mil
Retained Revenues	243.5 Mil (52%)	249.1 Mil (56%)
Leverage Ratio	2.09	2.15
Net Claims Incurred	64.5 Mil (26%)	81.1 Mil (33%)
Accumulated Profits in	214.4 Mil	200.1 Mil
Policyholders Account		
Takaful Iklas Total Assets	3,103.5 Mil	2,883.1 Mil
(AED)		
Total Takaful Revenues	819.2 Mil	754.5 Mil
Retained Revenues	683.6 (83%)	645.8 (86%)
Leverage Ratio	0.26	0.26
Net Claims Incurred	468.3 Mil (69%)	472.5 Mil (73%)
Accumulated Profits in	287.2 Mil	238.8 Mil
Policyholders Account		
Etiqa Takaful Malaysia Total	16,809 Mil	18,938 Mil
Assets (RM)		
Total Takaful Revenues	2,503 Mil	2,523 Mil
Retained Revenues	1,528 Mil (62%)	1,696 Mil (67%)
Leverage Ratio	0.15	0.13
Net Claims Incurred	1,304 Mil (85%)	1,614 Mil (95%)
Accumulated Profits/Loss in	283.9 Mil	355.4 Mil
Policyholders Account		
Amana Takaful Sri Lanka Total	4,746 Mil	3,742 Mil
Assets (Rs)		
Total Takaful Revenues	3,238 Mil	2,652 Mil
Retained Revenues	2,751.3 (85%)	2,384.1 (89%)
Leverage Ratio	0.58	0.64
Net Claims Incurred	3,021.0 Mil (109%)	2,293.0 Mil (96%)
Accumulated Profits/Loss in	-280.5 Mil	103.0 Mil
Policyholders Account		
Table F.O.C. De	etention and Leverage Ratios Mal	Januaria, 2014, 2015

Table 5.8.6: Retention and Leverage Ratios Malaysia 2014-2015

5.9. Productivity of Takaful Employees

It is understandable that the youthful Takaful sector worldwide is still building up a "head of steam" in terms of laying on employees to conduct business. Based upon sparse data collected of the actual number of Takaful company staff, a hazy picture emerges of average size of Takaful operators by region.

Actual numbers of employees per company gauged in 2015 vary widely depending upon the stage of maturity of the insurance market and the depth of competition. For example:

- Algeria 152
- Bahrain 55 132
- Bangladesh 400 1796
- Egypt 70 800
- Indonesia 70 1700
- Kuwait 37 94
- Saudi Arabia 45 1181
- Malaysia 53 2000

A rough figure for global Takaful average size is calculated at 378 (2015), 328 (2014) up from 299 (2011). Based upon an extrapolation of total Takaful employees worldwide of:

- 98,451 2015
- 86,310 2014
- 61,871 2011

Comparative productivity figures for the Takaful sector can be revealed by analyzing a ratio derived by dividing top line revenues by the number of Takaful employees. These ratios are displayed in Chart 5.9.1 arranged by major regions. Selected Takaful operators have achieved "reasonable" levels of productivity per employee:

- Malaysia's Maybank/Egita ranges from \$1.0 Million to \$0.81 Million per employee
- Malaysia's Iklas ranges from \$1.0 Mil to \$0.90 per employee
- Saudi Arabia's Tawuniya ranges from \$1.02 Mil to \$1.70 Mil (2014-15)
- Saudi's Cooperative sector as a whole range in 2014-15 from \$0.38 M to \$0.85 M a decline from \$0.82 Mil to \$1.02 Mil posted in 2009-2011

Certain Takaful Cooperative companies in Saudi Arabia standout as solid examples of high employee productivity in a league with international conventional insurance:

- BUPA \$1.7 M to \$2.3 Mil (2014-15)
- Tawuniya \$1.0 M to \$1.7 M
- Al Malath Takaful \$1.36 M to \$1.40 M
- MEDGULF \$1.24 M to \$1.52 M

- Al Wataniya \$0.72 M to \$1.63 M
- AXA Cooperative \$1.10 M to \$1.43 M

However, the worldwide Takaful sector's average productivity ranges from \$0.27 Million to \$0.26, which is a fraction of the productivity of the Islamic insurance of the relatively mature markets described above. Newer Takaful operators struggling to carve out a niche position in Levant markets — show productivity below the global Takaful productivity average, ranging from \$0.15 Mil to \$0.19 Mil per employee.

Based upon a sample of 69 insurers in GCC region (2005), the average productivity per Takaful Employee was \$263,000 vs. \$500,000¹⁵ for conventional insurers, a 47% shortfall in productivity.

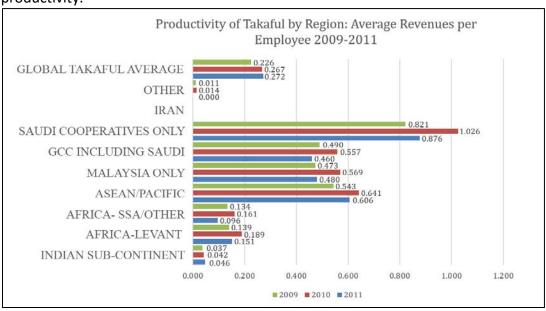


Chart 5.9.1: Productivity Revenues per Takaful Employee 2009-2011

Region	Average Productivity Per		
	Employee 2014 est.		
Indian Sub-Continent	\$0.038 Mils		
North Africa - Levant	\$0.095		
Africa- SSA/ other	\$0.101		
ASEAN/Pacific/So.Asia	\$0.121		
GCC (excluding Saudi Arabia)	\$0.674		
Saudi Arabia	\$0.901		
Iran	\$0.637		
Other: EU/Turkey/Trinidad/Yemen/USA	\$0.448		
Worldwide Takaful	\$0.294 Mils		

Table 5.9.1: Average Productivity by Region 2014

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¹⁵ Dr. O. Fisher, Unpublished thesis on Financial and Operating Characteristics of Takaful Operators in GCC, 2005.

In the 5-year period under review, global average Productivity per Takaful Employee rose from \$226,000 to \$294,000, a positive 30% gain. Nonetheless, a regional analysis shows that Takaful productivity made strong gains in ASEAN/Pacific/Malaysia (up 12%) and is 122% higher than the benchmark. GCC regional productivity is 69% higher than benchmark yet shows an overall decline of 6% for 2009-2011. Africa region likewise shows a decline in productivity of 32% -- perhaps due to larger headcount and slower adoption rates as a common feature for start-up ventures. North Africa - Levant regional productivity shows a gain of 9%, however overall employee productivity still lags at only 55% of the global Takaful average.

