



Singapore Actuarial Society



**Year 2018 / 2019
Annual Report & Accounts**

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 Singapore Actuarial Society?

The Singapore Actuarial Society (“SAS”) 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 SAS is the recognised representative body of the actuarial profession in Singapore, having the final authority in setting professional standards. The objectives of the SAS 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, risk management and other fields where such principles can be applied, 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 163 Tras Street, #07-04 Lian Huat Building, Singapore 079024. Please visit our website (www.actuaries.org.sg) for more information.

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President's Message



Matthew Maguire

While SAS doesn't have fixed terms for its officers or council members, any organisation wishing to grow and develop needs to evolve. So with that, I'm pleased to announce that after three years as President of the SAS, I am stepping down to allow the enthusiasm and new ideas of others to help the SAS to continue to expand.

Similar to directors on the boards of companies where staying too long is frowned upon as it can foster cosy relationships between the board and management, it is healthy for a turnover in the executive team in any professional body. One of the key benefits of a democratic process is that it allows for the orderly transition from one group of people in charge to another.

This doesn't mean that I am disappearing entirely, rather I will still be active in the SAS as the ex-officio, Chair of the Professional Affairs Committee and Chair of the upcoming Asian Actuarial Conference which Singapore will be hosting in October of this year.

When I commenced my tenure as President, I had set myself the task of trying to answer the existential question of why do (or should) people join the SAS. Through a series of surveys and conversations, I have summarised the role of the SAS into two key areas:

- Continuous Learning
- Community

First and foremost, SAS is a professional body. It is a collection of individuals who are all highly trained with important roles in their companies. However, beyond the immediate tasks performed for their employers, as professionals we have a broader commitment to the public interest. From our training, knowledge and experience we can often find ourselves in the privileged position of knowing more about a topic and its impact on the world around us than many of those we interact with. As professionals, it is our responsibility to try and shape the debate to maximise the benefit to society.

This is why the two topics above are so important to SAS members. Whether it is ensuring:

- our training and knowledge stay relevant through attending conferences, forums or training programmes; or
- that members feel a part of a community that is promoting actuary as a profession and providing opportunities to meet other actuaries and discuss topics of importance

In addition to this, as part of the community, SAS also aims to provide opportunities for members to meet in a 'not so formal environment' and have a bit of fun. Finally, we are always looking out to the future and so we hold a number of student outreach activities to ensure the next generation of actuaries are of the same quality as the current one and the profession continues to remain relevant way into the future.

With that, I'd like to finish my last message as president with thanks again to all the volunteers who make SAS such a vibrant and relevant society. I'd also like to extend my thanks to the secretariat which make everything in the SAS possible.

With that, thanks to all the members for having me as president these past three years and I wish you all a fantastic 2019 and beyond.

Vice President's Message



Frederic Weber

2018 was an excellent year for the SAS as it continued to develop and gain traction in a number of initiatives.

As announced a year ago, the hiring of an Executive Director has helped set a stronger foundation to further promote our profession and provide the right exchange platform for our members. In his role, Mr. Chi Cheng Hock managed to successfully tidy up a number of internal processes, from the official website to the membership database, not forgetting to revisit and document key processes. Most members may overlook the intricacy of this type of work, but I can assure everyone that it was a great achievement which will unlock more potential to more visible initiatives in the future. I want to thank Mr. Chi as well as the Secretariat and the Operations Committee for the enthusiasm and commitment for embarking on this journey.

Regarding these more visible initiatives, let me highlight that the SAS is already at the forefront of new trends. I am often asked what the SAS does best, and many things come to mind. Our voice on regulatory matters, our conferences, our Data Analytics Committee initiatives, our Speakers and Influencers Club, our ASEAN Education stream, and so on and so forth. But the real X-Factor of the SAS is probably the value of our 1000+ members, of which 400+ are Fellows (one of the largest pools in Asia). We come from different backgrounds, different countries, different practice areas, different primary actuarial bodies, and yet we are animated by the same passion. I can sense a unique vibe when it comes to Singapore-based actuaries, can't you?

