Life Conference and Exhibition 2011
Safder Jaffer and Lindsay Unwin (Milliman)

Takaful and Retakaful Challenges and Opportunities for Actuaries
22 November 2011
Agenda

• What is Takaful?
• Market size and its potentials
• Milliman Global Family Takaful Survey 2010
  – Key challenges
  – Key areas for future developments
  – Key opportunities
• Opportunities for Actuaries
• Conclusions
What is Takaful?

- Takaful is a Shariah-compliant form of cooperative insurance.
- There are certain key elements within conventional insurance that are not Shariah-compliant:
  - **Riba**: The payment or receipt of interest
  - **Gharar**: Excessive risk taking
  - **Maisir**: Being party to transactions with gambling or speculative nature
  - **Haram**: Association with asset classes partaking in prohibited activities.
- The concept is similar to Friendly Societies or Mutuals.
Summary of Takaful Business Proposition

- Takaful company is hybrid of a mutual and a commercial form of the company.

- Segregation between policyholders funds and shareholders fund.

\[ \text{Mutual} + \text{Commercial} \]

\[ \begin{align*} &\text{Shareholders Fund} \\
&\text{Policyholders Fund} \end{align*} \]
Summary of Takaful Business Proposition (2)

- Premiums should be paid on a donation basis to the policyholders funds.

- Company acts as an agent on behalf of participants to manage takaful funds.
Principles underlying Takaful

- Shariah Compliant
- Mutual Guarantee
- Transparency
- Voluntary Contributions
- Ethical
- Interest Free
## How is it different to conventional insurance?

<table>
<thead>
<tr>
<th></th>
<th>Conventional Insurance</th>
<th>Takaful</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risk Transfer</strong></td>
<td>Risks transferred from policyholder to insurer in exchange for a premium.</td>
<td>Risks shared by the pool’s members and the operator merely manages the pool.</td>
</tr>
<tr>
<td><strong>Uncertainty</strong></td>
<td>Contract terms are unclear as to when losses occur and how much is compensated.</td>
<td>Contributions are defined as donations to mitigate losses affecting the participants.</td>
</tr>
<tr>
<td><strong>Gambling</strong></td>
<td>The insurer compensates the insured on a loss even if it far exceeds the premium.</td>
<td>Participants pay contributions in the spirit of brotherhood to cover mutual losses.</td>
</tr>
</tbody>
</table>
## How is it different to conventional insurance? (2)

<table>
<thead>
<tr>
<th></th>
<th>Conventional Insurance</th>
<th>Takaful</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interest</strong></td>
<td>Funds are invested in fixed-interest instruments and so contain an element of Riba.</td>
<td>Funds are only invested in non-interest bearing instruments.</td>
</tr>
<tr>
<td><strong>Profit/Surplus</strong></td>
<td>Surplus/profit belongs to shareholders and with-profit policyholders whilst in-force.</td>
<td>Surplus belongs to the participants and is accordingly returned to them.</td>
</tr>
</tbody>
</table>
The similarities with conventional insurance

- Investment structure and practices (unit-linked non-guaranteed approach)
- Pricing methodology
- Mechanism for delivery of services by operator
- Channels of distribution - agents, brokers, banks, direct
- Risk assessment
- General accounting (except AAOIFI standards)
- Compliance with insurance regulations
- Rating for claims and financial credibility
Takaful vs. Mutuals

- Structure of Takaful products – surplus sharing, mutuality
- Contractual relationship – Tabarru/donation
- Avoidance of prohibited elements – Riba, Maisir
- Organisational orientation to Islamic values (spiritual dimension)
- Presence of Shariah advisers
- Products integrated within a Takaful model
- Segregation and treatment of a policyholder of Takaful funds
- Distribution of surplus
Takaful Business Models

• There are three main types of Takaful model:
  – **Mudarabah Model**, whereby cooperative risk-sharing occurs among participants yet the Takaful operator shares also in any operating surplus.
  – **Wakala Model**, whereby cooperative risk-sharing occurs among participants with a Takaful operator who earns a fee for services.
  – **Non-Profit Model**, includes social-governmental owned enterprises and programmes operated on a non-profit basis.
Comparison of Wakalah and Mudharabah Models

**Mudarabah Model**

- **Participants**
- **Contribution**
  - Investment Surplus
  - Tabarru' donation
  - Claim Payments & Underwriting Surplus
- **Investment Fund**
- **Underwriting Fund**
- **Operator**

Surplus shared in predetermined ratio between participants and operator.

