



SINGAPORE ACTUARIAL SOCIETY

Annual Report & Accounts

2012/2013

What is an Actuary?

An actuary is a financial services professional who advises clients on financial matters which involve management of the risks of financial events in the future which cannot be predicted with certainty. Actuaries use their mathematical skills to help measure the probability and risk of future events. This information is useful to many industries, including healthcare, pensions, insurance, banking and investments, where a single decision can have a major financial impact.

An actuary is a professional and, in giving advice, must always act with integrity, due diligence, competence and in the interest of all parties affected by his or her professional advice.

What is the Singapore Actuarial Society?

The Singapore Actuarial Society was formed in 1976. At that time, the profession was little known in Singapore and there were only a handful of qualified actuaries. The adoption of the new Constitution in July 1996 and the Code of Professional Conduct in November 1997 is the fruition of efforts made in the past two decades to promote the study of actuarial science and professional standards.

The Society is the recognised representative body of the actuarial profession in Singapore, having the final authority in setting professional standards. The objectives of the Society are:

- ❖ to uphold the highest professional standards among members;
- ❖ to serve the public's interest in matters we are uniquely qualified to respond on;
- ❖ to promote the study, discussion, publication and research into the application of economic, financial and statistical principles to practical problems, the actuarial, economic and allied aspects of life assurance, non-life insurance, employee retirement benefits, finance and investment with particular reference to Singapore and the ASEAN region;
- ❖ to assist students in the course of their actuarial studies;
- ❖ to further the professional development of actuaries; and
- ❖ to foster and encourage social relationship among the members.

Our office is located at 81 Clemenceau Avenue, #04-15/16 UE Square, Singapore, 239917. Please visit our website www.actuaries.org.sg for more information.

Contents

President’s Message	5
Vice President’s Message.....	5
2012/2013 in Summary.....	6
Educational Events.....	6
Outreach Events.....	9
Social Events	10
New Committees	11
Honorary Secretary’s Message	12
SAS Structure and Council.....	13
2012/2013 Council.....	13
SAS Membership.....	14
New Fellows	17
Reports from the Practice Committees	18
Life Insurance Committee	18
General Insurance Committee.....	18
Health Insurance Committee.....	19
Retirement Committee	20
ERM Committee.....	21
EAAC Committee.....	22
Reports from the Support Committees	23
International Committee	23
Public Relations Committee.....	23
Education Committee	25
Student Committee.....	26
Professional Affairs Committee	26
Administration Committee	27
Honorary Treasurer’s Message	28
Accounts.....	29
Thank you.....	34
Honour Roll for 2012/2013	35

President's Message



Jill Hoffman

It is with pleasure that I present to you the fifth Annual Report of the Singapore Actuarial Society (SAS). This report covers the period from 1 April 2012 to 31 March 2013 and will highlight the achievements made this year.

As shown in the Treasurer's Report, the SAS continues to enjoy a healthy financial state. This is partly due to the design in order to prepare for the 17th East Asian Actuarial Conference (EAAC) which will take place at Resorts World on October 15-18, 2013. However, I challenge the various Committees to spend the SAS's money bringing high quality educational events to our members.

This year, I undertook some soul searching for the SAS. Membership is now nearly 700 members and while I believe that the SAS has a strong foundation of Continuing Professional Development (CPD) and social events, should we be doing more? To this end, a membership survey was undertaken to find out what you would like. The results of this survey, which will be announced at the Annual General Meeting (AGM), will shape the direction and the future of the SAS.

One particular event that stands out for me this past year is our response to the consultation paper on Risk Based Capital 2 (RBC 2) released by the Monetary Authority of Singapore (MAS). This was the efforts of many, particularly from the Enterprise Risk Management (ERM), Life Insurance and General Insurance Committees. I would like to thank Raymond Cheung for spearheading this effort. The SAS held a forum to discuss our response, which had a turnout of over 100 members – Including a blackout! I'm proud of our response and it was a pleasure to formally present it to MAS.

I have now completed my third term as President. The more that the SAS does, the more I want to do. I am amazed and humbled by the dedication and passion that our members, particularly the volunteers, have shown towards the SAS. I would like to thank the Council, Patsy Lau, and her staff, and you, the members for the opportunity to give back to the actuarial community.

Vice President's Message



Richard Holloway

In line with the growth of the South East Asian economies, the SAS continues to thrive with significant increase in membership numbers and related activities. The focus on holding CPD related events ensures that the membership has exposure to latest developments across a wide range of disciplines, and attendance at these events is strong. A special mention is to the Life Insurance Committee for hosting a 2-day Life Insurance Conference, replacing the prior Appointed Actuaries Symposium. Also, it is good to see the SAS taking the initiative to formally respond to many of the consultation papers released by the MAS, a practice that will inevitably continue.

2013 sees Singapore and the SAS hosting the EAAC, which is a flag ship event for the region. We look forward to the strong participation from Singapore. A special mention is to the Council for its continued energy and enthusiasm under the leadership of Jill Hoffman, and to the many volunteers that make our events and initiatives successful.

2012/2013 in Summary

We had a very fruitful and eventful 2012/2013 Council year with many accomplishments.

Educational Events

- ❖ The SAS continues to provide many quality learning experiences for our members. A total of **12 forums** were held during the Council year covering a broad range of topics. We would like to thank Choo Oi San for organising and facilitating these SAS afternoon talks throughout the year. Some interesting forums to highlight include:
 - On **26 June 2012**, an SAS talk on "Longevity risk and models for forecasting trends in mortality rates" was held. The talk reviewed the performance of the leading stochastic models in fitting the mortality data and provided accurate forecasts, as well as recent developments in the financial markets for transferring longevity risk
 - On **18 July 2012**, a topic on "Where next for the Life market in Singapore" was presented. This presentation was based on the Financial Advisory Industry Review (FAIR) by the MAS that would potentially change the type and way life insurance products are sold in Singapore. The talk discussed some challenges faced by the market including a case study from the UK market. It also covered the new business process and discussed new ways for product design.
 - On **17 August 2012**, the SAS Risk Based Capital (RBC) special taskforce presented the consolidated comments and recommendations of the MAS RBC 2 consultation paper for review and discussion by our members before submission to the MAS.
 - On **29 October 2012**, an SAS talk about product innovation based on some counterintuitive discoveries from the field of cognitive science that sparked off large changes in their industries, and discussing the cognitive science that explained their success.
 - On **22 November 2012**, an update discussion on the Direct Insurers' Stress Test exercise for General Insurers was held. This talk followed from the joint MAS-SAS forum discussion held last year. It provided an update of the results from the 2011 stress testing exercise and the progress of the General Insurance Stress Testing working party looking to put up a Technical Note to assist the actuaries in the 2012 exercise.
 - On **25 February 2013**, the Enterprise Risk Management (ERM) Committee presented the consolidated comments and recommendations of the MAS ERM consultation paper for discussion with our members before submission to the MAS.
 - On **1 March 2013**, a workshop was held by the General Insurance Large Claims working party to teach on how to use a free Excel based toolbox that combines the various statistical models for large claims to model natural catastrophes and pandemics.

- ❖ In addition to these forums, the SAS hosted a number of conferences in 2012:
 - The **Retirement Conference** was held in April 2012 riding on the theme “Improving retirement security in Singapore”. This conference attracted a number of interested participants from the industry practitioners and governmental officials and the highlight of the conference was featured in the newspaper and the press.



Picture 1: The Retirement Conference in April 2012

- The 3rd **Health Insurance Conference** was held in May 2012 on “The Ticking Healthcare Bomb”. The two days conference also came with a day of pre-conference technical workshop.



Picture 2: The Health Insurance Conference in May 2012

- The 4th **General Insurance Conference** was held in June 2012. Besides participation from the SAS general insurance actuaries, the conference attracted many non-actuarial general insurance professionals as well as members of other actuarial bodies throughout the region.



Picture 3: The General Insurance Conference in June 2012

- **The inaugural Life Insurance Conference** was held in November 2012 in place of the traditional Appointed Actuaries' Symposium to cater to wider audience and growing interest from other insurance professionals.



Picture 4: The Life Insurance Conference in November 2012

- ❖ Lastly, the SAS also hosted various courses last year including the **CA2 Modelling workshop** in June, the **Joint Regional Seminar (JRS)** in July, the **Joint Professionalism Course (JPC)** in August. These events were completed with great success.

Outreach Events

The SAS has also undertaken a number of outreach events in 2012, as follows:

- ❖ The Student Committee organised an Actuarial CASE Competition in the Nanyang Technological University (NTU) in March 2012. The competition involved several teams of actuarial students from all the 3 universities in Singapore presenting their solutions to an actual case study from the Consumers Association of Singapore (CASE). Our SAS President Jill Hoffman and the Education Committee chairperson Gavin Maistry were invited as the judges.
- ❖ In May 2012, the Executive Council of the SAS met with the representatives from the Monetary Authority of Singapore and the Central Provident Fund Board to talk about how to collaborate in the future.
- ❖ The NTU Quantitative Finance & Actuarial Science Club (QFASC), in collaboration with the Student Committee, hosted the inaugural tri-university Actuarial Networking Night on 14 September 2012.
- ❖ The SAS has provided its support to the Insurance Leaders Talk organised by the General Insurance Association (GIA). The series of talks aim to target at young local talents in the insurance profession under the GIA Talent Outreach Program (TOP).
- ❖ The SAS Council members have also given various talks at the local universities, as well as high schools, about becoming an actuary.