To continue this mission, the work of volunteers remains invaluable. There are plenty of opportunities for you to lend a hand and in return you will be enriched with new experiences and wisdom from your peers. Let us be reminded that the SAS functions as an SME and should not be compared to other large examining bodies.

Finally, I wish all our members a successful year ahead and I look forward to meeting everyone at the Asian Actuarial Conference held in Singapore this October. Let's continue to grow and learn from each other, while not forgetting to have fun!

Highlights of 2018/2019 Council Year

The SAS continues to provide many high-quality learning experiences for our members. We had a very fruitful and eventful 2018/2019 Council year with many accomplishments.

Educational Events

- **Five afternoon forums** were held during the Council year 2018/2019 covering a broad range of topics. We would like to thank Frederic Boulliung for facilitating these SAS afternoon talks.



Picture 1: Afternoon Forum

- In addition to forums, the SAS hosted four conferences in 2018/2019:
 - The **Life Insurance Conference (“LIC”)** was held in August 2018 with the theme: *Extending our Borders, Enabling our Industry*



Picture 2: Life Insurance Conference

- The **General Insurance Conference (“GIC”)** was held in May 2018 with the theme: *The Next 10 Years...*



Picture 3: General Insurance Conference

- The **Health & Retirement Conference (“HRC”)** was held in October 2018 with the theme: *Technological Transformation – Applying Intelligence, Augmenting Insights*



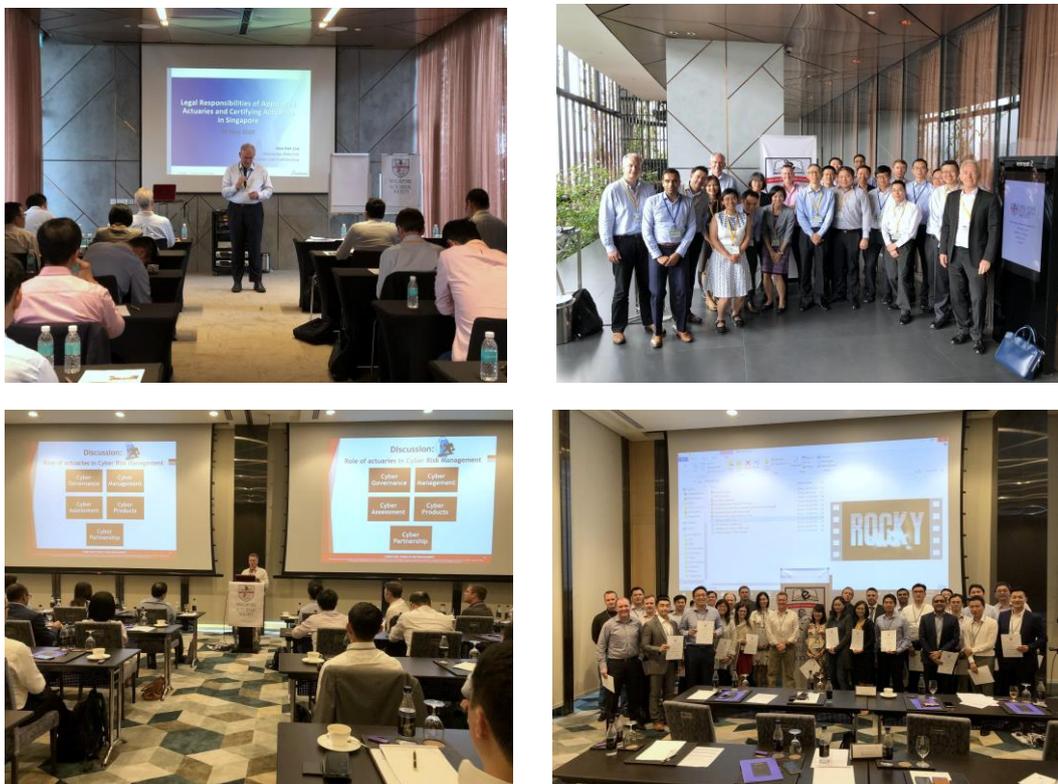
Picture 4: Health & Retirement Conference