Benchmarks of Employee Productivity using only conventional mutual insurers in developed markets can be calculated from data in the ICMIF Annual Market Share Report (2013) as follows:

Average Productivity Per Employee in			
Conventi	onal Sector		
Typical Gross Pre	emiums of M	lutuals	
2011 (M	2011 (Million US \$)		
UK	\$ 0.597		
France	\$ 1.390		
Germany	\$ 1.263		
Italy	\$ 3.144		
Netherlands	\$11.367		
Japan	\$ 1.165		
USA	\$ 0.979		
Canada	\$ 0.886		

Table 5.9.2: Average Productivity per Employee Conventional Sector 2011

Thus, the average Takaful Employee Productivity in 2014 of \$294,000 is approximately only 22% of the average productivity for established Mutuals with \$1.34 Million annually per employee in the above sample.

Benchmarks for Employee Productivity of \$0.848 Mil in Saudi Arabia's Cooperative sector as a whole and \$2.3 Mil for BUPA Arabia, provide indications of possible levels of employee productivity that Takafuls can aspire to. Achievement of such productivity outputs will require continuous employee training, adoption of IT automated systems, technological and operational improvements, and elastic incentives and compensation programs to reward merit and drive employee productivity higher in the workplace.

Chapter 6

Takaful Models and Risks

6.1. Types of Takaful Models

When Takaful re-emerged in Sudan in 1979, a cooperative model featuring no shareholders only policyholders was adopted for operations. Over the past three decades, a hybrid model appeared whereby shareholders form a stock company to manage a cooperative primary risk pool. Also, Takaful "windows" within reinsurance operators offered to handle sharing of Takaful risks on a "Re-Takaful" basis. In some countries, existing conventional insurers were allowed to open "Takaful windows" to address popular demand. Outside of Sudan, no insurance regulator supported the establishment of a mutual risk-sharing business model – but rather promoted stock insurance licenses to all Takaful new comers.

Refer back to Table 1.2.2 shows a breakout of 238 global Takaful institutions as of 2012. The total number of Takafuls and "windows" has swelled to 269 entities. Of these 11 institutions were closed, merged or acquired.

Malaysia's Takaful Act of 1984 regulated operations as a Mudarabah model, which structural model was unacceptable to GCC Takaful founders in Jordan, Saudi Arabia and Bahrain. Thus the GCC and Levant regions have pursued a Wakala¹⁶ operations model, which enterprise form was popularized by launching of Takaful Taawuni by Bank Al Jazeera in 2000.

Within the sample of 263 Takaful operations, there are 36 Unknown models, although it is certain that 2 models in Pakistan are experimenting with a Waqf model for Takaful. However, changes to Pakistan SEPC's insurance regulations in 2013 promotes the Wakala model and also permits conventional insurers to maintain Takaful "windows".

Over the past 20 years, there have been 11 mergers or closures of Takaful operations – several were outright failures in their respective markets. While circumstances most certainly differ – poor management, weak planning, wrongheaded product decisions or pricing—typical risks in any modern business—one cannot conclude that Takaful principles are at fault, nor that Islamic values are not welcomed by target customers. On the contrary, customers in the 21st century are savvier than ever, can access pricing and product information instantaneously on their digital devices, more vocal about quality of customer service and fulfillment of a brand "promise". To propel growth, Takaful must become "customer centric", improve and innovate products/services addressing real customer needs, and adopt enterprise risk management systems and techniques to accurately assess and price risks, while adhering throughout to core Islamic values.

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¹⁶ Full descriptions of each model can be found in Principles of Takaful, BIBF Bahrain 2009

Chart 6.1.1 below describes the forms of Takaful operations likely in use by the 233 Takaful and Re-Takaful institutions in the Directory.

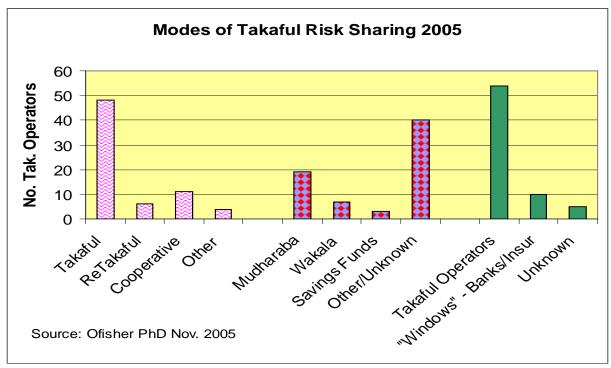


Chart 6.1.1: Types of Takaful Models 2005

Source: Dr. O. Fisher's research.

The data gathered and analyzed with an unpublished PhD thesis (2005) by the author shows that the global dominant model for Takaful is Mudarabah-- 29% of the Takaful sample of 69 operators elected the Mudarabah model, whereas 14% chose Takaful "windows" and 12% employed a Wakala model. However, seven (7) years later reveals a more balanced profile of deployment of Takaful models.

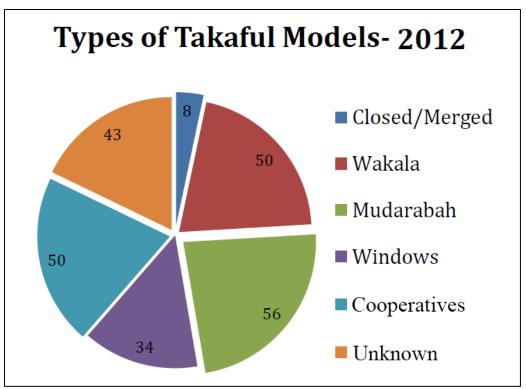


Chart 6.1.2: Types of Takaful Models 2012

Source: Takaful Directory and author's data, 2012.

During the past three (3) years worldwide, Primary Takaful Operators increased by 13, from 211 to 224. Concomitantly, ReTakaful Operators grew by 11, from 22 to 33. From available data, the number of Closed/Merged Takafuls remained unchanged at 8.

As more information became publicly available, the number of Unknown Models fell from 43 to 12. Mudarabah remains the most popular type of Takaful Model at 74 – possibly because it affords a highly commercial structure favoring shareholders. The 'Windows' type of Takaful Model grew to 48 as several insurers in Indonesia opted to issue Takaful policies. However, new regulations in Indonesia compel insurers to separate Takaful products into independent operations starting in 2014/15 which should act to reduce the "Windows" count by at least 23. Cooperatives expanded to 70 due to new comers identified in Iran, Saudi Arabia and Sudan. As observed by many Takaful experts, while the Cooperatives in Saudi Arabia comply with the Cooperative Law of 2006, which is deemed to be consistent with Shari'ah principles, these Models do not carry all recognized traits of a full Takaful business. Wakala Model increased to 51, yet remains the Takaful Model of choice by national Insurance Authorities in Bahrain, UAE, Malaysia and Indonesia. For example, Bank Negara Malaysia is encouraging new Takafuls licensed over the past 4 years to adopt the Wakala model, and points towards its increasingly preference as a disciplined, transparent and fair model for both shareholders and policyholders.