**Wakala Model**

- **Participants**
- **Contribution**
  - Investment Surplus
  - Tabarru' donation
  - Claim Payments & Underwriting Surplus
- **Investment Fund**
- **Underwriting Fund**
- **Operator**

Wakala Fee (% of Contribution)
Shariah Compliant Supply Chain – Retakaful

VALUE ADDED + SERVICES + CLAIMS
Agenda

• What is Takaful?
• **Market size and its potentials**
  • Milliman Global Family Takaful Survey 2010
    – Key challenges
    – Key areas for future developments
    – Key opportunities
• Opportunities for Actuaries
• Conclusions
Why Takaful?

- About 25% of the world is Muslim and it has even proven to be successful with non-Muslims in countries e.g. Malaysia.
- In recent years, contributions have grown by 15-20% p.a.
- Worldwide contributions are expected to reach US$7-8bn in 2015.

Family (Life) Takaful is the largest component of Takaful contributions.

In 2010, contributions are estimated to have grown by 24% p.a. to be US$1.7bn.

Source: Company financials, industry reports, Milliman estimates.
Family Takaful: Projected gross contributions

- The gross contributions are projected to increase to US$4.3 billion by 2015.
- Southeast Asia is projected to continue as the market leader.
- Indonesia is rapidly growing and is expected to have a similar market share to Malaysia by 2015.
- If Takaful manages to breakthrough in India, the growth in South Asia could accelerate rapidly.

Source: Milliman estimates based on a range of macroeconomic indicators and historical growth rates.
Strong market potential worldwide

- Favourable demographics in Muslim populations (in Europe and worldwide): young and rapidly growing population.
- ‘Ethical’ principals create potential to attract non-Muslims.
- Under-penetrated market means opportunity for Takaful.
- Increased availability of Re-Takaful capacity worldwide and Sharia-compliant investments.
- Success of Islamic banking expected to boost Takaful.

London the new gateway for Islamic finance - Introduction of measures to support Islamic finance.
Agenda

• What is Takaful?
• Market size and its potentials
• **Milliman Global Family Takaful Survey 2010**
  – Key challenges
  – Key opportunities
  – Key areas for future developments
• Opportunities for Actuaries
• Conclusions
Milliman carried out a qualitative questionnaire survey in 2010 to explore the key current issues and focus areas of Takaful players globally:

- Key challenges
- Key areas for future developments
- Key opportunities

A range of Takaful and Retakaful operators from different key regions worldwide participated in the survey.
Agenda

- What is Takaful?
- Market size and its potentials
- Milliman Global Family Takaful Survey 2010
  - Key challenges
  - Key areas for future developments
  - Key opportunities
- Opportunities for Actuaries
- Conclusions
Key challenges in Takaful

Business environment

• **Competition**: Intensifies as more players enter the market
  – Many players in the market mean it is not viable or sustainable for many smaller companies. Consolidation is expected and with it will come its own set of Takaful issues.
  – Irrational pricing of competitors (Retakaful).
  – Continuing trend of unsustainable terms and conditions (underpricing and relaxation of underwriting requirements).
  – Competition with conventional companies.

