

# Solvency Assessment and Management Economic Impact Study



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## Contents

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Executive Summary .....	4
Introduction .....	5
Overview of process followed.....	6
Limitations of the Economic Impact Study.....	8
Key Findings from the Economic Impact Study .....	9
Conclusions .....	16

# Executive Summary

This document provides a summary of the Economic Impact Study carried out to consider the potential economic impact of the implementation of the Solvency Assessment and Management (SAM) framework for prudential supervision of the insurance sector in South Africa.

SAM is a risk-based supervisory framework, with the primary objective of improving policyholder protection and contributing to financial stability through:

- aligning insurers' regulatory capital requirements with the underlying risks of the insurer; and
- providing incentives to insurers to adopt more sophisticated risk monitoring and risk management tools.

SAM has been informed by international best practice in insurance supervision, while at the same time tailored to be appropriate for the characteristics of the South African insurance industry – specifically to be a proportionate, risk-based approach with appropriate treatment for both small insurers and large, cross-border insurance groups. This has been achieved through following a consultative approach to developing the SAM framework. SAM has been developed and tested over a period of 5 years, in collaboration with the insurance industry and other technical experts, through a SAM Steering Committee (and supporting structures) with representation from key stakeholders.

The Economic Impact Study was designed to:

- evaluate the effects (including the costs and benefits) that the SAM framework may have on the behaviour of insurers and the potential impact that such a change in behaviour may have on key financial regulatory objectives, developmental objectives and the broader South African economy; and
- consider potential options for mitigation of any adverse impact of SAM, including its proportional application or the use of transitional arrangements.

The study suggests that the implementation of SAM is likely to lead to better risk management at a direct cost that is small when seen in context of the size of the South African insurance industry. This additional cost to the insurance industry will lead to a neutral to slightly positive impact for the economy as a whole, while also contributing to a more sustainable and stable financial sector.

# Introduction

Five years ago the Financial Services Board (FSB) and the South African insurance industry embarked on a journey to establish a risk-based supervisory regime for the prudential regulation of both long-term and short-term insurers in South Africa – namely the Solvency Assessment and Management (SAM) project.

The underlying proposals for the SAM Framework have been developed in a collaborative approach through the active involvement of various stakeholders. This has taken place through a representative SAM Steering Committee and supporting governance structures, which has enabled constructive dialogue between the various stakeholders.

The SAM Framework is based on a 3-pillar approach:

- Pillar I sets out the quantitative measurement of the capital that will be required to be held, based on the risk exposure of the insurer
- Pillar II sets out the governance and risk management requirements that insurers will need to comply with
- Pillar III sets out the reporting requirements, both in terms of private reporting to the regulator as well as public reporting requirements.

The target date for the implementation of the SAM Framework is 1 January 2016. Insurers and the FSB are actively working towards this date in their implementation efforts. The implementation of the SAM Framework will be enabled through amendments to insurance legislation, resulting in a new Insurance Act.

As with any significant financial regulatory reform, it is crucial to understand the wider implications for both the insurance industry and the economy, along with a detailed investigation into the costs and benefits of introducing the SAM Framework, so as to avoid or mitigate any potential unintended consequences.

The SAM Economic Impact Study was designed to:

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- consider potential options for mitigation of any adverse impact of SAM, including its proportional application or the use of transitional arrangements.

The Economic Impact Study supplements and was informed by Quantitative Impact Studies (QIS's) carried out by the FSB to understand the direct impact of SAM Pillar I proposals on individual insurers and insurance groups, as well as two Pillar II Readiness Reviews to understand the implications for insurers and insurance groups of the introduction of some of the qualitative aspects of SAM.

# Overview of process followed

- SAM Governance process

The SAM Economic Impact Study has been conducted through the SAM Governance Structure. Specifically, an Economic Impact Study Task Group (“Task Group”) was established to oversee the Economic Impact Study.

This Task Group consisted of senior officials representing National Treasury, the South African Reserve Bank (SARB) and the FSB. In addition, there was also representation from industry, both collectively through industry associations and from individual insurers. Finally, the Task Group also included members requested for their specialist knowledge on conducting economic impact studies, access to insurance and other insurance specific knowledge. The chair of the SAM Steering Committee is also a member of the Task Group. All members of the Task Group signed confidentiality agreements to ensure that any sensitive information discussed within the Task Group remains confidential.

The Task Group was established by the SAM Steering Committee, and has been chaired by the National Treasury. The Task Group reports to the SAM Steering Committee.