- The **SAS ERM-ESSEC CREAR Cyber Risk Conference (“ERM”)** was held in July 2018 with the theme: *Cyber Risks – Threats and Opportunities for the Asia Pac Insurance Industry*



Picture 5: ERM (Cyber Risk) Conference

- The Professional Affairs Committee organised two **Practice Certificate Seminars** in May and November 2018



Picture 6: Practice Certificate Seminar

The Council would like to thank all the conference chairpersons and committee members for the time spent in organising, planning and running the above conferences and seminars.

Outreach Events

We have highlighted below several outreach events organised by the SAS in 2018/2019:

- The **42nd AGM and Annual Dinner** in March 2018
- **2 workshop series (5 sessions each) – Machine Learning with Python** were held in July and November 2018, with great participations from SAS members and students
- **Speakers and Influencers Public Speaking Course** was commenced in November 2018. The course was popular amongst SAS members
- The **Actuarial Networking Night** was held in October 2018. It brought together the professionals and students for a night of active interaction and learning
- The **Actuarial Undergraduate Career Fair** in February 2019 was a great success.

More stories and pictures can be found at the Education & Career Committee (“ECC”) section. The Council would like to thank the ECC in the organisation and execution of the above events. The events would not be a resounding success without your help and participation.

Social Events

The SAS Social Committee organised recreational events for our members in 2018/2019. These events provided the platform for interaction and networking amongst our members.

- The **Bowling & Dinner Night** was held in June 2018, with lots of fun!



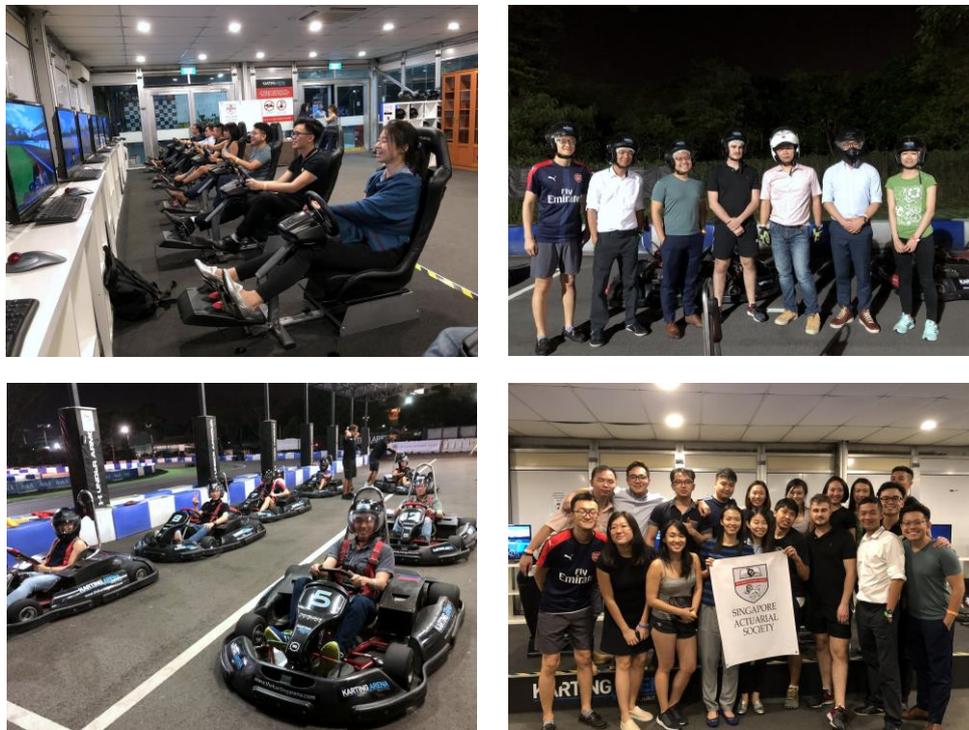
Picture 7: Bowling & Dinner Night – “Bowl, Bowl, Bowl away, who is the best bowler of the night!”

