

ACTUARIAL OPPORTUNITIES IN A MAJOR MICROINSURANCE MARKET: INDONESIA

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188 – Life Insurance (IAALS)

Keywords: Microinsurance, Indonesian Actuaries, Actuarial Society

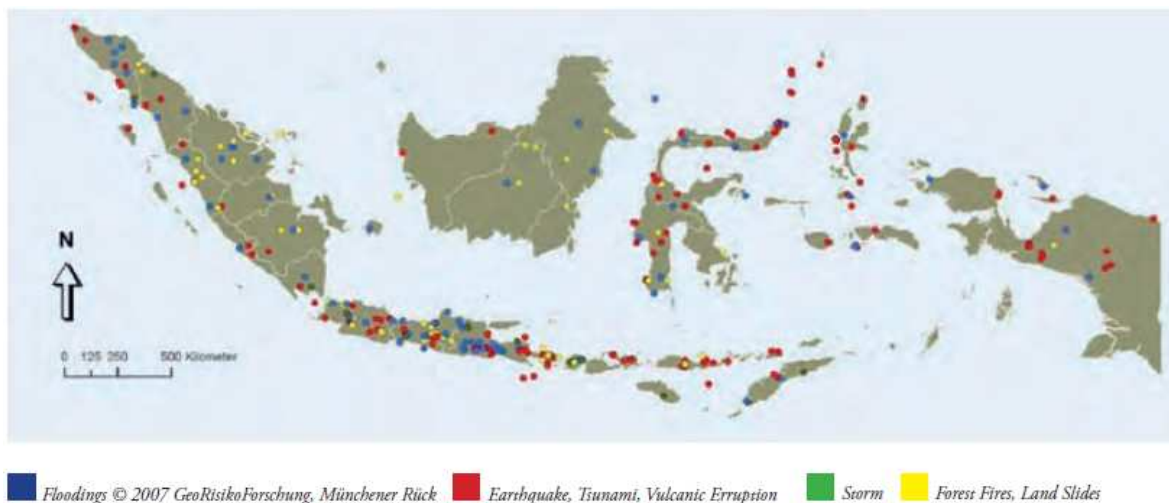
ABSTRACT

The majority of the workforce in Indonesia is constituted of the informal sector, whereas the Insurance and Pension plans here only provide coverage for the formal sector. Microinsurance is an alternative way to diminish the risks assumed by the low-income earners on unexpected incidents, especially those in informal sectors. Unlike conventional life/non-Life Insurance Products, microinsurance product must be designed and priced differently from conventional insurance products. There are great opportunities for actuaries to play a role in this area. With the support from the Government and Actuarial Society, actuaries could contribute significantly to the growth of the Micro-insurance market to benefit the population of Indonesia.

1. INTRODUCTION

With an estimated population of around 234 millions people in 2010, Indonesia is the world's fourth most populous country, after China, India and United States.^[1] It is an archipelagic nation comprising more than 17,500 islands spread between two continents; Asia and Australia, and two oceans; Indian and Pacific. Its location along the so-called “Ring of Fire” with its 70 very active volcanoes has made this country highly exposed to natural hazards like earthquakes, floods, volcanic eruptions, landslides, and tsunamis. The disasters in Indonesia as reported through MunichRe Geo Risk Project in 2007 are shown in the following figure:

Figure 1: Disasters in Indonesia (2007)



About 500 natural disasters occurred in 2003 in Indonesia causing the death of at least 800 people. An estimation of a further 4,500 people were injured and 500,000 people were displaced.^[2] The 2004 Tsunami was a major catastrophe, claiming more than 165,000 victims in

Indonesia and affecting around 3.5 millions people. The numerous natural disasters and national economic crisis have forced Indonesia to remain below the poverty line.^[3] One of the reasons is because there is no financial risk protection, especially for those categorized as low-income earners.

Based on the Data of Central Statistic Bureau (BPS), in 2007, out of 162 million population aged 15 years and over, 108 million (or 66.6%) are estimated to be in the labor force. The employed population is about 97.6 million. The unemployment rate is about 9.75% and under employment is about 31.0% of those employed. Only about 37% of the employed are in the formal economy, and about 63% of those employed are involved in various forms of rural and urban informal employment, including agriculture which still employs over 40% of the employed workforce, as shown in the following table:^[4]

Table 1: Labor Force in Indonesia, 2007

| | Population in 2007 (in thousands) | As % of Employed Population |
|--|--|--|
| Population 15 years of age and over | 162,352 | |
| Labour force (economically active) | 108,131 | |
| Employed population | 97,583 | 100% |
| By status: | | |
| Own account worker | 18,667 | 19% |
| Self-employed assisted by temporary/unpaid workers | 20,849 | 22% |
| Employer with permanent workers | 2,848 | 3% |
| Employee | 26,869 | 28% |
| Casual employee in agriculture | 6,278 | 6% |
| Casual employee not in agriculture | 4,267 | 4% |
| Unpaid worker | 17,805 | 18% |
| By formal/informal | | |
| Formal economy | 36,048 | 37% |
| Informal economy | 61,535 | 63% |
| Urban informal economy | 16,144 | 17% |
| Rural informal economy | 45,391 | 46% |
| Unemployed population | 10,548 | |

The formal social insurance fund membership is concentrated mainly amongst employees of larger private sector enterprises, plus public sector employees. Labour shedding by large enterprises following the Asian economic crisis, and a shift in economic activity towards smaller enterprises and the informal economy depressed social insurance membership statistics.