The Task Group oversaw a tender process that resulted in the appointment of a service provider (KPMG) to conduct the Economic Impact Study.

- KPMG study

The KPMG study was based on the following primary steps:

- Reviewing existing literature on similar studies performed elsewhere;
- Drafting an initial survey based on input from the Task Group;
- Conducting interviews with a selected range of insurers to test survey questions and coverage;
- Conducting the survey with all registered insurers and reinsurers<sup>1</sup>, and analysing the results in aggregate and for sub-sectors;
- Following up with a range of insurers to ask additional questions based on their survey results, to probe for additional issues and to explore apparent contradictions in answers across different types and classification of insurers or across different questions in the survey;
- Running comprehensive Quantitative Economic Impact Models;
- Performing desktop research based on the initial findings from the analysis and feedback from The Task Group; and

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<sup>1</sup> Some insurers in run-off were exempted from completing the survey

- Drafting and refining a report based on the analysis performed, internal review and Task Group review and comments thereby enhancing the results and final report.

In total, 142 completed responses from insurers were received. Dormant insurers or those in run-off did not complete the survey.

The responses from the niche, captive, cell captive and assistance-licensed insurers were analysed separately so that the conclusions relevant to them were not swamped by the other, typically larger, insurers.

Interviews were conducted with over 20 separate organisations over the course of the study.

The results from the survey and qualitative interviews was used to inform the modelling of the economic impact of SAM resulting from the direct impact of SAM on insurers and any potential change in insurer behaviour (such as changes to pricing). The quantitative economic impact modelling was undertaken by making use of a Computable General Equilibrium (CGE) Model. CGE modelling aims to reproduce the structure of the economy and therefore the nature of existing economic transactions amongst the different economic agents such as the productive sectors, households and government.

# Limitations of the Economic Impact Study

The Economic Impact Study was initiated before all the final details of the framework were known. If the study were to be delayed to such a point where all the details were known, there would not be enough time to take any action as a result of the findings of the study in time for implementation. As such, the study has been based not on the final details of the SAM framework, but on the information that was available at the time, and the following should be noted:

- From a Pillar I point of view, the exercise has been based on the second QIS conducted by the FSB, as the results for the third QIS were not yet available at the time. Nevertheless, some of the changes that have been introduced in the third QIS exercise were included in the surveys sent to insurers, and it is not expected that the results from the third QIS would have a significant impact on the findings of the study;
- The findings from the second Pillar II readiness review were also not available in time to be considered in the study. Nevertheless, the findings from the first Pillar II readiness review were considered within the study;
- The full set of templates required for reporting under SAM was not known at the time of the study. Although the type of information to be reported was known, the magnitude of information to be provided was still under development; and
- Changes to the reinsurance regulatory framework have not been taken into account in this study – there is a separate process of consultation and engagement to understand the impacts of these changes.

As is the nature with studies that consider wider economic impacts based on potential behaviour changes, a number of assumptions were made in this exercise. Furthermore, some factors have been difficult to quantify, for example determining the quantitative value of the benefits introduced by the SAM framework. As a result, the overall findings from this study should be seen as indicative, rather than providing a precise measurement of the impact that the implementation of SAM will have.



# Key Findings from the Economic Impact Study

The study considered not only the direct costs and benefits to the insurance industry due to the implementation of SAM, but also considered the impact that the implementation of SAM could have on insurance behaviours and the wider economic impact.

The key findings from the study are set out in this chapter.

- The direct impacts of SAM

The study considered the direct costs and benefits of SAM. Accurately measuring the costs and benefits of SAM implementation is difficult to do. This is especially true for the measurement of the benefits. Nevertheless the study considered both qualitative and quantitative measures with which to consider the benefits from SAM.

## Costs

SAM is estimated to cost at least R2.5bn<sup>2</sup> to implement with further estimated on-going costs of R500m per year, based on the surveys completed by insurers.

Approximately 85% of this cost will be on staff and staff-related expenses. Most of this cost, especially on-going costs, will be spent in South Africa.

While the amounts appear very large, to put into context the implementation costs amount to 1.2% of insurers' capital, and the on-going costs of SAM amount to less than 0.1% of the insurance sector's annual revenue.

Almost 80% of the insurers that answered the question indicated that more guidance on the principle of proportionality would lead to a reduction in SAM implementation costs.

## Benefits

The vast majority of respondents indicated a view that SAM will improve policyholder protection.

