access to insurance initiative

IAIS
INTERNATIONAL ASSOCIATION OF INSURANCE SUPERVISORS

Report of the 10th A2ii – IAIS Consultation Call

Actuarial Approaches to Inclusive Insurance Markets

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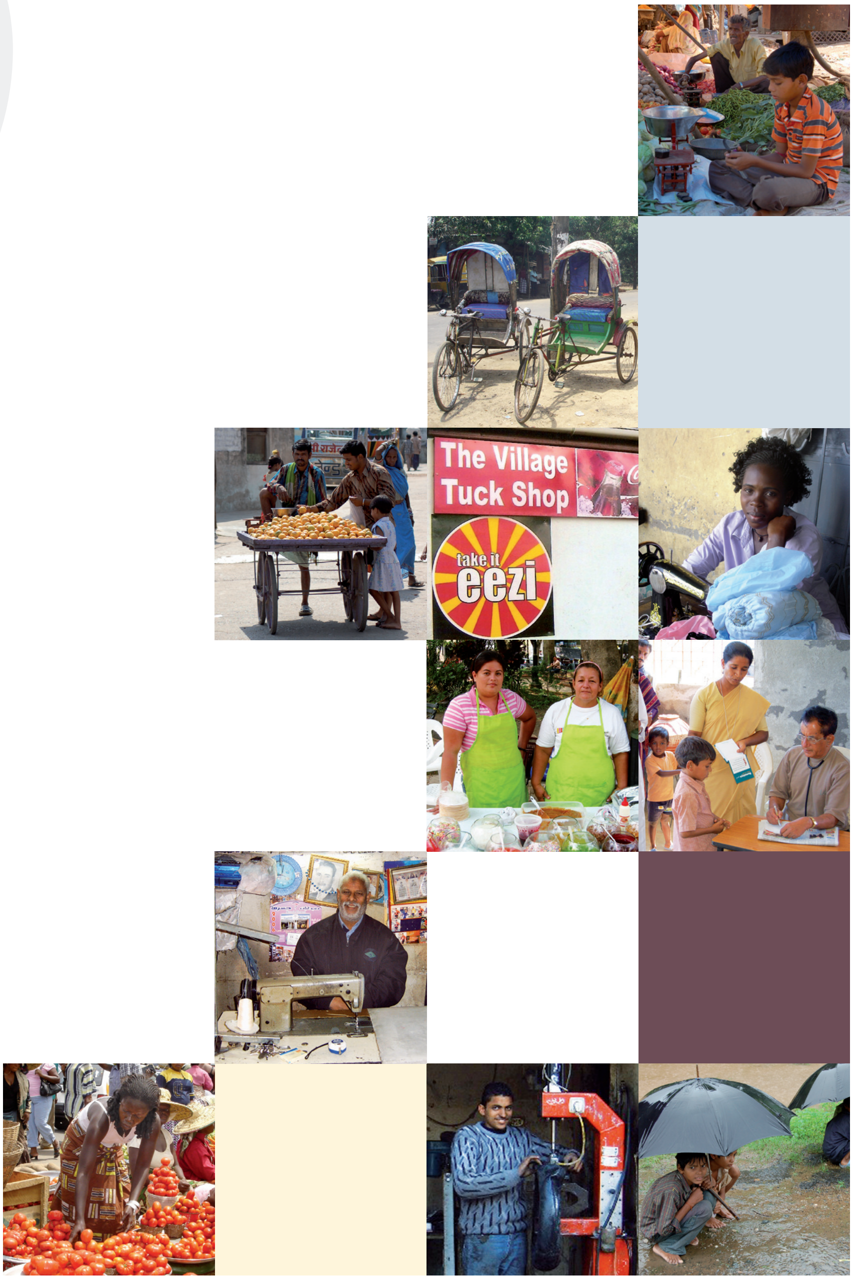

Actuarial Approaches to Inclusive Insurance Markets

The A2ii consultation calls are organised in partnership with the IAIS to offer a platform for supervisors to exchange experiences and lessons learnt in in expanding access to insurance. **This call focused on Actuarial Approaches to Inclusive Insurance Markets.**

The calls were hosted by Hannah Grant (A2ii) in English, Onur Azcan (A2ii) in French and Patricia Inga Falcon (A2ii) in Spanish. Technical inputs were provided by Jules Gribble (IAIS Secretariat) on the English call, Rodolfo Wehrhahn (Technical Assistance Advisor) on the Spanish call and Denis Garand (President at DGA) on the French call. A country experience was presented by Michael Kofi Andoh from the National Insurance Commission (NIC) Ghana.