Picture 4: Top Left: Participants of the CASE competition
Top Right: The happy faces of the winners for the CASE competition. Well done!
Bottom Left: Attentive students from the Actuarial Networking Night
Bottom Right: Refreshment & networking time from the Actuarial Networking Night!

Social Events

Besides the educational events, the SAS Public Relations Committee organised wide range of social events for our members in 2012/2013. These events catered to members with different interests including healthy, relaxing, educational, challenging and fun activities and, most of all, provided networking opportunities for our members.

- ❖ In July 2012, we organised a **Wine Appreciation Night**, attended by about 40 members.



Picture 5: (Left) Great catching up with one another and appreciate wine at the same time. Bravo!
(Right) A bunch of “drunk” and satisfied actuaries during the Wine Appreciation Night

- ❖ In order to encourage healthier lifestyle among our members, the SAS encouraged our very fit and enthusiastic members to participate at the Swissotel **Vertical Marathon 2012!**



Picture 6: (Left) Before the run, energetic runners waiting at the starting line.
(Right) After the run, still have energy to celebrate. Good job! Really fit and enthusiastic!

- ❖ A **Quiz Night** was held at Artery @ Red Dot Traffic Building in November 2012. Over 40 members and guests have joined in the fun as teams battled for the winning title.



Picture 7: (Left) Our members having some fun during the Quiz Night
(Right) The winner team celebrated their victory in “Gangnam” style

- ❖ In January 2013, a **Bowling Night** event was held. More than 70 members attended the event.



Picture 8: Pictures from the Bowling Night

The Council would like to thank the Public Relations Committee and all other members who were involved in the organisation and execution of the above events. The events would not be a success without your help and participation.

New Committee

The **ERM Committee** was formed in 2012, chaired by Raymond Cheung. Originated from the banking sector, ERM has been gaining in importance globally in the last couple of years in the insurance sector, supported by the rapidly changing regulatory regimes such as Solvency II, International Association of Insurance Supervisors (IAIS) as well as influences from the rating agencies.

The ERM Committee aims to contribute to the discussion of current ERM issues and its related developments, to produce Guidance Notes around ERM best practices and to encourage more actuaries to take on ERM positions.

Honorary Secretary's Message



This is my second term to serve in the capacity as an Honorary Secretary since I took over from Lorna McLaren in September 2011. It has been a very eventful and action-packed one and a half years for me in the SAS. I could feel the tremendous energy, passion and dedication from the Council and other volunteers in keeping the SAS alive and fun! The 2012/2013 has continued to be a very busy year for the SAS with many successful conferences, forums, social events and outreach activities to industry and academic bodies.

Raymond Cheung The SAS now organises annual or biennial conferences covering life insurance, health, retirement and general insurance practice areas. We organised a Retirement Conference in April 2012 and attracted many interested parties including government officials, industry practitioners and educational institutions to participate. In May 2012, we hosted two action-packed conferences – 3rd Health Insurance Conference and 4th General Insurance Conference – at Resorts World Sentosa. We also held our very first Life Insurance Conference in November 2012, attended by more than 140 delegates! I am proud to say that the conferences organised by the SAS are becoming larger in scale, better in quality, and higher in reputation. This year, we are looking forward to host the East Asian Actuarial Conference (EAAC) in Singapore. I believe the EAAC will be the highlight of the SAS in 2013 and would certainly attract many actuaries and insurance practitioners to attend, both regionally and globally.

In July 2012, the SAS has formed a special RBC 2 taskforce and hosted an RBC 2 forum to formally put up our consolidated response to the MAS RBC 2 Consultation Paper. Subsequently, we also discussed with the MAS on some potential joint efforts to fine-tune the RBC 2 proposals. In February 2013, the ERM Committee has again hosted an ERM forum to discuss our consolidated response to the MAS ERM Consultation Paper. All in all, the SAS has put up 4 responses and recommendations to the MAS consultation papers in the last term. Personally, I am very excited to see many SAS members coming together to do something positive for the industry. In addition, many new members have since expressed interest to join the SAS as volunteers. The SAS has also started to form some working groups to work on the various components of the RBC 2 and ERM. Interested members to join these working groups please contact me at secretary@actuaries.org.sg.

The SAS has continued to work closely with different organisations to explore collaboration opportunities. For example, the Retirement Conference was jointly organised between the SAS and the Life Insurance Association (LIA). On the General Insurance side, the SAS, in collaboration with the MAS, hosted an update forum discussion on Stress Testing exercise in November last year. The SAS has also supported the Insurance Leaders Talk organised by the General Insurance Association (GIA) as part of their Talent Outreach Program. This year, such collaboration will continue and the SAS is looking forward to work closely with the MAS in the RBC 2 calibration exercise (or better known as Quantitative Impact Studies) which we expect to be starting very soon.

The SAS will continue to organise many conferences, forums and social events for our members in 2013/2014. I would like to thank all the volunteers who have contributed in big and small ways in 2012 and please continue to support SAS in the coming year. Let us look forward to another great year ahead in the SAS.

SAS Structure and Council

The Singapore Actuarial Society is a non-profit organisation registered with the Registrar of Societies. It was founded in 1976 and is governed by the Singapore Actuarial Society Constitution (Revision March 2011).



The Council for 2012/2013: (from left to right) Scott Yen, Raymond Cheung, Angela Koechli, Richard Holloway, Jill Hoffman, Keith Walter, Chi Cheng Hock, Matthew Maguire, Leo Ng. (Not in picture: Choo Oi San)

The objectives of the Society are to set and uphold the highest professional standards among members; to promote the study, discussion, publication and research into the application of economic, financial and statistical principles to practical problems, the actuarial, economic and allied aspects of life assurance, non-life insurance, employee retirement benefits, finance and investment with particular reference to Singapore and the ASEAN region; to assist students in the course of their actuarial studies; to further the professional development of actuaries; and to foster and encourage social relationship among the members.

This Society is governed by a Council which is to be composed of a minimum of 7 and a maximum of 10 elected or co-opted members and 1 Ex-officio Member.

2012/2013 Council

The SAS Council roles and attendance are shown in the table below:

Person	Role	Total Attended	Total Possible*
Jill Hoffman	President	10	10
Richard Holloway	Vice-President	2	10
Angela Koechli	Hon. Treasurer	7	10
Raymond Cheung	Hon. Secretary	10	10
Matthew Maguire	Council Member	7	10
Scott Yen	Council Member	5	10
Keith Walter	Council Member	6	10
Chi Cheng Hock	Council Member	10	10
Choo Oi San	Council Member	7	10
Leo Ng	Council Member	7	10
Colin Pakshong	Ex-officio	7	10

* No meeting for the month of July 2012 and March 2013

SAS Membership

The SAS membership continues to increase over the years. As at end March 2013, the total membership of the SAS is 695. The total number of membership has increased by 18% over last year. The key driver for the high growth came from the Ordinary member category which has seen an increase of 24% compared with last year.

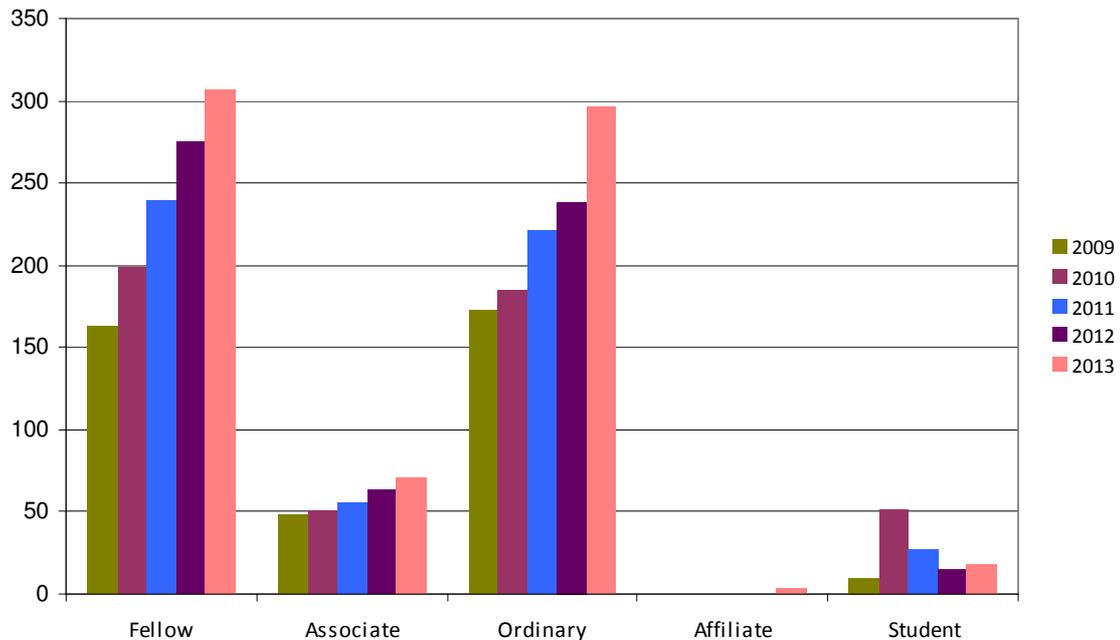


Figure1: Total membership

The SAS is still predominantly male and only slightly over one-third (35%) of our members are females. The male / female composition has been very consistent over the years.