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<sup>2</sup> It is possible that the final amount will be higher than that indicated in the survey response as many respondents provided fairly modest estimates of the costs of implementing Pillar III. UK and European experience suggests that the systems development and testing costs for Pillar III compliance, particularly to meet the tight reporting deadlines envisaged, will be significant.

The biggest sources of value from Pillar I arose through an improved understanding of risk and value. Notably, although improved capital efficiency was indicated by some, it is apparent that this is not seen as a key benefit from SAM.

Survey responses clearly indicate that implementation of Pillar II requirements is seen as having the greatest benefit. Insurers identified a range of benefits from Pillar II; but stated that they struggled to quantify these benefits.

The on-going Own Risk and Solvency Assessment (ORSA) process, which is a forward-looking approach in which insurers are required to have an on-going internal process to identify and manage their key risks, was nearly universally seen as valuable to insurers. The ORSA process encompasses stress testing, the Risk Appetite Statement, Solvency Projections and ORSA reporting. Organisation structure changes, the requirements on the composition of the Board of Directors and Board Committees were seen as less valuable.

Many insurers are wary of the costs of implementing Pillar III and raised concerns about the limited potential benefit available to insurers. However, some insurers also described Pillar III as having the highest benefit / cost ratio.

While the survey of insurers tended to focus more on the benefits to individual insurers, there are distinct advantages for insurance supervision from implementing SAM, as well as potential benefits in terms of a reduced risk of instability in the financial sector as a whole.

The SAM framework facilitates the introduction of a risk-based approach to the prudential regulation of insurers, as highlighted in the National Treasury document *A safer financial sector to serve South Africa better* released in 2011<sup>3</sup>. This allows for a forward-looking risk-based supervisory approach.

In addition to the benefits reported by insurers, there was an investigation into the possible benefit from SAM through decreased probability or severity of insurance failures. It is extremely difficult to estimate reliably the cost of the failure of an insurer, let alone the benefit attributable to SAM through a decreased probability or severity of an individual insurer. However, it is clear that the failure of a large insurer could have a systemic impact in South Africa, given the interconnected nature of the South African financial sector. Given the potential financial stability risks that such a failure could result in, the costs introduced by SAM are small in comparison to the cost of a financial sector collapse.

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<http://www.treasury.gov.za/documents/national%20budget/2011/A%20safer%20financial%20sector%20to%20serve%20South%20Africa%20better.pdf>

### Allocation of costs and benefits

The costs (and benefits) of SAM for insurers will be allocated between the key stakeholders in the insurance industry. Insurers anticipate that the costs of SAM implementation will likely be borne by shareholders in the short term, but that they may be passed on to consumers in the medium term. Predicting the extent to which these costs may be passed on to consumers is extremely difficult, as insurers' behaviour will depend on a range of factors. For example, SAM implementation costs may have less influence on pricing than competitive pressures or changes to market conduct regulation resulting in greater transparency. None-the-less, assuming all other factors equal, the study concludes that any potential increase in premiums is expected to be relatively small (between 1% and 3%). Assuming that the benefits of SAM have been understated by the respondents, even this small increase may be overstated. On-going costs of SAM are small compared to the operating expenses for the industry. Any impact from expenses is therefore expected to be modest in the medium term.

The extent to which premiums for insurance products will increase will depend on the risks associated with the product. As SAM is a risk-based framework, the higher the risks of a product, the more regulatory capital the insurer will need to hold for that product. This will lead to higher premiums for risky products and lower premiums for less risky products. So while the estimated average level of additional costs for consumers is in the range of 1% to 3%, this will vary across product types due to the fact that SAM is likely to result in more risk-sensitive pricing; and hence some low-risk products may actually decrease in price.

As discussed later in the findings below, it is important to note that in the economy as a whole, expenditure for one party must also be income for another party. Thus, the costs incurred locally have a positive impact on the economy to offset the costs incurred within the insurance sector.

- The impact on the behaviour of insurers
- The surveys completed by the insurers and other stakeholders were used in order to understand the potential impact that the implementation of SAM could have on the behaviour of insurers and other stakeholders. This was supplemented by the information gathered from the interviews conducted.

### Changes to risk management as a result of SAM

SAM will result in an improvement in risk management for those insurers currently operating with relatively weak risk management. Insurers with risk management systems that already exceed the SAM requirements will see limited benefit, but also probably limited additional cost. Indirect benefits may accrue to such insurers from a more level playing field that will result from all insurers being held to the same standards of governance and risk management, although some insurers felt their competitive advantage from advanced risk management would be eroded as other insurers improved their risk management systems.