The role of actuarial services in insurance markets

Responding to demands from supervisors engaged in inclusive insurance, the IAIS in close collaboration with the International Actuarial Association (IAA) is developing a paper on „approaches to actuarial services in inclusive insurance markets". The paper will aim to provide general guidance on requirements and specific approaches for proportionate actuarial services in inclusive insurance markets which are applicable across jurisdictions. To inform the drafting group of this paper the IAIS considers it important to obtain a broad perspective of the issues its members are confronted with in terms of actuarial services. Therefore, this consultation calls aimed at generating input for the forthcoming IAIS paper, as well as providing supervisors with an opportunity to share their experiences on this topic.

Actuaries model, analyse and interpret the impact of financial risks to inform business management to make better decisions on a wide range of topics such as product development and pricing, solvency, risk and financial management. Actuarial services and functions develop proposals on these topics for key decision makers in insurance providers, as well as supervisors and are an important part of a well-functioning insurance market.

When clearly and effectively communicated, actuarial services reduce the risks inherent in insurance to policyholders and providers. A provider failure can leave policyholders without cover and have a long-term negative impact on the insurance industry. This is heightened in inclusive insurance markets, where trust in the insurance industry is fragile at best. Where effective actuarial services are provided, decisions regarding insurance products and business operations are better informed.

Actuarial training and practices have an entrenched focus on protecting the policyholder. This is aided by their understanding of the long-term nature of insurance and direct consequences of that. For example, the nature of life-insurance means that over time there will be periods where more claims are paid out and other periods where less claims are paid out. Providers must have adequate resources in place to manage this. Reserves for claims must not be used for purposes other than meeting obligations to policyholders, such as to pay out shareholders or for operational expenses. By understanding the risks to policyholders and providers in insurance, actuarial services can also assist supervisors when making decisions on the development of insurance markets.

However, actuarial capacity is a challenge in most inclusive insurance markets. Despite the important role of actuarial services in insurance markets, there are only about half as many actuaries in the world as are needed[1]. When major actuarial countries are excluded – Australia, Canada, South Africa, United Kingdom and the United States – the situation is considerably worse. In most jurisdictions where inclusive insurance

1 http://www.actuaries.org/PRESIDENTS/Documents/Paris/Actuarial_Supply_Demand.pdf

is particularly needed the presence of actuarial services is extremely low. While plans are in place to build actuarial capacity, it is going to take time, and there needs to be a plan to deal with the lack of actuarial expertise in countries looking to develop their insurance markets. This begs the question, what alternative approaches are there for actuarial services in inclusive insurance markets?

Alternative approaches to actuarial services in inclusive insurance markets

The starting point for alternative approaches to actuarial services in inclusive insurance markets is to identify the right problem. Supervisors' first need to go back and consider what is different about inclusive insurance markets compared to conventional insurance markets that is relevant for actuarial services. Where there are similarities, learnings from previous experience can be drawn on, where there are differences, these differences need to be clearly articulated so appropriate responses are introduced. With regards to product features differences may include simpler products, lower covers and premium, less sophisticated and knowledgeable clients and lack of accessible recourse avenues. These differences create their own risks which require appropriate proportional responses.

What is proportionality? While proportionality is not explicitly defined in the insurance core principles (ICPs)[2], it is dealt with in paragraph 8 of the introduction:

→ '… supervisors … tailor certain supervisory requirements and actions in accordance with the nature, scale and complexity of individual insurers.

→ … supervisors should have the flexibility to tailor supervisory requirements and actions so that they are commensurate with;

- … risks posed by individual insurers;
- … … [and] potential risks posed by insurers to the insurance sector or the financial system … .'

What does this mean for supervisors? In applying proportionality supervisors need to use their judgment to tailor certain supervisory requirements and actions. The typical focus of proportionality is on reducing unnecessary obligations in terms of product features and product registration, distribution, governance or solvency. However with regards to actuarial services, it is important not to oversimplify things to the extent that inappropriate policies and practices sneak through.

Notably, approaches which work for conventional insurance products will not translate directly into inclusive insurance products. While the design, delivery, management and consumer relations in inclusive insurance could all differ, they are insurance products and the ICPs still apply. Certain ICPs may be applied differently due to the differences across jurisdictions given the nature of the market, and the level of sophistication of the supervisory architecture; however the underlying principles remain the same.

The positive is that the guidance on practices in inclusive insurance market supervision is increasing; the challenge, however, is how supervisors interpret it and apply it to the inclusive insurance context in their jurisdiction. For example, a core principle for managing insurance is the grouping of policyholders to manage insurance risk. In life insurance, an insurance company manages mortality risks by making assumptions about how many people die each year. This works at the group level because the probability of a claim is based on this assumption. However at the policyholder level, the individual is either dead or alive, making it impractical to manage through insurance. Thus while it may differ between inclusive insurance and conventional

2 The Insurance Core Principles (ICPs) are the highest level in the hierarchy of IAIS supervisory material and prescribe the essential elements that must be present in the supervisory regime in order to promote a financially sound insurance sector and provide an adequate level of consumer protection.

insurance, there is still a minimum group size at which a product is no longer considered insurance. Supervisor need to apply judgment for what this minimum is in their jurisdiction.