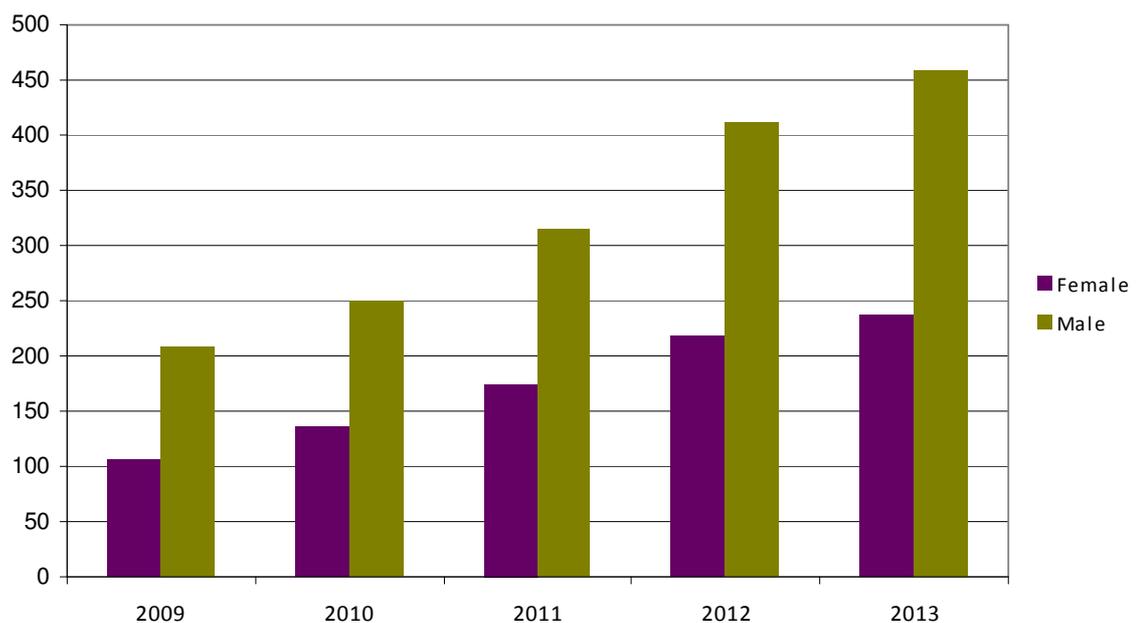


Figure 2: Male / Female composition of total membership

The number of males exceeded the number of females at all age categories. However, female-to-male ratio appeared to be more balanced at age band 25 and 35 respectively.

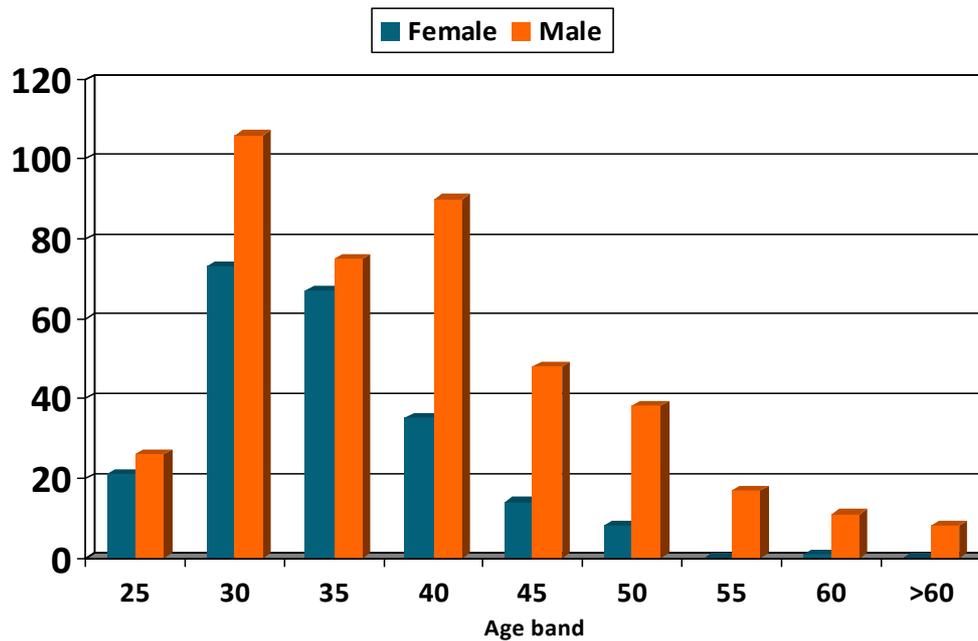


Figure 3: Male-Female ratio by age categories

In 2012/2013, the SAS welcomed a total of 157 new members. The composition of our membership is 44% Fellows; 10% Associates; 43% Ordinary and 3% students. We have also received 3 applications from non-actuaries joining us as Affiliate members in 2012.

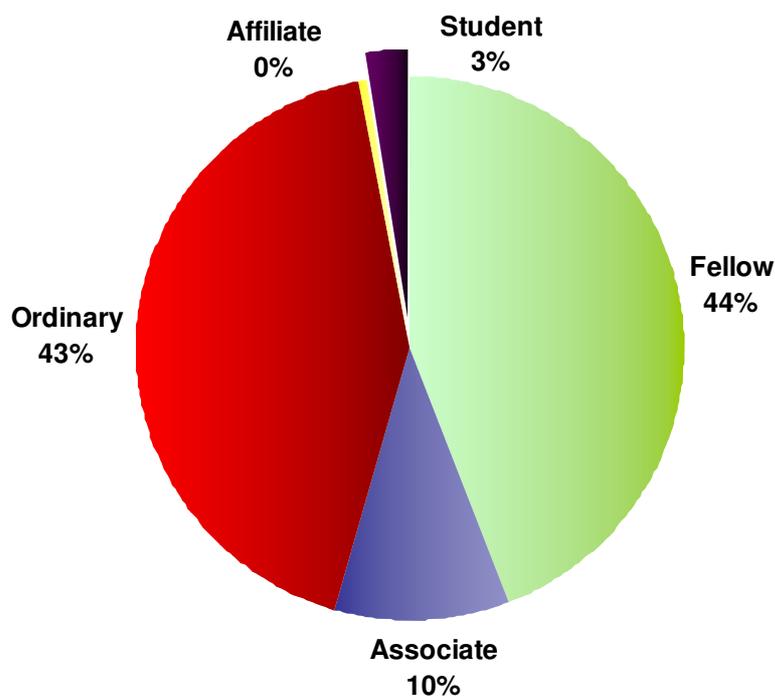


Figure 4: Membership composition

The majority of our Fellows are in the range between age 35 to 45, representing about 65% of total. Many members from the Ordinary category chose to transfer directly to Fellows upon qualification.

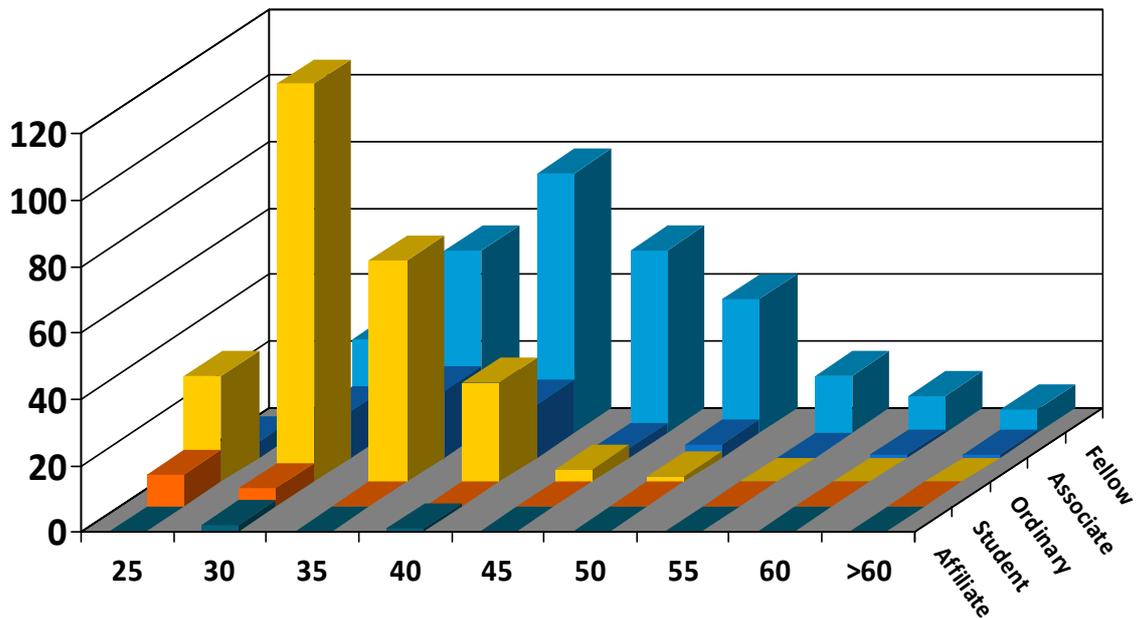


Figure 5: Membership categories by age banding

Most of our SAS members work in direct life or general insurance companies, representing about 56%. For the other categories, about 18% works in reinsurance sector, 14% in consulting firms, and 2% in the broking sector. The remaining members work in different sectors including banking, governmental bodies, educational institutions and full-time students.