- The Rock Climbing event was held in August 2018.



Picture 8: Rock Climbing event – *“Witnessing Spidermen & Spiderwomen in action!”*

- The F1 – Go Karting event was held in September 2018.



Picture 9: Go Karting event – *“Ready, Get Set, Go!”*

- The **Quiz Night** was held in October 2018, with Raymond Cheung as our Quiz Master.



Picture 10: Quiz Night – “An intense but fun night. Pictures tell the thousand words!”

The Council would like to thank the Social Committee and all other members who were involved in the organisation and execution of the above fun and exciting programs.

Honorary Secretary's Message



Raymond Cheung

The SAS has always sought to improve ourselves so that we can better serve our actuarial community. As you may have already known we have started the initiative to enhance the SAS operations and communication process following the SAS survey we have conducted in 2017. In 2018, the whole process of enhancement has simply accelerated multiple folds, thanks to our Executive Director, Mr. Chi Cheng Hock, as well as the council members for their dedication in shaping the future of SAS.

In terms of activities and events, SAS has successfully delivered 4 impactful actuarial conferences in 2018 with much interest from the SAS community. The Speakers and Influencers events organised by the Education and Career Committee (ECC) continue to be very popular amongst students and members. We also received good feedback for the organisation of the Students' Career Fair and Actuarial Networking Night which served to be great platform for interaction and networking between actuarial professionals and actuarial students. Outside Singapore, the International Committee has done a tremendous work in organising two very successful actuarial seminars in Vietnam and Cambodia. Both were well attended by over 100 participants from regulators, trade associations and insurance professionals.

Besides the usual annual activities described above, SAS also attempted to explore various innovative ways to bring the diversity and value to the SAS community in 2018/2019. For example, the SAS organised the new Machine Learning with Python workshop series in July 2018 to attract the "techies" in our midst with an interest in coding. Needless to say, the workshop was over-subscribed and our Data Analytic Committee had to schedule another similar series in November last year. In terms of social events, the Social Committee introduced, for the first time, the F1 Go Karting event to satisfy those SAS members who were looking for some racing thrill in Singapore. In terms of conferences, the ERM Committee tested a new conference theme on cyber risk which is a subject that is fast developing and growing in importance in Singapore.

I would like to take the opportunity to thank all the dedicated committee members and volunteers who have contributed in big and small ways to bring all the fun, thrilling and educational events to the SAS in the year 2018/2019.

Time flies! This year marks my 8th year serving as Honorary Secretary with the SAS. It was a long but fulfilling 8 years serving in the SAS. It is time for me to pass on the baton to another volunteer to continue the good work in SAS. I would like to thank everyone who has supported me in many ways over the last 8 years' journey. It was truly a joy serving alongside with all of you.

SAS Structure and Council

The SAS is a non-profit organisation registered with the Registrar of Societies. It was founded in 1976 and is governed by the SAS Constitution (Revision March 2014).

Persons may be admitted into the SAS in one of the 5 classes: Fellows, Associates, Ordinary, Student and Affiliate Member.

The SAS is governed by a Council which is to be composed of a minimum of seven and a maximum of 14 elected or co-opted members and one Ex-Officio member. All members of the Council shall be Fellows or Associates.

The SAS Council shall consist of the following:-

- The President
- The Vice-President
- The Honorary Secretary
- The Honorary Treasurer
- Up to 10 other elected (or co-opted) Council Members
- An Ex-officio Member

The President and Vice President must all be Fellows.