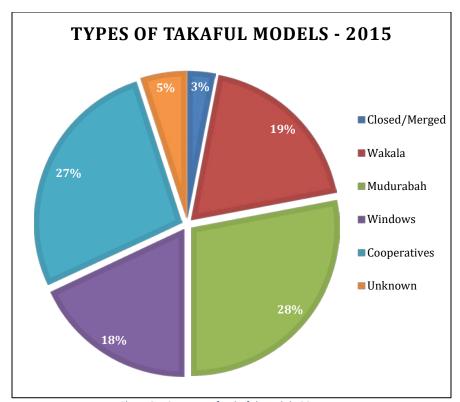


Chart 6.1.3: Types of Takaful Models 2015

	Mudarabah	Wakala	Cooperatives	Takaful Window	Unknown	Of Which: Retakaful
Total Takafuls (258)						35
Indian Sub-	2	5	0	7	1	2
Continent						
North Africa- Levant	8	3	0	2	11	5
Africa -SSA	8	4	0	7	11	0
Sudan	2	1	13	0	0	3
ASEAN/Pacific	9	4	1	23	5	4
Malaysia alone	6	12	0	5	1	9
GCC (excluding	28	18	0	3	3	7
Saudi Arabia)						
Saudi Arabia	1	0	36	0	0	2
Cooperatives						
Other:	5	1	0	1	4	2
EU/Trinidad/Turkey						
/Yemen/ USA						
Iran Cooperatives	0	0	14	0	2	1

Table 6.1.1: Types of Primary Takaful Models by Major Regions 2015

6.2. Takaful Sector Business Risks

Business risks are everywhere. Despite being experts in risk assessment, Takafuls turn in mixed results in actual implementation of risk controls and risk mitigation steps. Chart 6.2.1 below displays the 18 top priority risks that confront Takaful enterprises. Observations from industry experts and advisors, plus the author's first-hand interactions with senior management of Takafuls, are positioned on this radar graph ranking each risk as Low Risk (circle 7) or Highest Risk (Circle 1). Top three (3) risks are in purple color and should be uppermost in minds and plans of Takaful management (i.e. within Circle 1&2) yet concerns about such risks have not been translated into consistent risk controls.

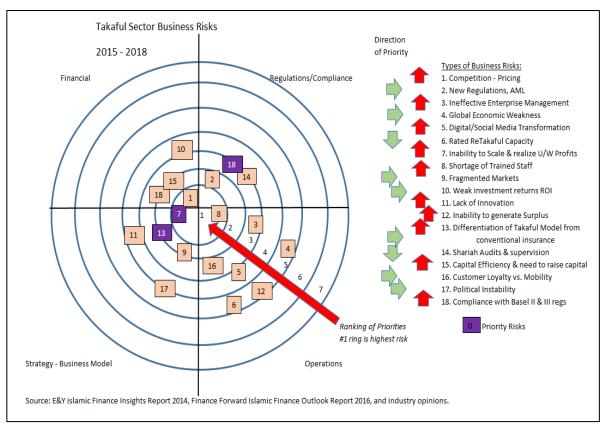


Chart 6.2.1: Takaful Sectro Business Risks 2015-2018

Important business risks are divided into four (4) quadrants reflecting major areas of operations; namely, internal process flow and operations; strategy and business model structure; financial performance; and regulatory compliance. Integrated with Corporate Governance policies are risk culture and day-to-day practices of risk management. Articles elsewhere ¹⁷ have documented the nascent level of Corporate Governance in a myriad of Takaful companies worldwide. Gradual improvement can be expected as Takaful players

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¹⁷ For example, see Dr. Fisher's article entitled "Alignment of Corporate Governance and Takaful", ME Insurance Review, 2014 and "Malaysian Takaful Dynamics Central Compendium" E&Y Report, 2015, p.21 ranking item7.

shape up to comply with insurance regulations and Takaful Ethical Code, where such pertain. Hence, further progress in risk management can be anticipated.

Nonetheless, if left unattended, the top risks of "Inability to Scale and realize U/W Profits", "Differentiation of Takaful model from conventional insurance" and "Compliance with Risk-based Capital Basel II & III regulations" will likely retard further growth of Takaful enterprises and/or sustain the widespread current trends of negative financial performance. Refer to Chapter 5.

Given prevailing low interest rate environment in most Takaful Emerging markets, an added financial challenge is raising up investment yields to help build up better profitability, especially because many Personal Lines covers (like Motor, Fire) are causing unfavorable underwriting results. Lastly, an absence of innovation among Takaful players – both in streamlining internal operations as well as in new methods to outreach to customers – represents a significant business risk if continued unaddressed. Generally speaking, insurers trail behind banks in adoption of innovation in software and brand experience platforms. Hence, if Takafuls seize the nettle and make investments to upgrade their online systems, introduce mobile apps and push aggressively into social media channels, then Takaful competitive advantage can be re-asserted.

Chapter 7

Major Findings and Challenges to Sustainability

On the global Takaful sector level, there are both structural and systemic changes required to be made for the worldwide remarkable growth in supply (and demand) of Takaful services to improve its competitiveness and to sustain its present trajectory.¹⁸

7.1. Major Findings in this Report

- ➤ Over the past 12 years, the Compound Annual Growth Rate (CAGR) for Takaful formation was an impressive 13.4% annual growth meaning establishment of 17 new Takaful Operators (or "Windows") every year! However, in the 7-year period 2008 to 2015 that growth rate declined to 8.2%, and more importantly, in the past 5 years (2010-2015) Takaful new formations stalled to a nominal 4.6% annual pace. While this growth rate may be 2X that of conventional insurers in similar markets, clearly many insurance markets are becoming "saturated" or at least crowded. This Report described some GCC nations as having +60 insurers to serve the local populations under 10 million people, with more than +11 Takafuls making alternative offers. [Refer to Chapter 1]
- Certain regional hubs for insurance have developed supportive platforms and favorable regulations to attract these ReTakafuls: Malaysia hosts 9, Indonesia has 3, MENA region has 8 and Sudan 3. [Refer to Chapter 1]
- ➤ Revenues top line for global Takaful has outpaced conventional insurance significantly (albeit from a smaller base volume) and out-stripped growth rates of Emerging Markets as well. Revenue growth over the past 7 years was 11.8% CAGR. The first 5 year period (2008-2012) averaged 12.1% annualized growth vs. the latest 5 years period (2010-2015) which slowed to 9.4% CAGR. Generally, conventional insurance grew between 2.5% and 4% annually in this period, whereas Emerging Markets grew 5% to 7.5%. [Refer to Chapter 5]
- As pointed out in Chapter 5, Takaful regional growth rates in 2009-2015 for Revenues evidences a diverse spread Africa-Levant 5.2%; Indian-Subcontinent 7.5%; GCC-wide 9.9%; ASEAN/Pacific 14.3% and Saudi Cooperatives only 15.6%.
- Obviously the strong growth rate for Revenues in Saudi Arabia and ASEAN/Pacific areas, which together represent nearly 80% of worldwide Takaful contributions, explains the impressive growth rates for total figures yet masks weaker sales performance in Levant, Africa and Indian-Subcontinent markets. It is noteworthy