One interesting point to note is that about 80% of our members specialise in life insurance and only 20% specialise in general insurance.

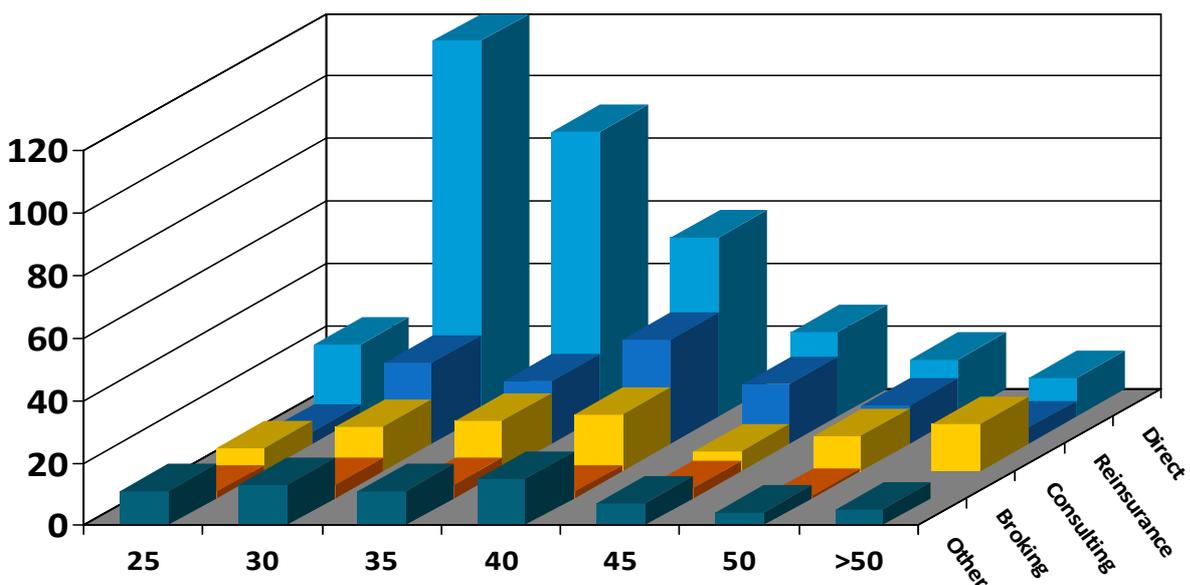


Figure 6: Company types by age banding

Finally, Malaysians represent the highest percentage of our membership, even larger than Singaporeans by a visible margin! Members from China, Hong Kong and Taiwan have emerged to become number 3 in the last 2 years.

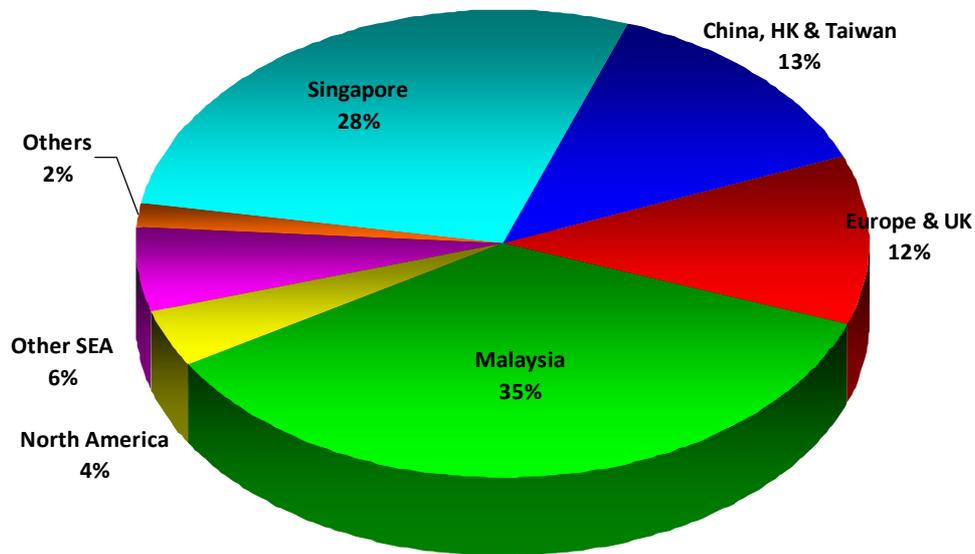


Figure 7: Membership composition by country of origin

New Fellows

The following 11 members have completed their examinations, professionalism courses and attained the SAS Fellowship status during the year 2012/2013.

Eddy Susanto
Choo Yen Chu
Sun Yan Lei
Han Yu
Goh Kok Yang
Tai Hui Yen
Nicole Poh Caiying
Nicholas Gabriele
Woo Chee Chang
Albert Hu Botao
Esther Huang Chuxin

The SAS would like to congratulate all our new Fellows for the great achievements.

Reports from the Practice Committees

The SAS has a number of practice committees which provide actuarial research and other services to the members of the SAS.

Life Insurance Committee

2012 was an eventful year for the Life Insurance Committee. The Committee is chaired by Koo Chung Chang and comprises a diverse range of members from direct insurers, reinsurers, regulator and consultants. The key accomplishments for 2012/2013 include:

- The committee has completed the update of the Appointed Actuary induction pack.
- The committee is finalising a Technical Note to provide guidance to companies in using internal models to value investment guarantees.
- The committee has worked together to review the proposals in the MAS Consultation Paper on RBC 2, and has contributed its views and recommendations to the SAS RBC 2 special taskforce. The taskforce has presented the consolidated comments to the MAS.
- A successful Life Insurance Conference was held in revamp of the Appointed Actuaries' Symposium, and has attracted an overwhelming response of about 140 participants from all around the region. The conference was held over two days featuring both international as well as local speakers to discuss various topical issues, and ended off with an interesting night of networking at the gala dinner.
- The committee held a meeting with the Appointed Actuaries (AA) in the life insurance industry to discuss about ongoing industry developments, such as the initiative by the Life Insurance Association (LIA) to reduce new business illustration rate and its implication on the management of participating fund.
- The committee initiated a dialogue session between the MAS and appointed / senior actuaries from various companies in the industry to exchange views on the 2012 Stress Testing exercise, and to suggest improvements for the next Stress Testing exercise in 2013.

General Insurance Committee

The General Insurance Committee is chaired by Matthew Maguire in 2012/2013. The committee was very active during the year meeting once a month and produced a very successful fourth installment of the General Insurance Conference in May/June. The committee changed its composition through the year and I would like to thank those members who have left after several years of help and to also thank those new members who have joined the team. We have a diverse range of participants now covering direct insurers, reinsurers, regulator, brokers and consultants.

The committee tackled a number of issues during the year including:

- Providing feedback on the MAS consultation papers
- Updating the Liability valuation Guidance Note
- Creating a Technical Note (or at least a draft at this stage) to assist in conducting the Stress Test exercises
- Organising the General Insurance Conference at Sentosa. For the first time, the committee has arranged a number of industry working parties to provide presentations at the conference. These groups provided a mix of original research and industry comments utilising people from across the industry. The presentations were very well received at the conference and we hope this will become an ongoing feature of both the General Insurance Committee and the conference.

The conference attracted over 130 delegates and continues to be the preeminent conference on General Insurance for actuaries and non-actuaries in the region. The topics again ranged from the more mathematical to those with a focus on the industry or professionalism. Capital and Risk Management continues to be a strong theme for discussion amongst the industry practitioners.

The feedback from the attendees was very positive and the committee looks forward to hosting its fifth conference this year in May (again at Sentosa).

Health Insurance Committee

The Health Insurance Committee is chaired by Chi Cheng Hock. The committee settled on 6 projects for members to work on in 2012/2013:

- Developing Guidance Notes for health insurance actuaries
- Drafting the Annual Healthcare and Financing Report for 2012
- Developing a health insurance resource centre to be set up on the SAS website
- Analysing data available on the Ministry of Health website
- Drafting a paper on the feasibility of implementing managed care arrangements in Singapore
- Making projections of Medisave account balances to test the adequacy of these account balances, especially in retirement

There had been progress on these projects during 2012/2013 but, other than the Annual Report, results are expected to be reported only in the 2013/2014 Society year. The statuses of the progress of the various projects are as follows:

- **Guidance Notes (Chi Cheng Hock; Leong Siao Wearn):** the team has identified useful resources, like guidance provided by other actuarial bodies, and is looking at supplementing GN L02: For Appointed Actuaries on Valuation of Policy Liabilities of Life Insurance Business with guidance specific to the valuation long-term accident and health insurance policy liabilities. The proposed supplementary notes will be put up at an actuarial forum for discussion in 2013/2014.