There is encouraging evidence that pricing risks will be better managed under SAM - better risk management will give rise to lower risk of losses from unforeseen risks.

#### Changes in assets, capital and dividends

Overall the analysis suggests that total assets in the insurance sector will increase. This is a function of the increased capital requirement, which is not fully offset by a decrease in management's targeted capital level and Technical Provisions.

Based on discussions, insurers are quite uncertain as to their capital requirements under SAM. While the QISs have shown that the insurance industry as a whole is well capitalised under SAM, some listed companies have advised shareholders that they are reducing dividend payments now to ensure sufficient capital when SAM is implemented. Other companies are still actively working to determine what an appropriate target level of capital would be.

#### Capital allocation and risk adjusted pricing

SAM is broadly more risk-sensitive than the current life and non-life insurance regime. It is widely viewed that SAM will make it less appealing for insurers to invest in long-term, illiquid instruments or those with credit risk. The SAM capital charges for asset risk are now more granular and more sophisticated and therefore should result in a closer matching of capital requirements to risk.

The insurance industry may have to raise capital in the short term and pay lower dividends in the short to medium term. This would reduce the return on capital and attractiveness of the industry to investors, all else being equal. The uncertainty around future capital levels and dividend policies is a major concern for many insurers. However, to the extent that SAM improves risk-adjusted performance over time, this may actually improve the attractiveness of the insurance sector to investors in the longer term.

#### Impact of SAM on consolidation

There is a strong view that higher capital requirements and fixed expenses will act as a barrier to entry, reducing competition and innovation. However, the analysis suggests that the industry is not sufficiently concentrated that an increase in concentration will adversely affect consumers outside of some specific subsectors.

A dedicated microinsurance regulatory framework is seen to help mitigate the risk of increased concentration and barriers to entry.

Mergers and acquisitions with international players are seen as more likely than a major increase or decrease in new entrants to the market.

Niche and mono line insurers are likely to be more adversely affected by SAM than traditional, diversified insurers. Niche, Captives and Assistance Business insurers are also spending proportionately more on SAM than the average of all

insurers. This is expected in the context of their relatively more complex operations and/or smaller size combined with the fixed costs of SAM implementation and on-going compliance.

The smaller, specialist insurers interviewed expressed the view that SAM is more beneficial for the larger companies and might result in a less competitive insurance industry. The costs of training and development and obtaining skilled resources were also viewed as more of a challenge for the smaller players with smaller budgets.

Cell captive insurers have higher implementation costs, compared to the rest of the insurance industry and the complex arrangements and reinsurance structure typical within cell captives are difficult to accommodate in the standard formula.

Although niche and mono line insurers are more adversely affected by SAM, these insurers have alternatives other than insurance licences, such as operating as an underwriting manager or within a cell structure.

#### Interaction of insurers, the financial markets and other financial services players

SAM will affect the interaction of insurers, the financial markets and other financial services players. Overall SAM improves risk sensitivity to asset and mismatch shocks.

The analysis of survey results indicates very limited changes in asset allocation. However, given the clear messages from those insurers interviewed that SAM could dramatically impact their asset allocations, care should be taken not to take these results at face value. A more likely conclusion, and one supported by further discussion with several insurers, is that most insurers have not yet decided what asset allocation changes they will make as a result of SAM.

Some insurers expressed a concern that a sudden change in capital rules could result in a sudden change in the demand for certain asset classes, which could disrupt the capital markets. Basel III affects demand for some of the same assets and could therefore exacerbate any affects. However, as long as the rules are known in advance of the implementation date, insurers should have time to adjust their portfolios appropriately.

The vast majority of respondents indicated that SAM would have no significant impact on the capital structure of the insurance industry.

#### Impact of SAM on risk transfer from policyholders to shareholders

No major impact is expected on risk transfer, either from withdrawal of products or change in policy conditions or guarantee terms.

There was a general view that higher-risk products will experience higher premium increases than lower-risk products, which may change the mix of products offered by insurers. However, the survey response overwhelmingly indicated no change in expected business volumes across the industry.

SAM is not viewed as having a major impact on distribution channels.

#### Financial inclusion under SAM

SAM has the potential to hinder financial inclusion, as higher costs may lead to an increase in minimum premiums for those insurers that sell insurance products with low benefit levels. This in turn may lower financial inclusion as the targeted policyholders will be less able to afford insurance products.