 $^{^{18}\,}$ For specific discussion points and details, kindly refer to HBMSU's "Global Takaful Report 2015", Chapters 5 & 6.

- as well, that the Cooperative Insurance marketplace in Saudi Arabia was just getting established in 2006-2009 whereby substantial books of existing conventional insurance was converted over to Cooperative/Takaful policies.
- ➤ Despite the new regional outcroppings of Takaful Operators in Africa, ASEAN/Pacific and Indian-Subcontinent areas, as of 2015 worldwide Takaful business is highly concentrated in three locations: Saudi Arabia's market share is 52% of global contributions (excluding Iran), Malaysia's is 18% and Iran is 27% of worldwide premiums. As public awareness builds and Takaful managerial expertise takes root, the vast and populous markets of Africa, Indonesia, Indian-Subcontinent will most certainly account for an increased global market share beyond their current very modest levels (2.6%, >1% and 1.7% respectively). [Refer to Chapter 5]
- ➤ Total estimated Employment across the global Takaful sector expanded between 2011 (63,358) and 2015 (98,400), a gain of 55%. This is not surprising as some 36 new Takafuls were launched. [Refer to Chapter 4]
- For new Takaful Operators, given their average longevity under 10 years, relatively modest capitalizations and difficulty to recruit and train personnel, their average Takaful Employee Productivity is extremely modest when compared to older Takaful players and to conventional insurers. Average Number of Employees per Takaful expanded 25% between 2011 (299) and 2015 (378). However, Revenues Per Employee seems to have declined and remains startlingly low in some cases:
 - Across North Africa Levant \$0.15-0.19 M
 - ➤ Worldwide Takaful \$0.27 M
 - As compared with Malaysia Takafuls \$0.81 to \$1.0 M
 - Compared with Saudi Arabia Cooperatives \$1.02 to \$1.7 M
 - > GCC BUPA is \$1.7 M to \$2.3 M
 - > GCC Axa is \$1.1 to \$1.43 M
 - Worldwide conventional Mutuals (2014) \$1.34 M
 - ➤ One exception is UAE where overall Employee Productivity rose from \$0.23M in 2012 to \$0.27 M in 2014 yet out-performed by gains in UAE Takaful sector rising to \$0.65M Productivity Per Employee.

 [Refer to Chapter 5]
- ➤ It is noted that on average for the 3,812 conventional mutual worldwide the average manpower size is 292 employees, roughly similar to manpower per Takaful. However, global Takaful Productivity Per Employee is only 11% of the Productivity of conventional Mutuals. [Refer to Chapter 5]
- ➤ Takaful founders have followed in footsteps of Islamic Bankers so that 29 of the 57 Organization of Islamic Conference (OIC) nations are home to Takaful

companies. Nevertheless, 49% of OIC nations hold out untapped markets of Muslim customers due to an absence of any Takaful services. Vast areas of North and Central Africa present substantial micro-Takaful opportunities, while huge territories of Former-Russian Republics have yet to embrace Islamic insurance (for example, Kyrgyzstan, Tajikistan, Turkmenistan). Moreover, as Chapter 3 demonstrates the Takaful capture of protection for Islamic Banking assets in countries, where penetration of Islamic Banking is pronounced, is only moderate at best – ranging from 0.17% in Turkey to 4.38% in Indonesia. Hence, pioneering work of Takaful introduction in these known Islamic Banking markets as well as opening up new areas is certainly a formidable challenge based upon the risk aversion in current Takaful management styles, lack of R&D investment and absence of dedicated efforts to educate the public about insurance and differentiate Takaful offerings.

- The Underwriting Leverage of Takafuls was 0.54 in 2012 based upon the data available for global Takaful assets. While the Underwriting Leverage measure improved to 0.63 in 2014 (+16%), this ratio is considerably below conventional companies operating in same markets (viz. BUPA at 1.19 and Arabian Shield at 1.02 in Saudi Arabia) with one exception Takaful Malaysia-General at 2.09. Thus, Takafuls seem to be operating on average at 60% efficiency of capital deployment when compared to peers and woefully underutilized capacity when compared with conventional insurers reaching Underwriting Leverage ratios of 200% [exception is Takaful Malaysia Family 209%, otherwise Takafuls are 13% to 26% in Malaysia]. [Refer to Chapter 3]
- As more information describing newly formed Takafuls becomes available, the number of Unknown types of Takaful Models shrinks. Between 2012-2015, net 21 new Takafuls were launched and many of these elected the Mudarabah Model of agency management in preference to Wakala. Because the Mudarabah Model allows charging of operating expenses by the Operator to the policyholder common risk pool as well as sharing of "surplus" between participants and Operator, this model inevitably leads to more commercially viable business for the Operator (shareholders). Takaful "Windows" increased during this period largely because of advent in Indonesia and Pakistan of conventional, well-established insurers entering the Takaful marketplace with focused products bearing Islamic alternative features. However, many Islamic scholars discourage this approach as such "window" operations often fail to separate funds flows and may not channel Takaful contributions into fully compliant Islamic securities. It may be noted that this time period witnessed the closing or merger of four (4) Takafuls and ReTakafuls. [Refer to Chapter 6]
- As we have reviewed, the Takaful phenomenon is very young with an average Global Time in Business of just 9.6 years (when setting aside the long lived outliers in Sudan, Iran and Malaysia conventional insurers converted into Takaful). By

analogy, Takaful Players worldwide are not yet even "teenagers", so critics should manage expectations about realistic achievements across the sector where competitors are entrenched for decades. [Refer to Chapter 1]

The Takaful Sector by numbers of institutions and volume of business is clearly concentrated in a few markets: namely

Country/Region	No. of Takafuls	Percent World
GCC	88	Wide 34%
Of which Saudi Arabia	37	
ASEAN/Pacific	66	25%
Africa- all	68	26%
Iran	14/16	6%
Indian-Subcontinent	15	6%
Other	8	3%