- **Annual Healthcare and Financing Report 2012 (Boo Junyou; Joyce Poh):** the report, covering news reports pertinent to health insurance, will be published in the SAS Newsletter before the Annual General Meeting in March 2013.
- **Health Insurance Resource Centre (Joanna Chu):** some resources have been identified for uploading onto the Centre, after it has been set up. Members will be solicited for suggestions for papers, articles and topics to be included, and a framework for the selection of resources will be drawn up. Discussions with the web designer on the construction of the Centre will commence in 2013.
- **Analysis of MOH Website Data (How Chee Koon):** the data has been up-dated to 2011. The results of the analysis will be presented to members, most likely at an actuarial forum, for discussion on what other statistical research the committee may undertake.
- **Managed Care for Singapore (Gideon Tan; Samuel Tan; Koh Zhee Chong):** the team aims to define and compare managed care models around the world, explore the Singapore healthcare and financing landscape, and propose managed care features which may be adopted by companies in Singapore. An interim report on the managed care models available in 5 countries and on the Singapore landscape will be presented in 2013.
- **Medisave Account Projections (Hugh Terry; Ong Jin Jing; Gideon Tan):** the team aims to project Medisave account balances on a number of different economic and healthcare scenarios, to provide a high level overview of scenarios which are likely to lead to shortfall in accounts. The team is finalising the assumptions, before building the projection model, and hopes to present some preliminary results in 2013.

Retirement Committee

The Retirement Committee had a busy year in 2012. A key focus at the start of the year was the Retirement Conference, jointly sponsored by the SAS and the Life Insurance Association of Singapore, which was held on 12th and 13th April 2012.

The conference was a great success, attracting more than 100 participants and bringing a focus to this very important issue of “Improving Retirement Security in Singapore”. We were very pleased that the conference attendees were engaged in discussion during the event and generated a significant number of new ideas for future consideration and development.

Following the conference, the Retirement Committee agreed to focus on four key topics that had been raised during the conference. The topics are:

- Employer-sponsored retirement schemes in Singapore
- Longevity protection and longevity risk transfer
- Investment alternatives for long-term retirement planning
- Education and awareness of National insurance schemes for integrated retirement planning

For each of these topics, a taskforce has been formed with volunteers working to develop specific plans and actions. These taskforces will report back to the SAS membership on their findings during the coming months.

The Retirement Committee continues to be chaired by Keith Walter who wishes to express his appreciation to all the committee members and taskforce members who have volunteered their time in 2012.

ERM Committee

The Enterprise Risk Management (ERM) Committee is chaired by Raymond Cheung. This committee is a new SAS practice committee set up in 2012 with the aim to provide research and other services to the members of the SAS.

The objective of the ERM Committee includes the following:

- To identify and discuss ERM issues, trends and developments in the region;
- To liaise and be familiar with the international risk frameworks which include organisations that develop corporate governance, risk management systems and ERM best practices around the world;
- To liaise with the International Actuarial Association (IAA) and other actuarial societies / bodies around the world to discuss ERM trends and issues;
- To discuss the international regulatory regimes and frameworks relating to Capital/ERM such as Solvency II;
- To provide the qualitative and quantitative assessment on ERM implementation “best practice”; and
- To promote the ERM best practices in the actuarial community & the insurance industry in Singapore and the region.

The key achievements for the ERM Committee in 2012/2013 include the following:

- Reviewed proposals in the MAS RBC 2 Consultation Paper and contributed its views and recommendations to the SAS RBC 2 special taskforce;
- Supported an ERM webcast seminar for Asia Pacific hosted by the Society of Actuaries in January and February 2013;
- Reviewed and provided consolidated comments and recommendations to the MAS ERM Consultation Paper. The Committee also hosted an ERM forum on 25 February 2013;

- The formation of 3 working parties with target to present papers in the EAAC in October 2013:
 - Diversification Benefits
 - Operational Risk
 - Own Risk & Solvency Assessment (ORSA)

EAAC Committee

The East Asian Actuarial Conference (EAAC) Committee is chaired by Wil Chong. As the 17th EAAC (15-18 Oct 2013) draws near, preparation for this event has picked up an extra notch and we would like to thank all the volunteers for their continued commitment in making the event a success.

The organising committee recently sent out a Call for Paper including a SGD\$10,000 Prize Award for the Best Paper announcement and we have received good responses. For those interested presenters, please submit your Expressions of Interest to 17eaac_cfp@actuaries.org.sg as soon as possible. We are also pleased to announce that China Association of Actuaries (CAA) has been admitted as a full member of EAAC following an affirmative vote from members of the EAAC Executive Board. The CAA is expected to send a delegation to attend the 17th EAAC in Singapore for the very first time.

We are putting some final touches for the 17th EAAC website. Please watch out for "Save the Dates" and launch of the 17th EAAC website in the next few days!

Reports from the Support Committees

The support committees of the SAS help with the organising of events and other matters.

International Committee

The International Committee is chaired by Colin Pakshong. The committee is responsible for liaising with other international bodies, in particular the International Actuarial Association (IAA), and responding on behalf of the SAS to requests from the IAA.

In 2012, the IAA released the International Standard of Actuarial Practice 1 (ISAP 1). The standard is a model that can be used by actuarial standard-setting bodies, although its adoption is not compulsory.

The IAA also signed a Memorandum of Understanding with the International Accounting Standards Board (IASB) to provide a framework for co-operation in areas such as insurance contracts and financial instruments.

Professor Kurt Wolfsdorf of Germany assumed the position of President of the IAA, with effect from 1 January 2013. He takes over from Desmond Smith of South Africa, who held the position during 2012.

In October 2013, just before the EAAC, the IAA will be holding its council and committee meetings in Singapore, and the SAS will be hosting a dinner for its delegates and accompanying persons.

Public Relations Committee

The committee is chaired by Joey Zhou. Joey is joined by Ocean Chiu, Wang Jian, Anne Pan Jin, Jennifer Yong Fui Shiah and Theresa Wu. The committee is supported by Leo Ng, the Council Liaison.

The committee's purposes include the following:

- Promote social activities through monthly newsletter, websites and facebook;
- Organise regular social events for our members;
- Promote the SAS and actuarial profession in Singapore.

For 2012-2013, the committee had set the following goal:

- Continue to maintain and encourage interactions with our members through social events, newsletter and the website communications (including social media);
- Increase links with regulators and overseas actuarial bodies.

In 2012, we started an SAS Vision Quest Team comprises of 5 members to engage in designing a new vision and mission statement for the SAS. This will include reviewing the SAS' public visibility and rebranding. The working party has created a survey for our members to partake in and to find out what kind of services would our members value most. The results will be shared with the members during the Annual General Meeting.

Major accomplishments in 2012/2013 include:

Relationships with Regulators and Industry Bodies

MAS	Meeting with senior MAS representatives	May 2012
CPF	Meeting with senior CPF representatives	May 2012

Relationships with Educational Institutions

NTU	Actuarial Networking Night (30 professionals and 70 students attended)	September 2012
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Social Events for SAS Members

Annual Dinner after 36 th AGM	50 attendees	March 2012
Wine Appreciation Night	40 attendees	July 2012
Vertical Marathon	11 attendees	November 2012
Quiz Night	47 attendees	November 2012
Bowling Night	76 attendees	January 2013
Annual Dinner after 37 th AGM		March 2013

Public and Media Profile

IAAust Actuarial Magazine	Introduction of SAS	April 2012
Straits Times newspaper report	Highlight of Retirement Conference	April 2012

Visiting overseas actuarial body representatives

Institute of Actuaries of Australia – President David Goodsall	Met with MAS, spoke at Forum. Australian members' lunch	May 2012
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In addition, the Committee has been contributing to our monthly newsletter for members. The updates to promote the profession are posted to the SAS website. The website is reviewed and updated regularly.

Education Committee

The Education Committee is chaired by Gavin Maistry with Choo Oi San taking the role of Forum Coordinator. The third committee member is Andrew Linfoot, who is one of the most dedicated and long serving members in the SAS.

The Committee arranged a number of formal educational courses during the year:

- ❖ CA2 Modelling Course, led by Professor John Shepherd on 19-20 June 2012;
- ❖ Joint Regional Seminar (JRS), led by Mark Saunders on 26-27 July 2012. A special thanks to Silvia Zhang and Vanessa Lou to coordinate the event in Singapore on behalf of the SAS;
- ❖ Joint Professionalism Course (JPC), led by Neil Hilary, Scott Yen and Colin Pakshong on 14-15 August 2012.