• **Lack of consumer awareness** in certain markets is hampering growth in family Takaful.
Key challenges in Takaful (2)

Regulatory environment

- Lack of regulatory understanding of Takaful.
- Lack of standard regulatory framework in many countries.
- Diverging regulatory approaches and a shortage of centralised regulations
  - Development of the Islamic Financial Services Board (IFSB)
Key challenges in Takaful (3)

Economic environment

- Shortage of Shariah compliant securities and suitable assets by type and duration.
  - Limited range of Islamic institutions for low return cash deposits
  - Over-concentration in high-risk equity and property
- Investment related issues with the downturn has slowed down investment growth.
- Lack of growth in mortgage/real estate lending related products following economic downturn.
- Lack of interest in savings products due to poor fund performance.
Key challenges in Takaful (4)

Human Resource

- Shortage of experienced talent
  - Actuaries
  - Scholars with appropriate experience
  - Scarcity of human resources with insurance and Sharia expertise
  - Lack of suitably trained sales agents.
  - Shariah Board have difficulty in understanding technical details.
Key challenges in Takaful (5)

**Operational challenges**

- Lack of surplus distribution in a transparent manner.
- Balancing shareholder and policyholder expectations.
- Conventional mindset amongst Takaful operators hampers original thought within the Takaful space.
- Long product approval cycle time.
- Rationalising of wakala concept/models with plurality of thoughts remains a concern (it may also be an opportunity).
- Unresolved technical and Shariah issues.
- Lack of product innovation.
- Limited standardisation across the industry.
- Corporate governance.
Key challenges in Takaful (6)

*Retakaful challenges*

- Risk Sharing versus Risk Transfer
- Plurality of Models
- Retrocession & Shariah Diligence
- Large Risks & Retakaful Capacity
- One Large Pool versus Several Small Pools
- Surplus distribution
- In force Block Takeover
Agenda

- What is Takaful?
- Market size and its potentials
- Milliman Global Family Takaful Survey 2010
  - Key challenges
  - Key areas for future developments
  - Key opportunities
- Opportunities for Actuaries
- Conclusions
Key areas for future developments

From the Milliman Family Takaful Survey 2010, the key areas identified as the focus for future family Takaful developments are:

- Products
- Wakala fees
- Asset classes
- Surplus distribution
- Environment – regulatory, distribution, Retakaful
- Key opportunities
### Key findings of Family Takaful Survey 2010

#### Areas for future development

<table>
<thead>
<tr>
<th>Category</th>
<th>Key findings</th>
</tr>
</thead>
</table>
| **Products**    | • Consumer education is key  
• Retirement is a key growth area.  
• Many operators viewed Shariah restrictions as a unique selling feature and not an impediment to product innovation. |
| **Wakala fees** | • Level varies significantly by region and is primarily derived from expense analysis.  
• Retakaful players felt this was driven by competitive pressures. |
| **Asset classes** | • Shortage of suitable assets is acknowledged which tends to limit product design.  
• Most operators are comfortable with concentration risk of assets (by class, geography and ownership). |
## Key findings of Family Takaful Survey 2010 (2)

### Areas for future development

<table>
<thead>
<tr>
<th>Category</th>
<th>Key findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surplus distribution</td>
<td>• Most have distributed surplus (only a handful have distributed 100% of surplus arising or none at all). Retakaful players believe that convergence of surplus distribution policies between cedants pool unlikely.</td>
</tr>
<tr>
<td></td>
<td>• Many viewed surplus distribution is a major attraction for Takaful product and crucial for the sustainability of the industry.</td>
</tr>
<tr>
<td>Business environment (e.g. regulatory, Retakaful)</td>
<td>• Many viewed that there is no issue with retakaful capacity.</td>
</tr>
<tr>
<td></td>
<td>• Many operators felt that regulators do not take into account the unique features of Takaful (e.g. Qard) but felt Shariah Board is cooperative in finding solutions.</td>
</tr>
</tbody>
</table>
Agenda

• What is Takaful?
• Market size and its potentials
• Milliman Global Family Takaful Survey 2010
  – Key challenges
  – Key areas for future developments
  – Key opportunities
• Opportunities for Actuaries
• Conclusions
Key findings of Family Takaful Survey 2010