However, the Indonesian Government has been working hard to implement Law No 40/2004 on the National Social Security System. They have finished harmonizing the existing regulations where relevant in the context of Law 40/2004, but still need to solve several problems regarding the implementation.

The first pilot project in 2005 was ASKESKIN, a health card program which provides free access for poor people to health services. The cards then issued covered both free outpatient primary care in the local health centres (Puskesmas), and free treatment at hospitals, generally 3rd class public hospitals.

The program is running by a state-owned company, PT ASKES, and is funded by the Government Budget every year. The contribution rate was set initially at IDR 5,000 (about USD

0.55) per month per cardholder million members. PT ASKES received funds to cover both areas, and in turn reimbursed hospitals and health centres on a fee for service basis for health services provided to card holders. The government allocated IDR 3.9 trillion in 2005 for basic health care and health insurance. Distribution and low budget have been the main issues for this social insurance program.^[5]

The existing security and insurance and pension schemes available for every sector in Indonesia as shown in the following table:

Table 2: Existing Security Schemes in Indonesia

| | Public (Formal Sector) | | | Private (Formal Sector) | | | All Sectors (Formal and Informal) | |
|------------------------------|--|--|---|--|---|--|--|--------------------------------------|
| Program/ Benefits | TASPEN/ Pension and Retirement Lump-sum | ASABRI/ Life Insurance Benefits | ASKES/ Life Insurance Benefits | JAMSOSTE K/ Four Programs of Social Insurance | Labor Law/ Severance Pay | Voluntary Pension Program | SJSN/ National Social Security* | Commercial Life Insurance |
| Participants | Civil Servants | Police and Army | Civil Servants | All private companies | | | All citizens | All citizens |
| Membership | Mandatory | Mandatory | Mandatory | Mandatory | Mandatory | Voluntary | Mandatory | Voluntary |
| Legal Basis | Law 11/1969 | Law 6/1966 | Government Regulation 6/1992 | Law 3/1992 | Law 13/2003 | Law 11/1992 | Law 40/2004 | Law 2/1992 |

Notes ^[6]:

- TASPEN is the fund for civil servants. It provides a retirement lump-sum, and a pension programme.
- JAMSOSTEK is the social insurance fund for private sector employers and their employees. It provides four programs: Employment Injury, Death, Health Insurance, and a provident fund type Old Age Benefit.
- ASKES provides Health Insurance cover for public sector employees and some others.
- ASABRI is the counterpart fund for the armed forces and police. It provides similar lump-sum retirement benefits and pensions. The Armed forces also have some hospitals of their own.
- *Based on Law 40/2004 on National Social Security, SJSN provides five programs: Employment Injury, Death, Health Insurance, provident fund type of Old Age Benefit, and Pension. The implementation is still under development.

Based on BPS Data in 2007, there are only about 10.5 million workers (or about 11% of employed population) are covered by Jamsostek. And there are only about 6.3 million civil servants (or about 6% of employed population) are covered by the Public Security Schemes (Taspen, Asabri, and Askas). In total, there are only about 16.8 million workers or 47% of 36 millions formal sector workers (or about 17% of the employed population) are actually contributing to Jamsostek, Taspen, Asabri, and Asabri schemes.^[7] It means the uncovered population needs to voluntarily set-up or join a pension program or to buy a commercial life insurance product, or to manage the risk by themselves.

However, Informal risk management is common for Indonesian people, especially those who have no access to any coverage. One element of the Indonesian culture is an obligation to help those in need in the community; or so called “gotong royong”. If someone in the neighborhood needs money due to sickness, accident, or to pay for the funeral of a family member, a leader will collect money from the neighborhood. This tradition is usually common in the rural areas. Therefore, if an unexpected incident happens, someone will raise funds from other people in the community first before looking to the bank or other financial institutions.

A tradition which is also common in the city area is called “Arisan”. It is an informal form of joint financial pool which usually involves close friends, neighbors, colleagues, alumni, and so on.^[8] They meet and contribute regularly into the pooled fund. The treasurer draws lots in

the Arisan gathering to decide who gets the Arisan money. If someone who has not won the “lottery” but wants to take his/ her turn immediately due to an emergency, he/she can ask the funds early from the member whose name is selected (usually with a discount on the amount). These two traditions can be categorized as informal risk management; although sometimes it cannot cover the loss occurred effectively.

Insurance plan is one of the effective ways to transfer and manage risks. However, the Indonesian insurance market, both in terms of density and penetration, is considered low. Based on Swiss Re Report on World Insurance in 2008, the Insurance Penetration and Insurance Density are 1.35% of GDP and USD 30.4, respectively as shown in the following table:

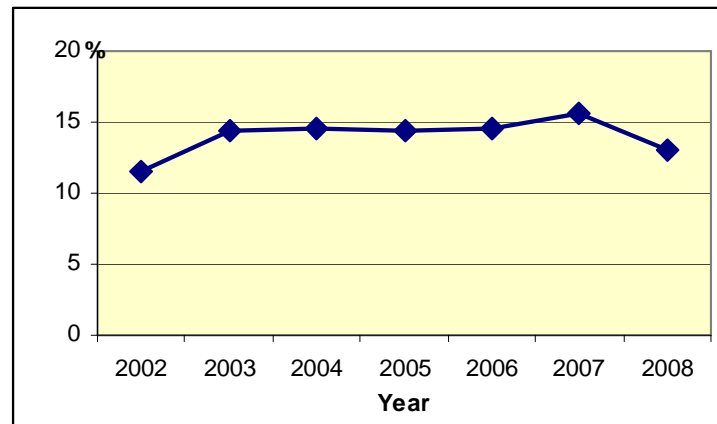
Table 3: Insurance Penetration and Density in Indonesia (2008)

| Insurance Business | Insurance Density (Premium per Capita in USD) | Insurance Penetration (Premium as % of GDP) |
|---------------------------|--|--|
| Life | 20.7 | 0.92 |
| Non-Life | 9.7 | 0.43 |
| Total | 30.4 | 1.35 |

Source: Swiss Re, Sigma No 3/2009, update in December 2009

Total insurance policyholders in Indonesia are only about 13% of total population in 2008.^[9] The trend since year 2002 to 2008 is shown in the following figure:

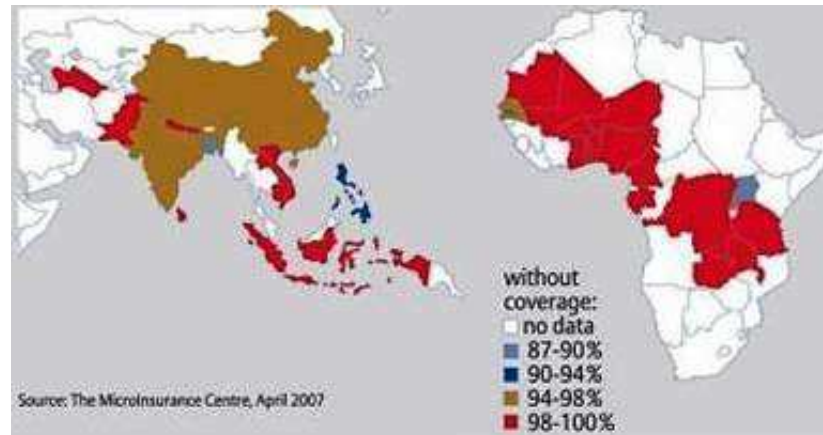
Figure 2: Total Insurance Policyholders as Percentage of Total Population in Indonesia (2002 – 2008)



Conventional life and non-life insurance may not be affordable for most of the households in Indonesia. The United Nations estimated that approximately 52% of the Indonesian population is still living below the USD 2 poverty rate (expenditure per capita of less than USD 2 per day).^[10] These people are the right target market for microinsurance.

The Microinsurance Center estimates that only about 78 million people in the 100 poorest countries have some microinsurance coverage (Roth, et al. 2007). We can see from Figure 3 that almost 100% of poor people in Indonesia are not covered by microinsurance.

Figure 3: Percentage of Poor People in Africa and Asia without coverage



Microinsurance is an alternative way to diminish the risks assumed by the low-income earners on unexpected incidents. Market research should be conducted to analyze the demand and supply side, to quantify the affordable premium and risks attached, and to investigate the right distribution method and potential market barriers.

Research on Market Demand for Microinsurance in Indonesia has been conducted by the partnership between ALLIANZ AG, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) and United Nations Development Programme (UNDP) in 2006. ^[11] We can see from this study that based on market demand there should be an effective market for microinsurance product in Indonesia, at least 12 millions active policyholders plus their family in ten years. With more than 140 insurers now, Indonesia has the potential to be a major market for microinsurance.

The insurance company actuaries, especially the Product Development Actuary and the Pricing Actuary, should be involved in any microinsurance initiatives in Indonesia. An actuary plays important roles in this relatively new area, especially in calculating the risks which are different from the risks involved in conventional insurance.

2. ABOUT MICROINSURANCE

By definition, Microinsurance is the protection of low-income people against specific perils in exchange for regular premium payments proportionate to the likelihood and cost of the risk involved. ^[12] The essential characteristics of microinsurance product are affordable prices and product simplicity. Based on the microinsurance compendium (Churchill 2006), the comparison between the Conventional Insurance and Microinsurance is as in the following table:

Table 4: Comparison between Conventional Insurance and Microinsurance

| Characteristics | Conventional Insurance | Microinsurance |
|-----------------|--|---|
| Coverage | <ul style="list-style-type: none"> Addresses the needs of middle-upper income segment Tends to exclude “high-risk” groups Sum-insured is based on application Group and Individual | <ul style="list-style-type: none"> Relevant to the risks of low-income households As inclusive as possible (high volume) Small sum-insured and simple benefit packages Grouping for more efficiencies |

| | | |
|------------------------|---|--|
| Rules and Restrictions | <ul style="list-style-type: none"> • Generally full of complex conditions, conditional benefits, and written in Legalese • Claims process tends to be difficult | <ul style="list-style-type: none"> • Simple and straightforward • Has to be easy for the low-income policyholders to submit claims |
| Premium | <ul style="list-style-type: none"> • Affordable for middle-upper income brackets • Different by Age, Sex, Smoking status and other • Single or Regular payments, collected and administered by a billing collection system | <ul style="list-style-type: none"> • Affordable for low-income households • One price fits all (Group Pricing) • Single or Irregular/ frequent payments • Premium collection is usually linked to other services |
| Delivery Channel | <ul style="list-style-type: none"> • Sold by licensed Insurance Agents or banks | <ul style="list-style-type: none"> • Usually through Partner-Agent Model e.g. bank, MFI's, NGO or mass organization as Agents |
| Underwriting | <ul style="list-style-type: none"> • Usually complicated and standardized | <ul style="list-style-type: none"> • Simple or no underwriting |

Note: MFI= Microfinance Institution, NGO= Non Governmental Organizations

3. MICROINSURANCE MARKET IN INDONESIA

3.1. Current Condition of The Insurance Industry

The economic climate of Indonesia has improved slowly after the Global Financial Crisis. The GDP grew by around 6% in 2008. Total GDP per capita is USD 2,237. The following table shows the economic indicators of ASEAN Countries as of December 2008 in which Indonesia is listed in the 3rd place in terms of economic growth.