Further, actuarial services are not limited to the design of the product. Financial risks arise at all steps in the insurance value chain from client acquisition, to administration, to premium collection to assessing and paying claims. If any of these chains break, from a policyholder view, insurance has failed. Therefore there needs to be appropriate processes in place to manage it.

The actuarial cycle

Actuaries manage the financial risks in the insurance value chain by what is referred to as the actuarial cycle. The actuarial cycle is where actuaries monitor what really happened against what they thought would happen and adjust their assumptions as required. In an ideal world, this would be done with complete data and by a fully certified actuary, but in reality this is not always possible. In all jurisdictions, there will be some degree to which the data is incomplete or contains omissions or errors, however it is particularly an issue in inclusive insurance markets.

The absence of complete and quality data leaves two options; you either do not provide actuarial services or you apply judgment to the actuarial services you offer and have a process to manage it. The latter requires judgment and an appropriate feedback mechanism, known to actuaries as the actuarial control cycle. This is the process by which you identify the problem, solve the problem, monitor the solution and if you need to change, go back to the identify stage, and start again. It is not limited to actuaries, but is entrenched in their actuarial training. A similar process is found for financial condition reports[3].

Supervisors need to assess what is important for actuaries to monitor in inclusive insurance. While all parts of the process will apply, the level of depth that it is attached to each part might change, however what is critical is to have a well-defined process. It is also worth noting that as most inclusive insurance policies are short-term (duration of just one year) rather than long term; when following a risk based approach there is arguably less need for a fully certified actuary to be fully involved throughout the process as considerations relating to the pricing of risk tend to be more simplistic.

Implications for supervisors

A starting point for supervisors looking to develop actuarial capacity in their market is to become familiar with the environment for actuarial services in their jurisdiction. Supervisors need to have reasonable expectations of the actuaries and the actuaries towards the supervisors. The danger of using services that are not familiar to all parties creates the potential for a mismatch in expectations, which needs to be guarded against. Supervisory bodies often lack appropriate actuarial resources and in the event they do have some, they are hard to retain.

There are several initiatives attempting to address actuarial capacity, but this will be slow, and supervisors need guidance on what they can do now. It is important that supervisors share their approaches to actuarial capacity in inclusive insurance markets.

The approach taken by the National Insurance Commission (NIC) of Ghana provides an important case study in building actuarial capacity.

3 Financial condition report is a report on the solvency condition of an insurance company that takes into account both the current financial status, as reflected in the balance sheet, and an assessment of the ability of the company to survive future risk scenarios.

Ghana Case Study

Starting in 2012, the National Insurance Commission of Ghana (NIC) has been collaborating with the German Development Corporation (GIZ) to support the development of an inclusive insurance market and help improve access to insurance for low -income earners including the informal sector.

One of the main components of the programme was to develop actuarial capacity to have an adequate supply of suitably qualified actuaries to carry out the technical function of pricing products in line with the new regulatory framework for the insurance sector developed in 2012. The framework specifies the role of actuaries within an insurance company and mandates that by 2017 all insurers must have an in-house actuarial function.

To support the development of the actuarial capacity for insurers to comply with the new regulatory framework, NIC and GIZ formed the Actuarial Capacity Development Coordination (ACDC) in collaboration with the Ghana Insurers Association (GIA), Actuarial Society of Ghana (ASG), the Ghana Insurance College (GIC) and four other universities with actuarial science programmes. As part of this process the ACDC developed an actuarial development strategy with the vision for all insurers to have a fully qualified actuary in-house by 2020.

Recognising that there will be a transition period between when the ACDC vision isrecognised and the the implementation of the new regulatory framework, which requires all insurers to have an in-house actuarial function by 2017, NIC developed an interim approach tailored to the current development in the insurance market. The approach applies a new actuarial framework recognising different types of actuaries that can provide differentiated actuarial services for insurance providers. This includes:

- **In-house affiliate.** An in-house affiliate is an individual who is taking active steps to become an actuary. They have an actuarial science degree or related major, are a full time employee of the insurance company and progressing towards an associateship.
- **In-house associate.** The step between in-house affiliate and appointed actuary is an in-house associate. The in-house associate is recognised as an associate of a recognised actuarial association and may be a part or full-time employee.
- **Appointed actuary.** An appointed actuary is a fellow of a recognised actuarial association and may be a part or full time employee or external consultant.

Under this new approach insurance companies will be required to have an in-house affiliate with the support of an externally appointed actuary. While the in-house affiliate would be responsible for the day to day actuarial services the appointed actuary would do the final review and calculations. Further for inclusive insurance products the proposed framework would allow the use of a microinsurance actuarial pricing toolkit[4].