- As the areas of high concentration of Takafuls are currently suffering economic contraction, due to sharply reduced national oil revenues, and have collectively only modest populations (excluding Indonesia), then it can be assumed that future growth in Takaful business will come predominantly from Africa, Turkey, Indian-Subcontinent, EU and Central Europe. [Refer to Chapter 1]
- Although establishment rate of primary Takaful players is slowing, the past 3 years witnessed a robust growth in Re-Takaful capacity – more than 13 new reinsurers were formed worldwide. The expansion rate of 59% is not sustainable and probably reflects a response to latent demand by dozens of new primary Takafuls. The sector's backbone is ReTakaful which until 10 years ago, there were only three dedicated ReTakaful operators worldwide. The average Time in Business is 8.9 years (excluding the national conventional reinsurers offering ReTakaful services as outliers). The top four (4) ReTakafuls have capitalization above \$100M, yet 16 of the 24 ReTakafuls with paid-in capital data show less than \$100M and 11 of these have \$50M or less capital at establishment. Total primary Takaful Contributions reached \$15.5 Bil in 2014 with several billions of risk underwritten on a regional basis; so it hard to imagine how ReTakafuls with \$50M or less of paid capital can engender confidence as a competent reinsurer, capture an "Excellent or Very Good" credit rating [+BBB or better], or even project expert know-how to primary Takaful customers in order to solicit and secure their risk sharing business. Malaysia is host to 9 ReTakaful Operators, Indonesia to 3, MENA region to 8 and Sudan to 3.
- ➤ Total cession from primary Takafuls to ReTakafuls is estimated at 7% to 12% of Global Takaful Contribution in 2014. If this cession rate is 50% on average of top line revenues (i.e. \$7.25 Bil), then the paid capital capacity as of 2015 still is only

33% of this business, suggesting a vacuum whereby Takaful risks are migrating to conventional reinsurers for protection. [Refer to Chapter 1]

Among the specific points for consideration by practitioners and regulators for required change to help redress the above observations pertaining to the Takaful sector globally are items both of Structural Change and Systemic Change. These are:

Structural Changes needed for Takaful:

- Ramp upscale in operations- affecting economies of scale, competitive pricing and geographic reach. Insurance generally is a large-scale business where smaller players are constantly challenged to realize profitability that comes with huge economies of scale in operations.
- Broaden diversification of business lines an over concentration on personal lines and as yet to be developed prowess in Casualty or Liability lines (including D&O coverage or Medical Malpractice) for larger risks means fragmented markets, fierce competition for similar business of small premiums and frequently lack of loyalty by customers.
- Widen distribution channels- Takaful's over-reliance on one or two channels only (direct sales force, brokerage or bancassurance) rather than a strategic development of multiple distribution avenues, including a transactional internet web presence, results in a relatively high-cost sales operations, limited process efficiencies and weakened ability to differentiate products and stand out.
- Expand Offerings of Islamic investment instruments and securities especially in Family Takaful and long term savings plans where Takafuls are mandated to match Long Term liabilities with Long Term assets, there is sadly still a limited array of investment securities which are fully Sharia compliant as qualified investments. Hence, Takafuls face an unfair burden and heightened risk exposures on an investment portfolio basis as compared to their conventional counterparts. Islamic Banks and asset management firms must be coaxed and incentivized to generate a broader array of Islamic securities – especially with tenor exceeding 15 years.

Systemic Changes needed for Takaful:

 Strengthen innovation- a tendency by Takafuls to imitate proven conventional insurance products/services rather than re-think the risk protection service model and probe Islamic values to identify potential areas for innovation. Today the form of Travel Insurance can be refined further to better suit the pilgrimage circumstances of millions of Muslims annually. Personal auto insurance might be recalibrated to charge premium only when the auto is actually in use. Moreover, to date Cybersecurity risks are unaddressed in Takaful format.

- Deepen the pool of skilled personnel there is a scarcity today of personnel knowledgeable about insurance, underwriting, actuarial studies as well as Shari'ah principles that apply to Islamic insurance. Key issues mentioned are: slow trickle of new recruits to insurance careers overall; aging generation of practitioners (especially Arab world); limited number of skilled Islamic Scholars knowledgeable about insurance; few trained Actuaries familiar with Takaful principles. National educators must team up with insurance regulators to support insurance training and provide incentives for young professionals to study Takaful and choose insurance careers.
- Full development and implementation of Enterprise Risk management (ERM) systems for risk identification, risk control and risk mitigation. A survey released by E&Y and Munich RE April 2015 19 describes the main reasons for limited adoption by Takaful companies of modern risk evaluation and management techniques: lack of accountability, lack of taking ownership of business risks, resistance to change, and lack of strong regulatory regime. Urgent changes in attitudes are required for ERM to take root in the Takaful sector.
- Pro-active response to mandatory compliance as an insurer of the Basel III and IV regulations on risk-weighted capital and solvency regimes that must be addressed in most Takaful markets before end of 2018. Many Takafuls exhibit slow adherence and appear re-active on this matter rather than pro-active.
- Renewed emphasis on corporate governance Islamic insurance companies have generally not adopted governance policies, practices nor standards for ethics and codes of conduct for Board members as well as client-facing personnel. Malaysian Takafuls offer a shining example and an exception, as Bank Negara supports and the Takaful Association actively promotes specific governance initiatives. Underdeveloped governance practices delay transparency across Takaful operations, under-cut loyalty and customer confidence in Takaful management and postpone the benefits in higher share values proven in conventional companies.

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¹⁹ MENA Insurance Enterprise Risk Management Survey, April 2015, E&Y and Munich RE.

From the list above, the critical challenge to sustained growth presented by a limited supply of trained talent for the Takaful global insurance sector requires a deeper look. Without the manpower and skills to compete effectively in local markets, Takaful may be relegated to a "niche" line of business rather than claim a significant stake in the global mainstream of risk protection.

7.2. Overcoming a Shortage in supply of Takaful Skills

Estimated worldwide demand for new skilled workers in Islamic finance is 50,000 over the next 10 years²⁰ and perhaps another 40-48,000 staff are required due to continued growth in global Takaful sector. Compared to the volume of graduates and certified participants of the Takaful Training institutes it is apparent that already a shortage exists of highly trained Takaful workers – both insurance underwriters, investment staff, sales force and customer service reps – with such shortage growing more acute in coming years due to normal industry turn-over, retirements, and expected new expansions.