Table 5: The Economic Indicators - ASEAN Countries (2008)

| Country | Area (km ²) | Total Population (in thousands) | GDP per capita (in USD) | Export (USD) | Import (USD) | Economic Growth (%) |
|------------------|-------------------------|---------------------------------|-------------------------|----------------|----------------|---------------------|
| Laos | 236,800 | 5,763 | 918 | 828 | 1,803 | 8.4 |
| Vietnam | 331,212 | 86,160 | 1,053 | 61,778 | 79,579 | 6.3 |
| Indonesia | 1,860,360 | 228,523 | 2,237 | 137,020 | 129,197 | 6.1 |
| Cambodia | 181,035 | 14,656 | 756 | 4,249 | 4,476 | 6.0 |
| Malaysia | 330,252 | 27,863 | 7,992 | 194,496 | 144,299 | 4.6 |
| Myanmar | 676,577 | 58,510 | 465 | 6,621 | 3,795 | 4.5 |
| Philippines | 300,000 | 90,457 | 1,844 | 49,025 | 56,646 | 3.6 |
| Thailand | 513,120 | 66,482 | 4,116 | 174,967 | 177,568 | 2.6 |
| Singapore | 707 | 4,839 | 38,046 | 241,405 | 230,760 | 1.1 |
| Brunei | 5,765 | 397 | 35,623 | 8,754 | 3,106 | 0.4 |

Sources: ASEAN, Indonesian Statistic Bureau, Malaysian Statistic Department, General Statistic of Vietnam, Singaporean Statistic Department, The National Statistic of Office Kingdom of Thailand, National Statistic Office Republic of the Philippines, ADB

According to the National Budget Plan on Spending (RAPBN) for 2010, GDP is expected to grow at 5%, with inflation on average of 5% per year. The Government Bond yield (3-month maturity) is expected to stay at 6.5% per annum in 2010.

The insurance industry in Indonesia was slightly impacted by the Global Financial Crisis in 2008; only the insurance companies whose investment portfolio was heavily-weighted in

equity and where product portfolio was mostly in the form of savings/unit-linked product were greatly affected. The Insurance Premium as percentage of GDP has gone down close to 9% from 2007 to 2008 as shown in the following table:

Table 6: Economic Indicators after the Global Financial Crisis (2008) ^[13]

| Figures | 2007 | 2008 | Change |
|-------------------------------------|-----------|-----------|--------|
| Insurance Premium (in millions USD) | 8,060.1 | 7,972.2 | -1.1% |
| Asset (in millions USD) | 25,676.4 | 23,597.5 | -8.1% |
| GDP (in millions USD) | 420,150.8 | 452,420.1 | 7.7% |
| Exchange Rate (IDR to USD) | 9,419.0 | 10,950.0 | 16.3% |
| Total Insurance Companies | 149.0 | 141.0 | -5.4% |
| Total Population (in millions) | 225.6 | 227.8 | 1.0% |

From various sources

There are only a few insurance companies that have a poor Risk Based Capital (RBC) ratio below the minimum RBC set by the Government (120%). ^[14] Following is the RBC rating classes of 131 insurance companies (43 Life, 88 Non-Life) in Indonesia as of December 2008:

Table 7: Risk Based Capital Class (2008) ^[15]

| Risk Based Capital (RBC) | Total Insurance Company | |
|--------------------------|-------------------------|-----------|
| | Life | Non-Life |
| > 230% | 24 | 37 |
| 120% - 230% | 15 | 49 |
| <120% | 4 | 2 |
| Total | 43 | 88 |

Source: Minister of Finance

In conclusion, Indonesia is a relatively stable country in terms of economic conditions and holds good potential for investors. And to achieve its full potential and sustainable economic growth, it would require a good social security system, insurance market covering the security of all segments of the population.

3.2. Current Condition of Microinsurance Market in Indonesia

Many insurance companies in Indonesia are reluctant to enter the microinsurance market due to the high infrastructure cost needed, considering the low premium they can receive. ^[16] Besides the small profit margin, limited benchmark and distribution issues are also the main reasons insurers are not yet entering the market. Some microinsurance pilot project that have been running need to deal with distribution issues, since most of the microinsurance target live in remote areas. ^[17] However, some insurers indicated an openness to enter the low-income market and to develop microinsurance products. ^[18]

Currently the conventional insurances in Indonesia are only available for the middle-and upper market segments that are able to pay for the premium. Only some national and international insurance companies have designed individual and group products for the lower-income market. Following are the list of several national and international insurance companies that have been offering microinsurance products to the market:

Table 8: List of Insurers that offer Microinsurance Products in Indonesia¹

| Company Name/ Product | Premium | Benefit | Administration Fee/ Other Information |
|---|---|--|---|
| 1. Allianz Life ² (Multinational Life & Non-Life Insurance Company) - Payung Keluarga or Family Umbrella ³ (Micro-Life Insurance) | 0.1% of loan principal x Number of Months or 1.2% of loan principal per annum | Death benefits: - Waives of outstanding loan; - 2 x loan principal in lump sum | - Admin fee: 22% - Profit sharing 20:80 Allianz : MFI at the end of the year - 178.506 policy holders, over USD 100,000 premium and 76 claims in 2008 |
| 2. Askrinda (National Non-Life Insurance) - Credit-Life Insurance | 0.4% per annum for loan higher than IDR 1 millions for age up to 55 years. Above 55 other rates are applied | Death benefit: full coverage of initial loan amount | - Admin fee: 25% of collected monthly premium at the end of the year - No profit sharing |
| 3. Bringin Life Syariah (National Life Insurance) - Life Insurance and Pension Fund for employee | Profit Sharing, equivalent to 1.7% to 2.7% of financing at a minimum of IDR 3 millions loan according to the two different benefits | Death benefit: a. Full coverage on initial loan amount b. Coverage only on outstanding loan | Dissemination through e.g. a rural bank; Bank Perkreditan Rakyat (BPR) |
| 4. Bumiputera (National Life Insurance) - Life Insurance - Credit Life Insurance - Old Age Insurance | IDR 560,000 per 6 months Vary, depending on the age of borrower and tenor of loan Pay premiums for 14 years; IDR 300,000 per 3 months | Death and accident benefit: IDR 50 millions coverage - for husband only Death Benefit: Full coverage on initial loan amount Retirement policy: IDR 35 millions coverage - for husband only | Admin Fee: 15% of collected premium per month |
| - Endowment Policy | IDR 153,000 per 3 months IDR 450,000 per 3 months 139,000 per 3 months for 7 years period | Policy covers oldest child with IDR 7 millions; when child graduated from pre-school, they received IDR 500,000 Policy covers second child with IDR 10 millions Payment of IDR 7 millions when the oldest children enters university | |
| 5. Jasaraharja (National Non-Life Insurance) - Motorbike Lost – Asset Insurance | IDR 25,000 annually for 2 years period | Payment of the motorbike price | |

| | | | |
|--|--|---|---|
| 6. Jiwasraya (National Life Insurance) - Life Insurance | 3‰ per 1 millions loan for one year loan given | Death Benefit: Full coverage of outstanding loan | |
| 7. Takaful (National Life, Non-Life and Takaful Insurance) - Life Insurance - Health Insurance - Takaful Ukhawah (Credit Life Takaful Insurance) | IDR 6,000 annually for IDR 1 millions loan Premium. For other tenor and loan, amount is adjusted in prorated basis - Adult: IDR 175,000 annually, - Child: IDR 90,000 annually Single Premium of IDR 50,000 | Death Benefit: Full coverage of outstanding loan Package - Treatment: - non ICU per days: IDR 100,000, max 360 days - ICU room a day 200,000 (max 15 days) - Death Benefit: IDR 5,000,000 - Accidental Death: IDR 25,000,000 | Annually (end of year) under a certain computation (depending on amount of death claim and collected premium) |
| 8. Wahana Tata (National Non-Life Insurance) - Alert 1 Manggarai Protection Card | One card costs IDR 50,000 | Provides one-off payment of IDR 250,000 if the water rises to or above 950 cm (Alert 1) at the Manggarai Water Gate in Jakarta | The first indexed-based microinsurance flood product worldwide |

- 1) Source: GTZ-Munich Re: Empirical Findings from Four Provinces in Indonesia Final Report, 2007 page 21 and information published on the company's website
- 2) Allianz is the first international insurance company to offer microinsurance product (2006) and Takaful microinsurance (2008).
- 3) Allianz has launched the overhaul of "Payung Keluarga" which provides joint-life coverage, and Takaful version of "Payung Keluarga" which provides a micro-education endowment
- 4) USD 1 = IDR 10,000

The most common type of microinsurance product is credit-life insurance which is attached to loans provided by Banks; such as credit-life insurance provided by BRIngin Life through Bank Rakyat Indonesia (BRI), and credit-life insurance provided by Asuransi Central Asia (ACA) through Bank Central Asia (BCA). According to the Central Statistic Bureau Data in 2008, about 84% of the capital of small and medium sized enterprises (SME) is sourced from other parties, while the rest (15.6%) use their own assets. This explains why the credit-life insurance is popular.

If the policy holder dies, the insurer will pay off any debt outstanding at the time of death, sometimes plus extra benefit for the family. This insurance mainly helps the lenders, and it turns out to be profitable due to infrequency of death. The Central Bank of Indonesia, Bank Indonesia (BI) limits the micro-loans at IDR 50 millions.^[19] Microinsurance premium also follows this rule. Generally, the premium is below IDR 100,000 per annum.

The other type of microinsurance which has been developed by some insurance companies and has successfully got market's attention is Takaful microinsurance. More details on Takaful Insurance will be explained in the next section.