In addition to the formal courses, the Committee arranged the following 12 forum meetings during the 2012/2013 year:

Date	Forum Topic	Speaker
10 May 2012	The Future and Challenges of Defined Benefit Retirement Schemes and the Alternatives	David Goodsall, President of IAAust
26 June 2012	Longevity risk and models for forecasting trends in mortality rates	Steven Haberman, Cass Business School
18 July 2012	Where next for the Life market in Singapore	Alex King, Pacific Life Re
19 July 2012	The Renshaw-Haberman mortality trend model applied to general insurance loss reserves	Gary Venter, AIG Property Casualty
17 August 2012	RBC 2 Review Discussion	RBC 2 Taskforce
29 October 2012	Product Innovation	Shaun Martin, Applied Cognitive Research
22 November 2012	MAS-SAS General Insurance Stress Testing Discussion	GI Stress Testing Working Party
25 February 2013	ERM Consultation Paper Discussion	ERM Committee
1 March 2013	Workshop for General Insurance Conference seminar paper	GI Large Claims Working Party
4 March 2013	Use of Derivatives by Life Insurance companies globally	Mark Hoogendijk, E8 Consulting Asia
15 March 2013	Employer-sponsored retirement schemes in Singapore – the need for change	Retirement Committee Working Party
15 March 2013	Coping with longevity risk within retirement provision in Singapore	Retirement Committee Working Party

We are very grateful to all our speakers for providing our members with these Continuing Professional Development (CPD) opportunities and stepping stones to qualification and, of course, to the SAS members who have contributed to the organisation of these events. Special recognition should go to our Forum Coordinator Choo Oi San for ensuring that we had a full and high quality program in 2012/2013.

Student Committee

The Student Committee was set up in February 2010 and is chaired by Vince Tan. The Committee's main goal was to promote the actuarial profession among the universities and junior colleges. Here is a summary of our initiatives during the past year:

a) Actuarial CASE Competition

The Committee was very excited to organise the first ever Actuarial CASE Competition that was held in NTU in March 2012. This competition involved actuarial students from all the 3 universities in Singapore, namely NTU, NUS and SMU. There was a preliminary round where teams had to submit a written report, with the top 5 teams competed in the final round with a presentation-style format.

b) SAS Career/Internship Fair 2013

Preparations are underway for our very popular career fair to be held some time in the second quarter of 2013. We look forward to another successful event this year.

c) Establishing Links with Schools and Universities

A network has been established through our affiliated actuarial clubs and other relevant student bodies in NTU, NUS and SMU. This network enables the SAS to reach to our target student populations more efficiently and forge closer ties with the universities. Various talks were held in the universities during the year to raise the profile of the profession.

Professional Affairs Committee

The Professional Affairs Committee continues to perform the role of reviewing the SAS Constitution, the Code of Conduct, and the Professional Standards as well as to make recommendations to Council for any changes required.

In 2012, we started a taskforce called the Fellowship Status Working Party (FSWP) to work on the expansion of the list of mutually recognised actuarial associations. The taskforce consists of 5 members, with Pierre Balthazard as the de facto chairman. The FSWP is currently discussing a number of proposals on criteria to be eligible for the SAS Fellows. More information will be provided once the FSWP has formalised some proposals for discussion with the SAS members.

Administration Committee

This Committee ensures that the SAS continues to operate effectively. Thanks to the strong support of our Administrative Executive, Patsy Lau, on the day to day operations and the administration. We are also grateful to Colin Pakshong, our very own in-house IT expert, and Choo Oi San, who is coordinating with our external website support, to ensure that our IT and website related issues can be rectified as soon as possible.

A special thank goes to Patsy's three lovely children, Guan Kiat, Kai Kiat and Xin Wei, who have been a great help in ad-hoc administration and registration support in many different occasions during the year.

Honorary Treasurer's Message



I'm pleased to present you with the Audited Accounts as at December 31, 2012 for the SAS. The conferences we have organised started to become the main driver for income in 2009 and in 2012 the Life Insurance Conference generated the largest profit, followed by the General Insurance Conference, the Health Insurance Conference and the Retirement Conference.

Our SAS subscription fees should cover our administrative costs and this worked well until 2009. From 2010 onwards this is no more the case. However, the SAS started to organise its own conferences in 2009, with the General Insurance Committee taking the lead. Other committees followed and we now have a steady stream of income from our own conferences. This allows us to keep the subscription fees unchanged for 2013.

The net surplus for 2012 was SGD\$100,678.16 compared to SGD\$21,586.00 for 2011. The increase in the surplus comes mainly from our conferences as well as from the job advertisements.

In 2012, our income exceeded SGD\$500,000 for the first time in the history of the SAS and as per our constitution (Art. 10) and the regulation of the Registry of Societies (ROS) we had to perform both an internal and an external audit.

We have appointed A Garanzia LLP as our auditor. The full audit report is posted on our website.

The SAS remains solvent with over SGD\$550,000 of net assets.

Accounts

SINGAPORE ACTUARIAL SOCIETY

Balance Sheet as at 31/12/2012

all amounts in SGD

Current Assets	2012	2011
Cash in hand	0.00	0.00
Fixed Deposit	256,908.31	256,671.60
Bank Balance	314,609.90	211,365.26
Rental Deposit	4,800.00	4,800.00
Receivables	0.00	641.90
Deferred Expenses (EAAC 2013)	40,553.34	0.00
TOTAL ASSETS	616,871.55	473,478.76
Current Liabilities	2012	2011
Payables	19,237.95	0.00
Deferred Income (Advance Subscription Fees)	14,565.00	21,088.32
Deferred Income (EAAC 2013)	30,000.00	0.00
TOTAL LIABILITIES	63,802.95	21,088.32
NET ASSETS	553,068.60	452,390.44
Represented by:	2012	2011
Accumulated Fund at the beginning of the year	452,390.44	430,804.44
Surplus / (Deficit) arising during the year	100,678.16	21,586.00
BALANCE AT THE END OF THE YEAR	553,068.60	452,390.44

Jill Hoffman, President

SINGAPORE ACTUARIAL SOCIETY

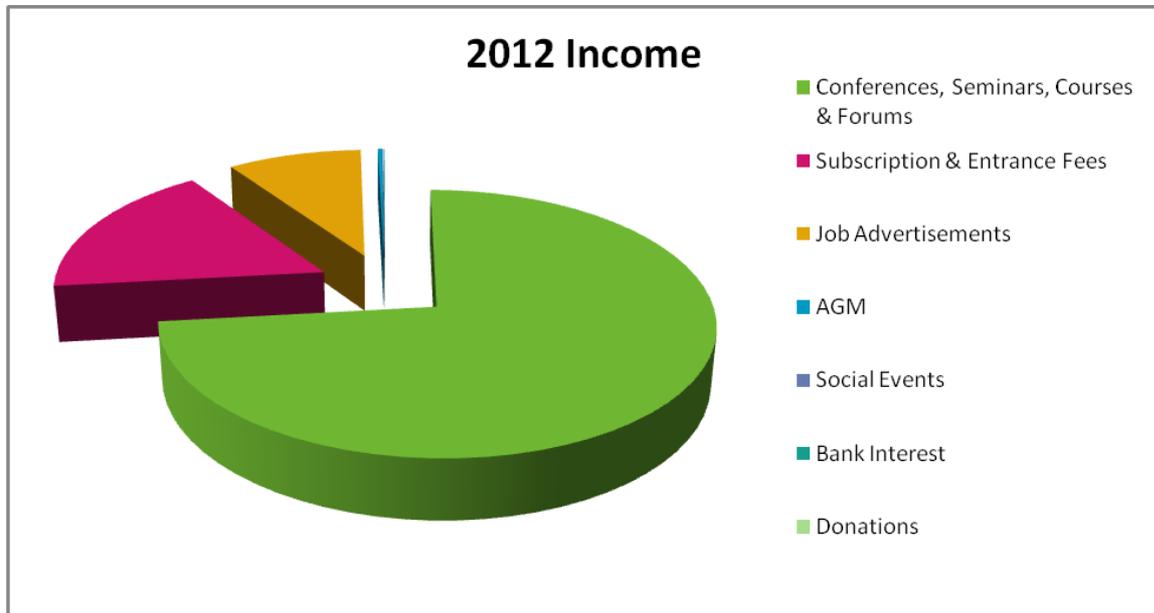
Income & Expense Account for the year ended 31/12/2012