Takaful sector baseline employment is approximately 99,000 as of 2015.²¹ Assuming that Takaful expansion and organic growth since 2012 requires additional employment, the new Takafuls established might represent some 7-10,000 new staff, bringing the global Takaful manpower to roughly 109,000. If normal turn-over is say 2% annually, then over the next 10 years another 15-20,000 new Takaful staff must be recruited and trained. Across the GCC and MENA regions, senior management and technical staff dominant in the above 50 age bracket. Hence, retirements may trigger another 4-6,000 staff to be replaced before 2025. Finally, anticipated growth in overall Takaful business and potential corporate extensions within nations as well as cross-border expansions might require as many as 30,000 new Takaful staff (associated with incremental new revenues of \$16 Bil globally).

Thus, normal turn-over plus expected retirements plus potential organic growth of Takaful business could demand upwards of 41-48,000 new trained personnel over the next 10 years.

Table 7.2.1 Displays the leading training institutes that provide certification and degree programs specific to Takaful. Academic training in Takaful and insurance subjects also is conducted on numerous College campuses and Universities in Asian and EU, however, the focus of this section is private and quasi-governmental institutes dedicated to recruit and train Takaful skills.

²⁰ Islamic Finance Report 2015

²¹ Takaful Global Report 2015

Bahrain	Gulf Insurance Institute (GII) (Bahrain)
	The Bahrain Institute of Banking and Finance (BIBF) (Bahrain) in cooperation with Institute of Chartered Insurance (London)
Indonesia	Tazkia University College of Islamic Economics (Indonesia)
Malaysia	Islamic Banking and Finance Institute Malaysia (Malaysia)
	Islamic Finance Training (Malaysia)
	The Malaysian Insurance Institute (Malaysia) International Center for Education in Islamic Finance (INCEIF)
Pakistan	AlHuda-CIBE (Pakistan) (Pakistan)
UK	Institute of Islamic Banking & Insurance (UK)
UAE	Dubai Center for Islamic Banking and finance (UAE)
	Institute for Banking and Insurance (UAE)
	Dubai Islamic Economy Development Centre

Table 7.2.1: Takaful Training Institutes 2015

Source: ICMIF web site 2015 and author's sources.

Current graduates with insurance degrees and Takaful diplomas or certifications most probably do not exceed a few thousand annually. Thus, it is quite apparent that this supply-demand mismatch shapes up to be a very significant challenge to the Takaful industry at large — and to many individual Takaful operators who will compete to recruit and train interested graduates from a slender pool of talent.

The obvious challenges to Takaful in its training sector is two-fold:

- first, the existing infrastructure of qualified Training Institutes is under-utilized and yet at the same time is too limited in capacity at present to address the magnitude of this challenge; and
- second, an insurance/Takaful career is not positioned yet to appear attractive to young people so that thousands choose this career path. More must be done in Emerging Markets worldwide to display the benefits of an Insurance/Takaful career and demonstrate how Takaful employment contributes to better societies and enhances local economic development.

Moreover, the issue of wages parity must be simultaneously addressed. It is well known that in MENA and ASEAN regions salaries for banking jobs are higher and supply better perks – benefits than "similar" jobs in insurance/Takaful sector. Until Takaful companies adjust their pay and benefits scales in line with other financial services businesses, the existing lower wages will fail to attract top talent and ambitious job seekers.

Chapter 8

Conclusions

As Takaful companies enter only their 4th decade of existence, as contrasted with conventional insurers whose longevity exceeds 400 years, it is apparent that formidable challenges lie ahead for the global Takaful sector to sustain its momentum and adapt to the numerous new marketplaces that beckon entrants. While the worldwide potential for mutual Islamic insurance is irrefutable, serious obstacles—Structural and Systemic -- have been identified within this report update and several important ones summarized in Chapter 7.

Broadly, the sub-optimal financial and operational performance (as evidenced by prior sections) of Takaful cannot lead to a resounding success in competition with conventional insurance. Wishful thinking and good intentions are surely not enough. Now is best time to take action—to reflect on origins, fundamentals, strengths and weaknesses, and what attributes stamp Takaful with its natural competitive edge.

Among possible courses of action for further study and reflection to upgrade and revitalize the Takaful model are these options:

- ➤ Review Takaful Capital adequacy and solvency using actuarial studies; wherever necessary compel consolidation or mergers to assure public consumers that each Takaful is safe and properly capitalized.
- ➤ **Promote Transparency** to review and assure an alignment of incentives as between major stakeholders: shareholders and policyholders.
- > Strengthen Risk Management both in technical underwriting and pricing tools/techniques as well as ERM across the Takaful enterprise. Instill a risk culture along with risk identification systems and monitoring practices whereby risk awareness is nurtured amongst all personnel to transform accountability and upgrade efficiencies.
- ➤ Open up the Managerial organization to reduce blatant conflicts of Interest between shareholders and policyholders, to encourage fuller Representation and a "Voice" by policyholders in key managerial decisions (such a surplus sharing), and make a communications channel available for on-going dialogue between management and the policyholders they are meant to serve.
- Secure rights of Takaful policyholders by legal separation of funds. Formalize the legal status of the policyholders' risk pool to form a trust or limited liability corporation, which elects policyholder representatives. Segregation of policyholder's funds away from shareholder's funds is central to Takaful principles

as assure a neutrality in management decision-making concerning participants' funds. This new entity would retain the Operator via a contract (Wakala model) and negotiate for representation in the management of the trust or Takaful company.

- ➤ Modify existing regulations in Emerging Markets to allow a pure mutual Takaful model with no shareholders, similar to conventional mutuals. This featured change would:
 - Be consistent with Takaful mutual indemnification (congruent with Takaful business principles)
 - Display strong Ethics Code for business operations and binding on personnel
 - A fair balance of Shareholder interests and Policyholder interests, whereby existing Shareholders' role is transformed into financial backer only
 - Encourage policyholder representation and, where possible, participation in management decision-making in matters of direct impact to policyholders
 - Impose Market discipline through disclosures and financial reporting by policyholders to policyholders
 - Underpin the goal to manage the business as an affordable and self-sustaining mutual risk insurer rather than an insurer seeking maximization of profits for Shareholders only.
 - Pursue sound investment strategies (matching assets/liabilities, sound liquidity, safety and diversification) in accordance with Shari'ah compliant rules.

Data compiled by global Takaful reports makes clear that the nascent industry has spread into 44 countries and is growing rapidly – more than 15% per annum in many places – and far outstrips the growth rates of conventional insurance in same markets. Although, Takaful contributions amount to less than 1 percent of global insurance industry annual premiums of \$4.77 Trillion dollars (2015), both the impressive rates of adoption of Takaful coverage and the proliferation of new Takaful entities assure that this segment of the industry will swell in breadth and importance.