Picture of Allianz Indonesia team when visited the “Payung Keluarga” microinsurance policy holders
Property of Martin Hintz (Allianz Indonesia Microinsurance Consultant)

3.3. Takaful Insurance

Takaful insurance is an insurance system which complies with Shari’ah, Islamic Law. The word “Takaful” is based on the *Quranic* concept of *taawun* (mutual assistance) which literally means joint-guarantee, a pact among a group of persons to indemnify a member of this group if he suffers a specified calamity or loss. The amount comes out of a common pool created with the individual contributions of participating members. A Takaful insurance product has to follow the following principles:

1. Solidarity and joint guarantee;
2. Self reliance and self sustaining for community well being;
3. Assist those that need assistance;
4. Community pooling system;
5. Shari’ah approved investments and products.

The different between Takaful insurance and conventional insurance is in the sense that the company is not the insurer of the participants since the persons participating in the scheme mutually insure one another. The takaful company simply handles the matters of investment, business and administration.

The Takaful insurance company operates much on the same basis on which mutual insurance companies operate and has a similar features to par product offered by Life insurance companied. Like in mutual insurance, the insured themselves are the insurers and income earned from premiums is used to cover the cost of operations and to pay claims. The balance, if any, is returned to the members. However, Takaful contributions (premiums) are not invested in interest-earning schemes and un-Islamic businesses. ^[20] Below are the differences between Takaful insurance and Conventional insurance:

Table 9: Comparison between Conventional Insurance and Takaful Insurance

| Characteristics | Conventional Insurance | Takaful Insurance |
|-----------------------------|--|--|
| Premiums (or Contributions) | Premium belongs to the insurance company (as company’s property) and is managed by the company | <ul style="list-style-type: none"> - Contributions which has been paid belongs to all members, and all policyholders share in operation and investment results - Distribution of earnings is defined in the policyholder agreement |

| | | |
|----------------------------|--|---|
| Risk and Operating Results | <ul style="list-style-type: none"> - Transfer Risk - All risk and all operating results (regardless of profits or losses) are borne by the insurance company | <ul style="list-style-type: none"> - Risk sharing - Operating surpluses are held in reserve to offset future losses but remain the property of the policyholders (Profit Sharing) |
| Investment | Managed by the insurance company | Must follow the Shari'ah Law and approved by the Shari'ah Supervisory Board |
| Supervisory | Minister of Finance | <ul style="list-style-type: none"> - Minister of Finance - Shari'ah Supervisory Board |

From various sources

Indonesia is the most populous Muslim-majority nation in the world with about 85.2% of total population is Muslim, or about 13% of total Muslims in the world.^[21] Many insurance companies in Indonesia have developed Takaful insurance products, or Takaful divisions, and some have expanded to Takaful Insurance companies in order to respond to the growing market demand.

Total premium of all insurance companies in Indonesia was around USD 7.9 billion in 2008, while total premium on takaful insurance was around 2.1% of the total premium (or about USD 165 millions).^[22] Currently there are about 10 Takaful financial institutions and about 70 Takaful units with total asset as shown in the following table:

Table 10: Total Assets of Takaful Financial Institutions in Indonesia

| Institution | Total Takaful Asset (millions USD) | % of Takaful Asset out of Total Asset ⁴⁾ | Total Institutions | Data as of |
|------------------------------------|------------------------------------|---|--------------------|------------|
| Takaful Bank ¹⁾ | 5,523.8 | 2.2% | 30 | Jun-09 |
| Takaful Insurance ²⁾ | 265.3 | 1.9% | 38 | Dec-08 |
| Takaful Multifinance ³⁾ | 4,220 | 3.2% | 12 | Jun-09 |

Notes:

- 1) Consisted of 5 Takaful Bank and 25 Takaful units
- 2) Consisted of 3 Takaful Insurance Companies and 35 Takaful units
- 3) Consisted of 2 Takaful Multifinance Companies and 10 Takaful units
- 4) Conventional plus Takaful Assets

Source: BI, MoF, BAPEPAM, BEI, DSN, Published Financial Statement – compiled by INVESTORS team

Based on the same sources; total asset (nominal) of Takaful Bond (Sukuk) is about USD 447.9 millions as of July 2009, and total asset (NAV) of Takaful Mutual Fund asset as of June 2009 is about USD 313 millions in June 2009.

3.4. Takaful Microinsurance

When Indonesians are given two options between Takaful and Conventional insurance product, many prefer to choose Takaful insurance which does not go against the principles of the Koran or Shari'ah Law. It is understandable since Indonesia is a majority Muslims country. It is the low-income earners who are the most sensitive to Islamic principles. Usually when a financial product is offered, they will seek opinion or advice from the religious leaders.^[23] Therefore, microinsurance product is better to be offered in the form of Takaful microinsurance, in term of marketing advantage.

Based on GTZ research in 2007 on surveyed group in rural areas, it became obvious that Shari'ah compliance is not a must but religious issues could become an obstacle for

microinsurance scheme at a later stage. Therefore, the religious leaders must be involved in the promotion of microinsurance products and general education on insurance.

Takaful microinsurance operation is similar to conventional Takaful insurance. For example is the Takaful Ukhuwah, an YRT-credit-life takaful insurance offered by Takaful Indonesia. The Premium is IDR 50,000, which is consisted of IDR 22,500 of contributions to the pooled-fund, IDR 2,500 of donations to the poor, and IDR 25,000 of operational expenses. The donations to the poor will be collected and managed by a Non-profit religious organization. If the policyholder dies, he/she will receive death benefit which the amount depends on the cause of death. Although the product operates based on the Holy *Quran*, a non-Muslim is welcomed to buy the product.