all amounts in SGD

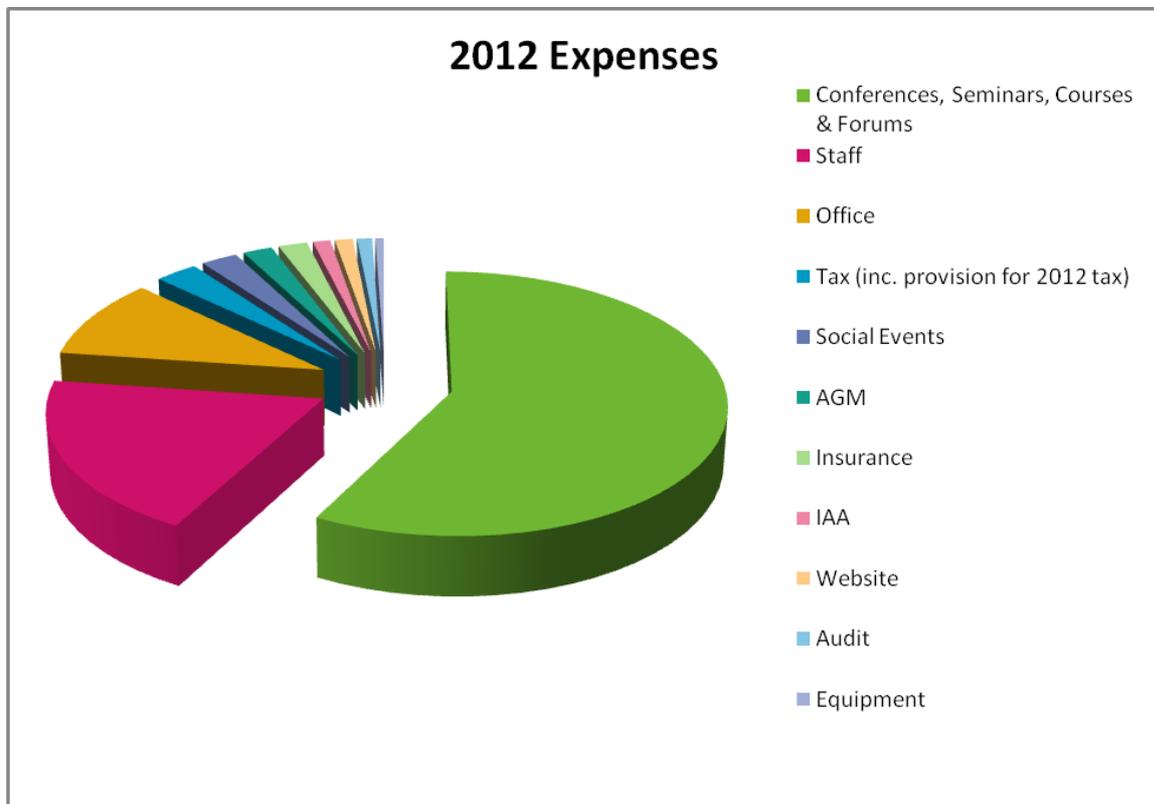
Income	2012	2011
Subscription & Entrance Fees	86,447.68	75,054.00
Bank Interest on Fixed Deposit	236.71	1,750.97
Job Advertisements	46,350.00	31,000.00
AGM & Dinner	1,580.00	1,420.00
Social Events	250.00	1,045.00
Donations	45.00	0.00
Forums	1,050.00	1,605.00
AA Induction Course	2,500.00	2,000.00
Retirement Conference	66,190.00	0.00
Health Insurance Conference	65,119.24	0.00
General Insurance Conference	75,305.00	67,380.00
CA2 Module	20,250.00	15,150.00
Joint Regional Seminar (SAS / ASHK)	26,380.00	20.00
Joint Professionalism Course (SAS / SMU)	17,000.00	43,800.00
Life Insurance Conference	95,250.00	0.00
2011 AA Symposium	350.00	23,550.00
2010 Life Protection Seminar (SAS / LIA)	0.00	1,300.00
TOTAL INCOME	504,303.63	265,074.97
Expenses	2012	2011
Office Rent	30,816.00	22,577.00
Admin. Staff Salaries & Benefits	78,141.20	61,980.00
Audit Fee	4,000.00	0.00
Postage, Stationery & Printing	2,970.12	2,898.88
Transport	1,920.87	1,348.72
Telephone & Internet	1,113.75	1,224.68
Website	4,777.34	4,640.00
Office Equipment Expenses	2,277.00	998.52
Liability Insurance	7,704.00	7,704.00
Bank Charges	0.00	315.81
Tax (incl. provision for 2012 tax)	11,432.15	10,804.57
IAA Membership Fees	4,654.64	4,654.64
Executive Club Membership Fees	335.00	1,284.00
Council & Committees' Refreshments	2,848.86	1,277.40
Speakers' Gifts & Competition Prizes	2,903.40	792.00
AGM & Dinner	7,828.45	9,833.85
Social Events	9,757.65	16,454.52
Forums	11,378.24	20,874.98
Retirement Conference	52,773.98	498.00
Health Insurance Conference	40,372.65	0.00
General Insurance Conference	36,422.71	36,036.31
CA2 Module	12,498.91	12,443.51
Joint Regional Seminar (SAS / ASHK)	16,918.29	0.00
Joint Professionalism Course (SAS / SMU)	5,649.95	13,354.64
Life Insurance Conference	50,994.44	0.00
2011 AA Symposium	0.00	9,389.48
EAAC	3,135.87	2,103.46
TOTAL EXPENSES	403,625.47	243,488.97
NET SURPLUS / (DEFICIT)	100,678.16	21,586.00

Jill Hoffman, President

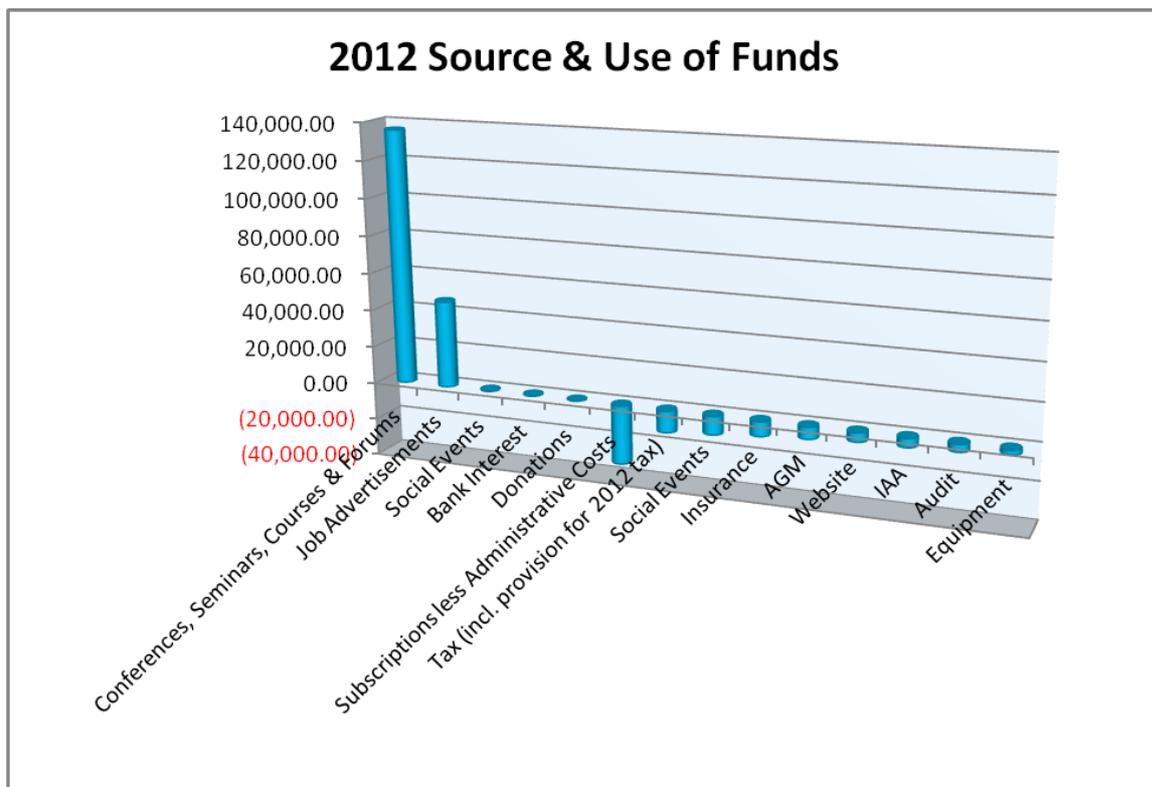
The income sources for the year 2012 are shown below. 73% of our income was derived from seminars, compared to 60% in 2011. The two other major sources of income were subscription & entrance fees and job advertisements.



As can be expected, seminars have been the major expense in 2012 at 58%. Fixed costs such as administrative support and rent were 29% of our total expenses.



The chart below shows our sources and use of funds during the year 2012.