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4 The microinsurance actuarial pricing toolkit was developed by the UK Actuarial Profession Microinsurance Working Party in collaboration with the International Actuarial Association, the Microinsurance Network and the Oxford University Department of Statistics, with funding from the UK Actuarial Profession.

The design and implementation of the training has been assisted by the UK Actuarial Profession and the Society of Actuaries in the US. The NIC conducted study tours hosted by these organisations in their respective jurisdiction where they were introduced to a number of institutions related to actuaries to build relationships and learn from them. Further the NIC organised various training opportunities in Ghana for building actuarial skills which include faculty from the UK Actuarial Profession and was one of the first countries to enrol students on the Certified Actuarial Analyst (CAA) Program of the Institute of Actuaries in the UK.

Further to building the capacity of actuaries, the NIC has also been involved in building a database for actuaries to work with. The database will be a market-wide life, property and motor policy database for insurers to use in their analysis, it will include for example mortality rates and traffic accident numbers and frequency. The objective is to improve the understanding of markets being insured, support risk-based premium pricing, reserving, and policy/claims verification, and to provide historical policyholder information on fraud.

The following are the key lessons emerging from the experience of the NIC in Ghana on developing and implementing an approach to building actuarial capacity in inclusive insurance markets:

- **Involve all relevant stakeholders.** By bringing all the relevant actuarial stakeholders to the table in Ghana upfront, it reduced the need to consult with them after.
- **Conduct a landscape study and capacity gaps analysis.** A starting point for developing actuarial capacity is assessing what capacity you already have and what capacity you need. The NIC did this by assessing how many actuarial students there were in comparison to how many actuaries insurance companies need.
- **Well planned study tours.** The NIC learned from and built relationships with actuarial organisations in more actuarially heavy countries.
- **Document your strategy and solicit for comments and inputs.**
- **Build capacity for implementation.** Before introducing regulatory requirement ensure that there are plans to build capacity in the industry to make sure the companies have the capacity to comply with them.
- **Carefully balance regulatory requirements with value proposition.** When introducing regulatory requirements, it is important that providers of insurance understand why they are being introduced and what the value to them is.

Questions and Discussion

The discussion by participants in the call on actuarial approaches to inclusive insurance markets centred around three questions:

Can an "actuary light" approach be justified? While participants on the call recognised the approach by Ghana, there were concerns over whether an "actuary light" approach can be justified, because microinsurance products are highly price-sensitive. Given the low-incomes of the target market, differences in prices can have a large impact and the margin for error is even smaller than for conventional insurance products. Pricing products correctly requires sophisticated know-how to benefit the consumer and sustainability of the scheme. It is also requires a proper understanding of the dynamics of inclusive insurance markets i.e. the fact that distribution, management and product features are more important when pricing risk than demographic features.

The question therefore arose on the call as to whether the focus should be on getting the best actuary to assess the schemes, and not an "actuary light". While many felt having the best actuary would be the ideal solution, it was also recognised that it is not always possible and will take time. Therefore, in the interim the emphasis should be on professional qualifications. There are partial professional qualifications on the pathway to being a fully qualified actuary and qualifications in tangential fields that are equally of value and can be relied on. In addition, it was recognised that what might be the 'best actuary' in some more developed jurisdictions might not be the 'best actuary' in an inclusive insurance market as the best actuary is someone who understands the unique characteristics and differing pricing considerations of inclusive insurance markets.

How do insurance companies retain actuarial resources? Supervisors who invest in actuarial capacity for their jurisdiction are concerned that the actuaries they develop will look to other jurisdictions where there are fewer actuaries and their services are in greater demand. While supervisors might not be able to enact regulation addressing this concern, insurance providers are also supporting the investment in actuarial capacity, and should (and in some cases are) include requirements in their contract to ensure actuaries are retained. It was felt that once actuarial capacity is appropriately developed, insurers should see their value and be more willing to pay fair market value for them. However, concerns were raised over whether this would exclude small microinsurers who might not be able to afford an actuary, but serve a market for which insurance services are critical. This needs further consideration, especially where regulation requires all insurers, including microinsurers, to have an in-house actuary, as if the costs associated with compliance are too high, such a requirement could act as a regulatory barrier and run the risk of stalling the development of an inclusive insurance market. Sharing the actuarial function was mentioned as an example of a proportionate approach.

What actuarial approaches minimise costs for inclusive insurance policies? Several participants in the call referred to the impact of actuarial services on the cost of inclusive insurance products. If the focus of microinsurance is on distribution, which is the most costly parts, why emphasise the actuarial validation? While this is true, neither of the approaches will minimise nor maximise cost because the consumer ultimately bears the cost of the product and not the insurer. Thus it is important that the cost is as accurate as possible for the policyholder.

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