3.5. Product Considerations

3.5.1. The Basic Needs

Based on the GTZ Research in 2006, the risks which were identified through focus group can be categorized into two categories; insurable risks and non-insurable risks. The insurable risks include: (1) serious illness, (2) education of children (through a life policy), (3) poor harvest, (4) death of a relative and (5) accident. The non-insurable risks include (1) social obligations, (2) business loss, (3) marriage of children and (4) inflation.

Respondents identified social obligations as a burden, but they are also an advantage. Social norms require that neighbors and community members pitch in with gifts and donations in times of death and marriage.

3.5.2. Simple and Affordable Product

As explained earlier in section 2, the key success of a microinsurance product is price affordability and product simplicity. Based on GTZ research, the ability to pay the insurance premium is not an important reason of the low insurance penetration and density. According to the surveyed groups, two important reasons are the low financial literacy and the bad reputation of the insurance industry, which actually can be solved through promotion of and education on insurance.

The average capacity to pay ranged from IDR 2,000 – IDR 50,000 per month depending on the income level and social background.^[24] The respondents also mentioned that it is much easier to pay the insurance weekly or at least monthly.

Most of the low-income earners are low in education. Therefore, the product must be easy to understand. All documentation must be written in simple wording, such as simplified application form, simplified provisions and policy kit, and also simplified marketing material. The underwriting and administration process also must be simple. It means simplified claim investigation rules (target to settle claims within 2-4 weeks), simplified administration procedure, simplified distribution, and simplified underwriting process. Therefore the low-income people who are usually paid in daily basis will not lose their income due to the long claim or underwriting process.

A product which is linked to the water level like the one offered by Asuransi Wahana Tata recently (Alert 1 Manggarai Protection Card) is an example of product which is easy to understand and easy to administer and distribute.

3.5.3. Appropriate Partners

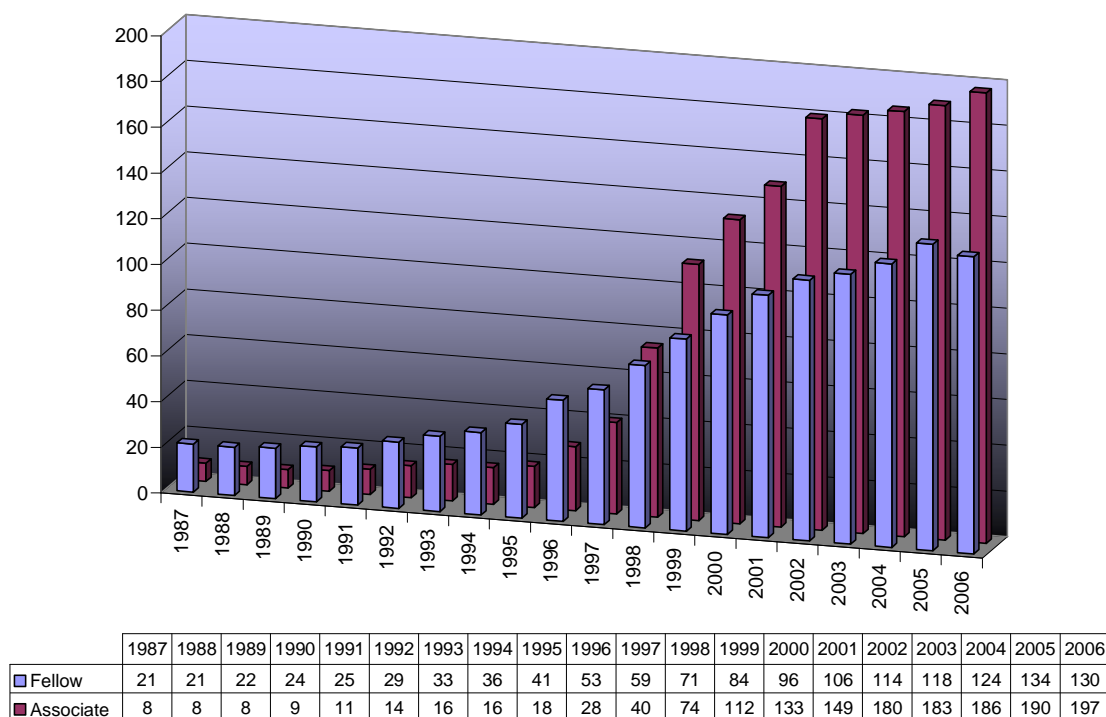
Currently, the credit-life insurance product which has been the most widespread microinsurance product in Indonesia is linked to micro-finance product (micro-loans). Therefore the Micro-finance institutions (MFIs) are considered to have enough experience in offering the microinsurance products to low income households. MFIs like cooperatives (*koperasi*), foundation (*yayasan*), rural banks, and commercial banks are the appropriate partners for the distribution of microinsurance products.

Technical skills, especially in insurance, are essential to develop the appropriate microinsurance product. International partners, which are more experienced in microinsurance, are needed to work together in developing the product. Actuaries as professionals who have risk management and actuarial skills and knowledge required in the insurance area are also needed to develop microinsurance scheme. The following is a brief summary of current condition of Indonesia actuaries as professionals and their opportunities in the microinsurance area.