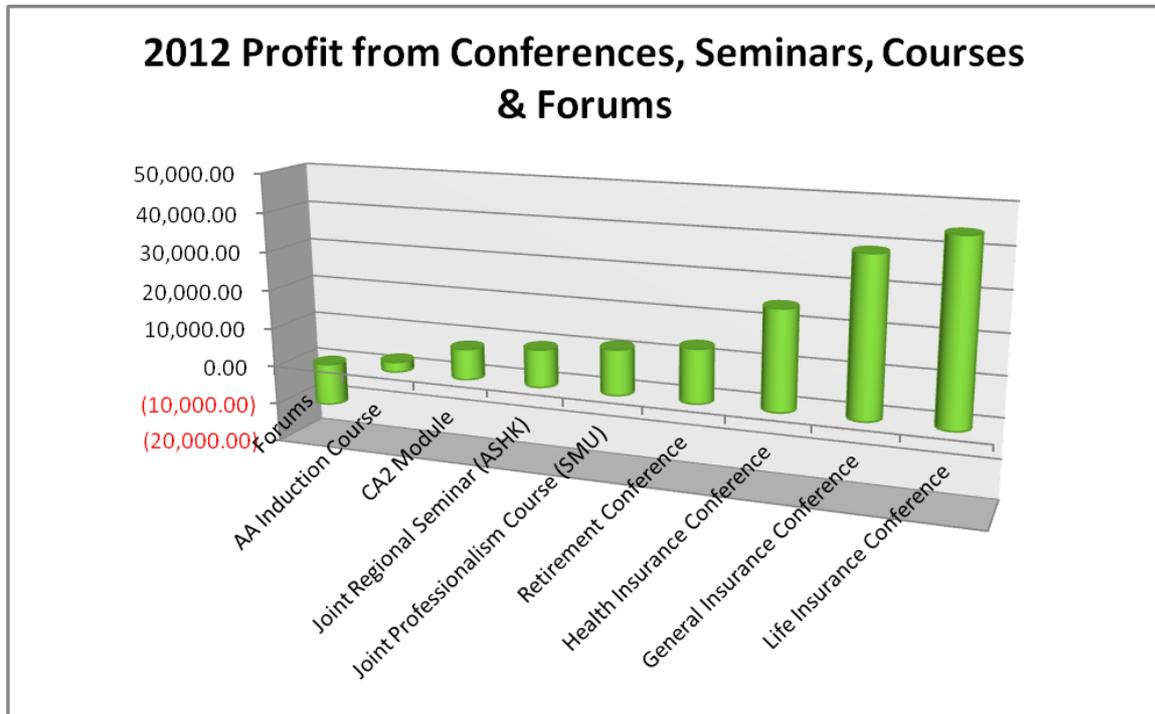


The conference/seminar fees and the sponsorships received are netted against all costs. Fixed administrative costs such as office rent, salaries and Central Providence Fund (CPF), stationary, postage, printing, transportation, telephone and internet usage are netted against subscription and entrance fees received for the year 2012.

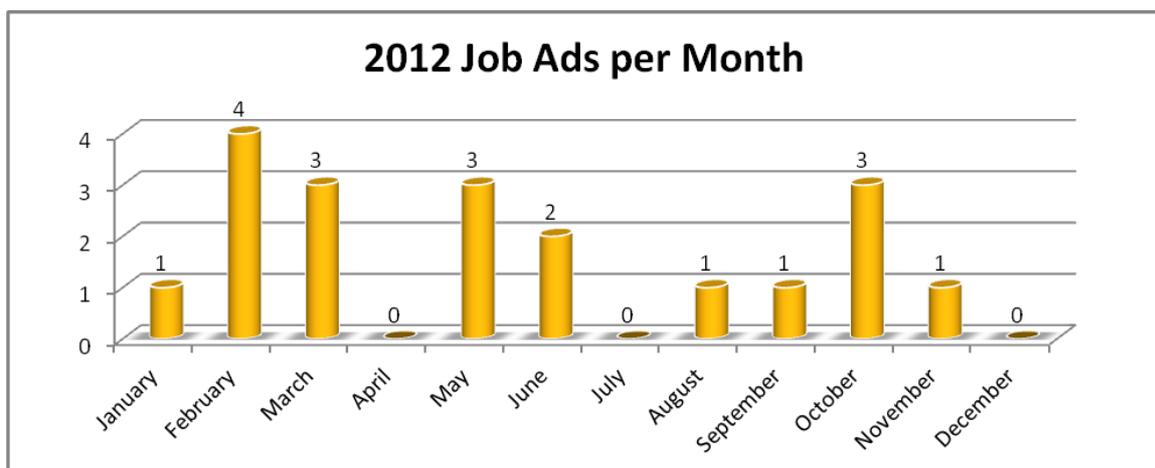
2012 Source & Use of Funds	
Conferences, Seminars, Courses & Forums	136,010.80
Job Advertisements	46,350.00
Social Events	250.00
Bank Interest	236.71
Donations	45.00
Subscriptions less Administrative Costs	(31,363.12)
Tax (incl. provision for 2012 tax)	(11,432.15)
Social Events	(9,757.65)
Insurance	(7,704.00)
AGM	(6,248.45)
Website	(4,777.34)
IAA	(4,654.64)
Audit	(4,000.00)
Equipment	(2,277.00)
Net Surplus 2012	100,678.16

The Life Insurance Conference and the General Insurance Conference generated most profit for the SAS, followed by the Health Insurance Conference and the Retirement Conference. Both the Joint Professionalism Course and the Joint Regional Seminar were profitable as well as were the CA2 Module and the Appointed Actuaries' Induction Course which is conducted entirely by the SAS volunteers and thus incurs no costs. A big thank you goes to our committee volunteers.

The Forums are free for SAS members and designed to provide CPD opportunities.



11 companies within the insurance industry in Singapore (life insurance, general insurance, reinsurance, consulting and broking) advertised job vacancies in 2012.



Thank you



Our dedicated Administrative Executive

Patsy Lau is our first full-time employee and is responsible for the day-to-day running of the SAS. You will have seen her at numerous events providing administrative and registration support. She also helps to maintain the SAS membership database and ensures that our enquiries on any SAS matters are answered.

Patsy Lau

In recent years, the workload in the SAS has increased significantly as our membership continues to grow year-on-year. However, Patsy has continued to serve in the SAS with much zeal and enthusiasm.

The Council would like to thank Patsy for her dedication and support on behalf of all our members.

Honour Roll for 2012/2013

The SAS would not exist if it were not for all the volunteers on various committees. The SAS would like to thank the following members for their contribution:

Our SAS Volunteers for 2012 / 2013...

Aaron Wee	David Richardson	Julien Parasie	Ng Cheng Wei	Susan Wong
Albertus Teddy Setiadi	Eric Seah	Junyou Boo	Ngu Jin Ye	Tan Hau Keat
Alex Lee	Esther Huang	Kay Shong	Nick Gabriele	Tan Samuel
Alex Wong	Felicia Er	Keith Walter	Noelle Lee	Tan Sze Huey
Alfred Toh	Foo Lee Voon	Kevin Cheng	Ocean Chiu	Tan Wie Perng
Alistair Chamberlain	Frank Dubois	Khoo Poh Huat	Oh Yin Yin	Tan Yue Li
Alvin Fu	Frank McInerney	Khor Kah Hoa	Ong Jin Jing	Theresa Wu
Andreas Zell	Frederic Boulliung	Koh Zhee Chong	Ooi Chin Heng	Vanessa Lou
Andrew Linfoot	Frederic Weber	Koo Chung Chang	Pardha Viswanadha	Vanessa Sukanto
Andrew Loh	Gan Leong Hin	Lau Sie Liang	Parth Khandelwal	Vince Tan
Angela Koechli	Gavin Maistry	Lee Kah Jing	Patricia Chang	Wang Jian
Anne Pan Jin	George Attard	Lee Pit Wen	Philip Eng	Wang Lulu
Ben Qin	Gideon Tan	Lee Wai Yi	Phillip Lui	Wil Chong
Bernice Zhang	Grishma Kewada	Lee Wen Yee	Phyllis Chan	William Liang
Bing Xing Xia	Hiew Tet Chian	Leo Ng	Pierre Balthazard	William Song
Bob Gibson	Hitesh Shah	Leong Siao Wearn	Polly Au	Wong Kooi Fong
Brian Ang	How Chee Koon	Liau Lee Jiat	Questor Ng	Wong Ming-Yi
Cheng Min Hung	Hugh Terry	Lim Jun Hong	Raju Seetharaman	Yan Sun
Cheung Kwok Kei	Hussain Ahmad	Lim Siang Thnia	Raymond Cheung	Yang Bohan
Chi Cheng Hock	Ivo Bloodworth	Loo Boon Teik	Raymond Lee	Yeo Ying Hui
Chong Yechao	Jennifer Yong	Low Zi Xiang	Richard Holloway	Yilu Zhang
Choo Oi San	Jeremy Boey	Lu Zihao	Rioma Kam	Yisi Kang
Colin Chan	Jill Hoffman	Maggie Woon	Samson Wong	Zach Chua
Colin Pakshong	Jim Qin	Marcus Ho	Scott Yen	Zhang Yan Wen
Colin Priest	Joanna Chu	Marcus Kok	Seck Chee Weng	
Colin Startup	Joanne Yeo	Mark Whatley	Shahzad Karamally	
Dang Hong Hai	Joe Lam	Matthew Maguire	Shailendra Sapra	
Danny Quant	Joey Zhou	Meng Deshuo	Silvia Zhang	
Darshan Singh	Joseph Choo	Michael Kuek	Songphol Arrewijit	
David Maneval	Joyce Poh	Neo Pay Peng	Sumit Narayanan	

Thank you all for your contribution and dedication...