Eventually, by capturing **two per cent** of global risk coverages, perhaps achievable by 2050, Takafuls could realize global insurance business of \$86 billion, which will guarantee it ascends to a rightful place alongside conventional cooperative and mutual insurance as the Islamic alternative of choice for millions of policyholders worldwide.

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Takaful Global Directory

Algeria	Salama Assurances Algerie Takaful
Australia	Takaful Australia- Cooperative
Bahamas	Islamic Takaful & ReTakaful / with SALAMA Saudi
Bahrain	Takaful International/ Investors Bank/ Bahrain Islamic Bank
	TARIIC/ SALAMA- Life/ (UAE)
	Allianz-MEDGULF Takaful
	Chartis Takaful- Enaya AIG
	Aman Bahrain Insurance / Takaful (UAE)
	Solidarity Family Takaful
	Solidarity General Takaful (console from 2006)
	Legal & General Takaful/ Ahli United bank
	T'azur company
	ACR MEA Re-Takaful/UAE/ Malaysia+Dubai
	Hannover RE Takaful
Bangladesh	Islami Insurance- Takaful/ Megna Life
	Prime Islami Life Insurance Co.
	Fareast Islami Life Insurance Co.
	Takaful Islami Insurance Ltd
	Padma Islami Life Insurance Co.

	Islami Insurance Bangldesh Ltd.
	Commercial Islami Insurance Co.
Brunei	Insurans Islam TAIB Sendirian
	Takaful Brunei Keluarga (IDBB-Darussalam)
	Takaful Brunei AM (Takaful IBB)
Egypt	Egyptian Saudi Insurance House/ Salama/ Faisal Islamic Bank
	Wethaq Takaful/ (Kuwait)
	Solidarity Family Takaful/ (Bahrain)
	Arab Orient Takaful
	Egyptian for Takaful (Family)/ Gulf Insurance
	Egyptian for Takaful (General)
	Libano-Swiss Takaful Egypt
	Tokio Marine/ Nile family Takaful
	Tokio Marine/ Nile General Takaful
	Africa RE Takaful
Gambia	Takaful Gambia Ltd
Ghana	Metropolitan Insurance Co
*	Unique Life Assurance (window)
India	Life Insurance Co. of India/ LICO
(a)	GIC Re (window)
Indonesia	PT Asuransi Takaful Keluarga (STM Life)
	PT Asuransi Takaful Umum - General
	PT Allianz Asuransi

PT Allianz Utama
PT Asuransi Tri Pakarta
Asuransi Mubarakah Takaful
PT AIJ Financial
PT AJ Central Asia Raya composite (window)
PT Asuransi Adira Dinamika /(sharia window)
PT Asuransi Bangun Askrida Unit Syariah
PR Asuransi Central Asia general
PT Asuransi Sharia Mubarakah
Pt Asuransi Dayin Mitra Terbuka
PT Asuransi Staco Mandiri Cabang syariah
PT Prudential Life Assurances (window)
PT AIA Financial -composite (window)
Great Eastern Life – Syariah (window)
MAA Gen Assurance Syariah (window)
MAA Life Assurance Syariah (window)
MANULIFE Indo (window)
TUGU REINDO- Takaful
PT Reasuransi Nasional composite/ Tugu RE
PT Maskapai RE Indonesia Tbk (Marein) window
PT Tokio Marine Life Insurance Indo
Sinar- MAS Syariah (window)
Syarikat Takaful Indonesia/ Malaysia
Asuransi Murni Syariah (window)
Jaya Proteksi Takaful (window)
SunLife Financial Indo (window)

Syariah (window)
Syariah (window)
a 1912 Mutual Life (window)
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Co. PJS - composite Takaful
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Iran Central Insurance
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Kenya	Takaful Insurance of Africa/ Gulf Cap- TIA
<u> </u>	Metropolitan – Takaful (window)
	Kenya Reinsurance / ReTakaful (window)
	FCB Takaful /Crescent SACCO
Kuwait	First Takaful Insurance - Life/ Kuwait Finance House/ Jordan
	Boubyan Takaful/ Aman-Dubai
	Qatar Kuwait Insurance Co.
	Takaful International Insurance CoWatanyia
	National Takaful/ Coop- P&I marine/composite
	Al Muthana Takaful/ KFH- NL
	Ain Takaful Cocomposite
	T'AZUR Takaful
	Al Safat Takaful/FWU/STM-Malaysia-composite
	Gulf Takaful- Global/Wafra-composite
	Ritaj Takaful (Warba Insurance)-Life, medical
	Ritaj Takaful Insurance- (merged2012)
	Wethaq Insurance - General
	Al Fajr ReTakaful Co.
Lebanon	Al Aman Insurance Co.
*	ARAB Re
Libya C*	Takaful SA of Libya
Luxembourg	Solidarity Takafol SA

Malaysia	Sharikat Takaful Malaysia (STM)- General
(* 	Sharikat Takaful Malaysia (STM)- Life
	Takaful Nasional-General/ Mayban
	Eqita/ Maybank Takaful- composite
	Takaful Iklas/ MNRB/Allianz -composite
	MAA/Solidarity Malay Assurance -composite
	Hong Leong MSIG Takaful (Millisea-HLBank)
	Bank Simpanan-Prudential BSN Takaful - composite
	HSBC/ Amanah/Employe Provident/Jernah Asia- composite
	MNRB Holdings/ TakafulRE
	BEST RE Takaful (Life)
	BEST RE Takaful (General/NL)
	CIMB-Aviva Takaful-composite
	AIA/Alliance Bank AFG Takaful Malaysia
	AIA Public Takaful
	AMB Holdings/Friends Provident
	ING/Public Bank/Public Islamic Bank (window)
	Great Eastern/Koperasi AngkatanLife
	SunLife Malaysia (window)
	AmMetLife Takaful
	Zurich Takaful
	Labuan RE-Takaful
	Swiss RE Takaful
	Munich RE- Takaful
	ACR ReTakaful SEA (NL)

	ALLIANZ SE Life Reinsurance
	ARIL/ASEAN RETAKAFUL
Maldives	Aman Takaful- Maldives PLC
Mauritania	Taamin Assurance Islamiq
*	SMAI Islami
Nigeria	African Alliance Insurance Co.
	Cornerstone Insurance (window)
	Niger Insurance (window)
Oman	Al Madinah Gulf Insurance (Takaful)/ QIIC/ Wathba (UAE)
兴	Technical Assistance -Solidarity (Bahrain)
	Takaful Oman SAOG
Palestine	Al Takaful Palestine Insurance
	Palestine Takaful Insurance
Pakistan	First Takaful Insurance (General)
C	Pak-Kuwait Takaful/TN/Noor-Kuwait (General/Kuwait)
	Takaful Pakistan/Emirates (General)
	Pak-Qatar - Family Life/QII/QIIB (Qatar)
	Pak-Qatar - General /QII/QIIB (Qatar)
	AIG Takaful -Life
	Pakistan RE (window)
	Dawood Family Takaful (Life)
Qatar	Qatar Takaful Co. (Islamic Takaful Co)
	Damaan Islamic Insurance (Beema)- composite
	t'azur Takaful/Bahrain/QFC