4. The Society of Actuaries of Indonesia (PAI)

The Society of Actuaries of Indonesia (PAI) was established in Jakarta on 19 October 1964. Despite its existence as an actuarial professional organization for 46 years, the actuarial profession is not well known among the public, even in the insurance industry where actuaries play major roles. Based on the PAI Database in 2005, there are about 310 members; 124 fellows (FSAI) and 186 associates (ASAI). With the annual growth rate of 16.7% for the last 17 years (11% for FSAI and 22% for ASAI), the actuarial profession is considered rare and exclusive compared to about 240 millions people in Indonesia.^[25] The growth of the PAI membership from 1987 to 2006 is shown in the following figure:

Figure 4: The Growth of PAI Membership (1987 – 2006)



About 80% of the PAI members work within the insurance industry in the area of life insurance and pension fund. Almost all of them are located in Jakarta as the capital city of Indonesia. Despite their small number of membership, the PAI has been consistently developing the actuarial profession in Indonesia both in quantity and quality; such as PAI's recognition as a full member of the International Actuarial Association (IAA) in 2007.

4.1. Supply vs. Demand Issues of Actuaries

The turnover of actuarial staff is the highest every year among all life-insurance companies. It is obvious that the existing actuaries can not meet the increasing demand of actuarial staff.

Based on Minister of Finance Decree No. 426 year 2003, a life insurance company must appoint an actuary with certain qualifications and relevant working experience as the company's actuary. The government and PAI have been working together so that this rule can be applied to Non-Life insurance companies as well. Currently, there is no requirement for non life insurance companies to perform Pricing and Reserving according to actuarial principles. If the PAI does not increase its effort in increasing the actuarial resource in the market, then the market will face with a shortage of actuarial talent. In addition, the growing microinsurance market will also push the PAI to work harder in creating more actuarial experts.

The global crisis has created downturn in the job market in many countries. It is a blessing in disguise for the PAI, since many Indonesian actuarial students who studied abroad chose to return home and working in Indonesia. Not only it does create more resources in the market, but the local actuaries – somehow- are pushed to compete with them. It is a kind of homework for PAI to promote Indonesia in order to attract the foreign actuaries to work in Indonesia so the supply – demand issues can be solved.

Regarding the penetration of microinsurance market, PAI should also try to import material and expertise in Microinsurance to compensate for the fact that the actuarial profession in Indonesia is relatively isolated in terms of actuarial education in university and limited cooperation with the international actuarial societies.

5. Roles of Actuaries in developing Microinsurance

As explained in the previous sections, there is a large potential market for microinsurance in Indonesia. As for the insurance companies, it means opportunities for future sales and new distribution channels. And in light of the high economic growth rate in Indonesia, it will generate profits in the long run and at the end will help the company to strengthen its reputation and brand name and to strengthen company's relationship with insurance regulators and other governmental agencies. Indonesian Actuaries that mostly work for insurance companies can also bring in learning from the conventional market to ensure healthy growth of the microinsurance industry.

Currently, there is no specific regulation regarding microinsurance in Indonesia. In India, the insurance companies have to write a certain amount of business in the rural areas or they will face hefty fines. Consequently, the microinsurance industry in India is growing rapidly; a growth closely linked to the overall growth of insurance in the country. This is where actuaries can play an important role, such as to conduct studies in order to convince the government to have that kind of regulation.

Actually it needs actuarial skills to convince the Minister of Finance that the microinsurance products reflect sound actuarial principles. Fair pricing must be conducted by

actuaries, so that the insurers are not only making unsustainable promises but also have mortality, morbidity, persistency, and other statistics as needed.

Actuaries are the futurists of insurance – they look at past experience and forecast the future using mathematical and statistical models of mortality and morbidity.^[26] In order to develop a suitable product with fair pricing, market research (especially regarding risks on mortality, morbidity and persistency) must be conducted by the actuary. It includes a massive on a national level, such as age distribution, statistics of deaths, capacity to pay, modes of payment, frequency of utilization, and so on. Then the actuary can perform the pricing, and calculate the cost of insurance, expenses needed, and an acceptable profit margin. And at the end, an actuary must be involved in developing the database system so that all data could be maintained easily and properly for the review analysis purposes.

6. Conclusions and Recommendations

- Microinsurance is an alternative way to diminish the risks assumed by the low-income earners on unexpected incidents.
- Indonesia is a relatively stable country in terms of economic conditions and holds good potential for investors. And to achieve its full potential and sustainable economic growth, it would require a good social security system, insurance market covering the security of all segments of the population.
- There is a large potential market for microinsurance in Indonesia. It means a great opportunity for future sales and new distribution channels for insurance companies.
- There are great opportunities for actuaries to play a role in microinsurance area. With support from the Government and the Actuarial Society, actuaries could contribute to the growth of the Microinsurance market in Indonesia.

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 - ³ National Crisis in 1998 and Worldwide Crisis in 2008. The poverty line is defined as an expenditure per capita of USD2 per day (United Nations 2008)
 - ⁴ ILO Sub regional Office for South East Asia Report. Indonesia: Providing Health Insurance For The Poor (2008) page 3
 - ⁵ ILO (2008) page 3, GTZ (2007) page 75
 - ⁶ ILO (2008) page 2
 - ⁷ ILO (2008) page 4
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 - ²³ Allianz-GTZ-UNDP (2006) page13
 - ²⁴ GTZ (2007) page 61
 - ²⁵ Ponno Jonatan (2005). Roles of Actuaries and Actuarial Association in Developing Actuarial Association in Addressing Good Governance in Indonesia (EAAC 13th Indonesia)
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