However, the introduction of a microinsurance framework is aimed at mitigating this risk by placing simpler regulatory requirements on simple products with low benefit levels. The microinsurance framework may also facilitate innovation by insurers, who would otherwise not be able to provide these simple products under the SAM framework. This approach is in line with the overall proportionality approach taken to the development of the SAM framework.

- Wider economic impact of SAM

The results from the survey, along with data from the SAM QIS exercises, provided the input into a CGE model to understand the impact that SAM implementation may have on the wider South African economy.

#### Positive contribution to GDP and employment

From the CGE modelling results, there is evidence to believe that the implementation of SAM may have a slightly positive impact on the overall economy and contribute towards GDP growth and employment.

As a result of the SAM implementation expenditure, GDP is estimated to increase by 0.19%, equivalent to an increase in output of GDP of R6.16bn before offset of the cost of funding the expenditure. On-going SAM expenditure is expected to increase GDP by 0.47%, equivalent to an increase in output of R14.8bn, provided that all things remain constant and before offsetting the costs of funding the expenditure.

It is important to note that the expected increase in GDP might not take place in one year. The total change is expected to take place over a period of time until the economy returns back to equilibrium.

The increased activity in the insurance sector may potentially lead to a very small increase in the demand for employment within the insurance sector as well as other sectors that have associated backward and forward linkages with the insurance sector.

The growth and employment impact results associated with the SAM changes should however be viewed with some caution; the results are so small, relatively speaking, that the SAM implementation could effectively be seen as having no impact on the economy given the potential for error that exists in all types of models.

### The impact of SAM on international capital flows and investments

SAM does promote South Africa as a leading financial services centre.

SAM is likely to have limited impact on international capital flows and investments. That said, insurers felt that SAM increases the attractiveness of South Africa as an inwards investment destination, with the biggest perceived impact arising from investors in developed markets. This is likely due to increased confidence created through a familiar regulatory and solvency regime.

The requirements on insurance groups under SAM will place additional risk sensitive capital requirements and risk management requirements on insurance groups based in South Africa operating in other jurisdictions. Whereas these requirements are not expected to provide further impetus to the expansion into Africa, it is expected that these requirements will help ensure that any expansion into Africa is done in a sustainable way.

# Conclusions

South Africa has committed to the implementation of international standards with regard to financial regulation through its membership of the G20 and the Financial Stability Board. These international standards include the Insurance Core Principles, as set by the International Association of Insurance Supervisors. The SAM Framework gives effect to the prudential aspects of these Insurance Core Principles.

Not only does SAM increase compliance with international standards, but the introduction of SAM facilitates a forward-looking and risk-based approach to insurance supervision. The SAM framework will also enhance the risk management within the insurance industry. The alignment of risk to capital and enhanced management and supervision of risk is expected to lead to a more financially stable insurance industry. This in turn is expected to lead to a more stable financial sector due to the interconnectedness of the South African financial sector. Given the potential financial stability risks that a systemic failure could result in, the costs introduced by SAM are small in comparison to the cost of a financial sector collapse.

The Economic Impact Study shows that the implementation of SAM does not result in a cost to the economy, but rather that there is evidence to believe that the implementation of SAM may have a neutral to slightly positive impact on the overall economy and contribute towards GDP growth and employment.

The implementation of SAM will result in additional costs to the insurance industry. These costs will be offset by the benefits described above, although they are more difficult to measure. Even if these costs are passed on to consumers in the medium term, they are likely to be small, and may even be negligible given the difficulty in quantifying counterbalancing benefits and the fact that pricing may be influenced by many other factors.

The study has also identified some other potentially negative impacts of SAM, most notably the potential negative impact on financial inclusion. The introduction of a dedicated microinsurance regulatory framework and a proportionate approach to the implementation of the SAM Framework can help mitigate these negative impacts.

The study has further identified a number of recommendations relating to some of the detailed requirements in order to facilitate a smooth transition to the SAM Framework. These recommendations relate to clarifications of the SAM Framework, the supervisory approach taken, further transitional considerations and the application of proportionality.

Overall, the study suggests that the implementation of SAM is likely to lead to better risk management at a direct cost that is small when seen in the context of the size of the South African insurance industry. This additional cost to the insurance industry will lead to a neutral to slightly positive impact for the



economy as a whole, while also contributing to a more sustainable and stable financial sector.