	General Takaful Co.(GTC) -Qatar General
	Doha Insurance Co. (window)
	Al Khaleej Takaful/ Retakaful-composite
	Allianz MEDGULF Takaful- (QFC branch)
	Al Jasr Takaful /Qatar-Bahrain bridge
	Solidarity/QIB- closed
Russia	
	First Takaful of Russia
Kingdom of Saudi Arabia	Alrahji Al Aman Coop-composite
35/2013 0	Islamic Insurance and Reinsurance Co. (IIRCO)
	International Islami Insurance Co. (IIIC)-DMI
	Al Tawunyia (formerly NCCI)
	Al Jazira Takaful Ta'awuni (Life)
	Methaq Insurance - closed
	Islamic Arab Insurance Co. (IAIC)/SALAMA
	Takaful Islamic Insurance- Riyadh/Solidarity/closed
	Alimna- Tokio Marine/Millisea-Hong Leong Bank/Alimna Islamic Bank
	Arabian Shield/Bahrain National Holdings
	SAAB Takaful/ HSBC
	Al Ahli Takaful/ NCB/ Enaya
	AlAlamayyia Insurance- Royal Sun - General
	Saudi Arabian Cooperative Insurance Co. (SAICO)
	Sanad for Cooperative Insurance
	Allianz/Saudi Fransi Bank-composite
	ACE Arabia Coop-Jordan -composite

	AXA Cooperative Insurance
	AMANA Cooperative- FALCON Finance- composite
	Wafa Insurance/ Saudi Indian Cooperative
	BUPA Medical Cooperative
	MetLife AIG ANB Cooperative
	Walaa Saudi United Cooperative
	Solidarity Saudi Takaful Co.
	Al Wataniya Cooperative Insurance - Saudi National Insurance (SNIC)
	Malath Cooperative- Takaful Co/ (Jeddah)
	Malath Cooperative - Takaful Co/ (Medinah)
	Gulf Union Insurance - composite
	MEDGULF
	Burooj Cooperative / Saudi Pearl/ Gulf Insurance Co
	Al Sagr Saudi Insurance/ Sagr-Dubai (NL)
	Wiqaya Takaful/1st Takaful (Kuwait)
	Al Ahlia Co. for Cooperative Insurance (NL)
	Trade Union Cooperative Insurance
	Saudi RE
	Allied Cooperative Group/ Islamic Development Bank-NL
	ICIEC/IDB Export Insurance
	UCA Cooperative Insurance
	AMTC- Bahrain/Saudi/closed
Senegal	
*	Sosar Al Amane/ Tariic-Salama (Bahrain)

Singapore	HSBC/Amanah- NTUC Fund (window)
():	Ampro Holdings Singapore
	Tokio Marine Nichido Retakaful
Somalia	
*	FISCO Takaful
South Africa	Al Noor Takaful SA/Takafol So. Africa/ closed??
	Reliance Takaful So Africa
	ABSA bank Takaful SA (window)
	Takafol South Africa LTD
Sri Lanka	Amana Takaful/ Sharikat Takaful Malaysia
	Ceylinco Takaful /Sheikan Insurance (Sudan)
Sudan	Al Barakah/ IAIC (Jeddah)
	Al Salama- A.Taifour
	National Insurance & Reinsurance- General
	Islamic Insurance Co Faisal Islamic Bank
	Blue Nile Insurance Co. (NL Saudi Arabia)
	El Nile Insurance Takaful Co.
	General Insurance Takaful Co.
	Sheikan Insurance & Reinsurance Co.
	Juba Insurance Takaful Co.
	Red Sea Cooperative Insurance
	Middle East Insurance Co.
	Savana Insurance Co
	United Insurance Co. Takaful
	Sudanese Insurance & Reinsurance- General Takaful

	Watania Cooperative Insurance Co.
	Taawuniya Farmers Cooperative Insurance
Syria	Al Aqeelah/ KW Al Aqeelah Leasing
* *	Arab Union RE Insurance
	Noor Insurance /Kuwait/ Pak-Kuwait
	Aman Syria for Takaful Insurance
	Syrian/Qatar/ Qatar Islamic Insurance Co./ Qatar
	International Islamic Bank (Qatar)
Thailand	Muang Thai Life Assurance Takaful
	Finansa Life Assurance (window)
	Dhipaya Insurance Public Co. (window)
	Kamol Sukosol Insurance (window)
Trinidad Tobago	Takaful Trinidad & Tobago Friendly Society
Tunisia	Best Re
©	Tunisia RE (window)
	Al Takafulia Tunisia
	Al Amana Takaful
	Zaytuna Takaful - composite
Turkey	ISIK Sigorta ve Reasurar
C*	Ihlas Sigorta AS
UAE	Dubai Islamic Insurance & Reinsurance Co. (Aman-DIB)
	IAIC- Salama - local UAE (non-consol)
	HSBC- Amanah
	Takaful RE- ARIG/ (Bahrain)
	Methaq Takaful (Abu Dhabi)

	Emarat Takaful/ National Beharia/ (Sharjah)
	Al Hilal Takaful/ Abu Dhabi- Crescent Bank
	Etiqa Takaful/ National Beheira Insurance
	Noor Takaful-Life/NL- Noor Islamic Bank
	ADNIC Takaful/Abu Dhabi (window)
	FWU Dubai Services (DIFC-Dubai)
	Dar Al Takaful House/ Mawarid Finance DAR/ (Dubai)
	Wataniya/ National Insurance House
	ACR ReTakaful Holdings (DIFC)
	ADIB- National Takaful/ Abu Dhabi Islamic Bank
Yemen	Aman (United)Takaful-Yemen/ Bank of Yemen (window)
	Yemen Islamic Insurance/ Sabaa Islamic Bank
United Kingdom	Takafol UK Ltd.
	Cobalt Underwriting UK/ Lloyds
	British Islamic Insurance Holdings BIIH/Principal- closed
USA	First Takaful USA (1997-2000- closed)
	Zayan Brokers- (window)
Zambia	Phoenix Assurance – Zambia (window)

#Note: While every effort was made to assure completeness in this Directory, several Takaful operators are privately owned without public data.

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