Key opportunities in Takaful

- Many Takaful operators believe that growth is here to stay.
- BancaTakaful is the way forward for effective Takaful distribution.
- Low penetration in family Takaful markets creates opportunities for exponential growth.
- MicroTakaful in economies with relatively low GDP per capita.
- Availability of retirement products.
- High growth of family Takaful within the growing middle class.
- Launch of group savings.
- Improved financial and fund market performance.
- Increased appetite for Shariah compliant products.
Agenda

• What is Takaful?
• Market size and its potentials
• Milliman Global Family Takaful Survey 2010
  – Key challenges
  – Key areas for future developments
  – Key opportunities
• **Opportunities for Actuaries**
• Conclusions
Opportunities for Actuaries

• Issues and challenges facing the Takaful industry give rise to opportunities for actuaries:

Innovative Product Design

• At present, Takaful products are similar to conventional insurance products.
• Lack of innovative product design to fully capture the essence of Takaful and target population.
• Limited range of products (including retirement products).

Pricing

• Level of profit margin, expenses and tax treatment (particularly for Wakala models).
• Risk-based capital framework may lead to higher capital requirements while the lack of guarantees and ability to increase contributions would call for capital relief.
• The split between Takaful operator and Policyholder interests complicates pricing.
Opportunities for Actuaries (2)

**Investment policy**

- Research in partnership with scholars to identify investment strategies to lower the risk of backing policies sold (over-concentration in high risk equity and property).
- Increasing the range of Shariah-compliant investment vehicles and instruments.

**Reporting**

- IFRS defines insurance as risk transfer but Takaful is based on risk sharing – how can this be reconciled?
- Shariah scholars maintain that funds related to Takaful business are fiduciary in nature and should not appear on the operator’s balance sheet.
- Treatment of Qard (interest free loan to policyholders fund).

**Model office projections**

- Modelling the peculiarities of Takaful, recognising the split of cash flows between shareholders and policyholders.
Opportunities for Actuaries (3)

**Distribution strategy**
- Adopt similar distribution channels as conventional players
- Utilisation of more cost-efficient distribution strategies that use existing social or commercial structures of target Muslim societies

**Surplus distribution**
- Methods of smoothing and equitable surplus distribution for with-profits business in the UK, are likely to be more transparent compared to the current ad-hoc approach.

**ALM**
- Need for an ALM framework that allows the use of compliant hedging assets such as real estate and mortgages to support annuities.
- Developing an ALM framework which recognises the shortage of tradable Shariah-compliant assets.
Key opportunities for Actuaries (4)

Risk Management

- Establishment of a framework for managing and monitoring the interests of the participants, shareholders and Takaful management.

Technical education

- There is significant demand amongst Takaful providers to obtain appropriate training for its employees.

Moving to mutuality

- Accumulation and use of contingency reserves to retire shareholder capital over time.
Takaful in Europe

- Takaful operators in Europe need to comply with Shariah law as well as the EU insurance regulatory regime.
- UK, France and Germany are expected to be the main Takaful markets in Europe.
- Cost of compliance with proposed Solvency II may be too onerous for a start-up company and represents barrier to new entrants.
- Some key issues:
  - Limited Islamic deposit banks and high equity investment may result in potential concentration of investment risk
  - Funds for interest-free loans given provided by the operator may need the reworking of provision and risk-margin definitions
  - Consistency in the definition of compliance across scholars
Agenda

- What is Takaful?
- Market size and its potentials
- Milliman Global Family Takaful Survey 2010
  - Key challenges
  - Key areas for future developments
  - Key opportunities
- Opportunities for Actuaries
- Conclusions
Conclusions

- There is a strong market potential worldwide for Family Takaful. Reinsurers also provide Retakaful capacity.

- UK, France and Germany are expected to be the main Takaful markets in Europe, although Solvency II may impede growth of Takaful in Europe.

- There are many challenges ahead which give rise to opportunities for actuaries to apply their knowledge and skills, particularly in product development, surplus distribution and asset liability management.
Questions or comments?

Expressions of individual views by members of The Actuarial Profession and its staff are encouraged.

The views expressed in this presentation are those of the presenters.