Picture 11: The SAS Council for 2018/2019, taken at the Council Dinner in December 2018

(From left to right):

(Back) Danny Quant, Frederic Weber, Matthew Maguire, Frank Devlin, Hitesh Shah, Joey Zhou

(Front) Siang Thnia Lim, Eric Seah, Jill Hoffman, Esther Huang

(Not in picture) Raymond Cheung, Chua See Ju

2018/2019 Council

The SAS Council meets once a month and at least ½ the members of the Council shall constitute a quorum for any Council meeting. The roles and attendance for the Council Year 2018/2019 are shown in the table below:

Person	Role	Total Attended	Total Possible*
Matthew Maguire	President	9	11
Frederic Weber	Vice-President	11	11
Frank Devlin	Hon. Treasurer	11	11
Raymond Cheung	Hon. Secretary	9	11
Esther Huang	Council Member	5	11
Joey Zhou	Council Member	7	11
Eric Seah	Council Member	9	11
Hitesh Shah	Council Member	8	11
Danny Quant	Council Member	9	11
Chua See Ju	Council Member	7	11
Lim Siang Thnia	Council Member	7	11
Jill Hoffman	Ex-officio	8	11

* *Note: Council meeting in December 2018 was replaced by Council dinner on 13th December 2018.*

Table 1: SAS Council 2018/2019



Picture 12: The SAS Council at work during the March 2019 Council meeting

SAS Membership

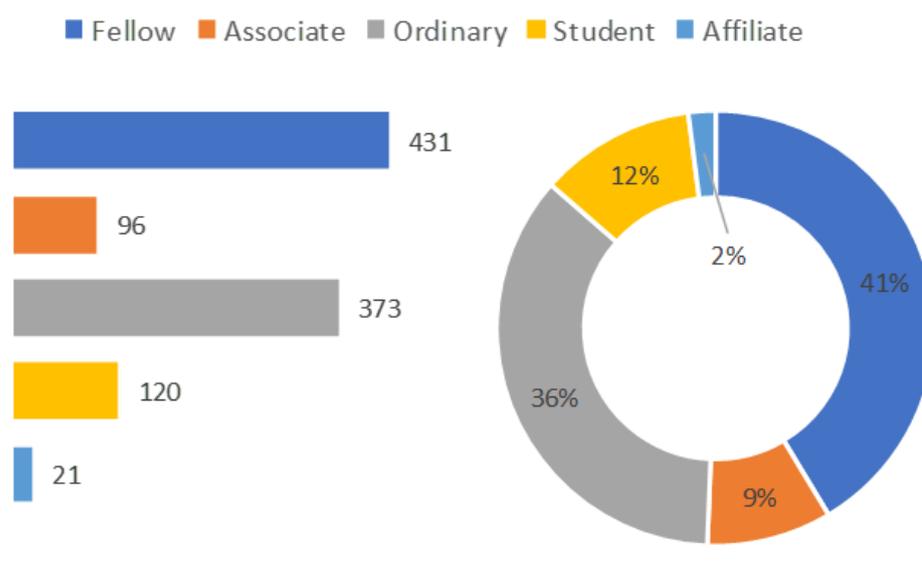
As at March 2019, the total membership of the SAS stood at 1,041. The Fellow category has the highest proportion of members with 431 members, followed by Ordinary category with 373 members.

The SAS is still predominantly male and about 37% of our members are females. The male / female composition has been relatively consistent over the years.

MEMBERS

1,041

CLASS OF MEMBERSHIP



GENDER

MALE

63%



FEMALE

37%



Chart 1: Total membership in 2018/2019

Most new members who have joined the SAS in 2018/2019 are Ordinary or Student members. 19% of new members are Fellows from another mutually recognised actuarial bodies. Many of these Fellows are seasoned actuaries from overseas who have decided to work in Singapore over the past 12 months.

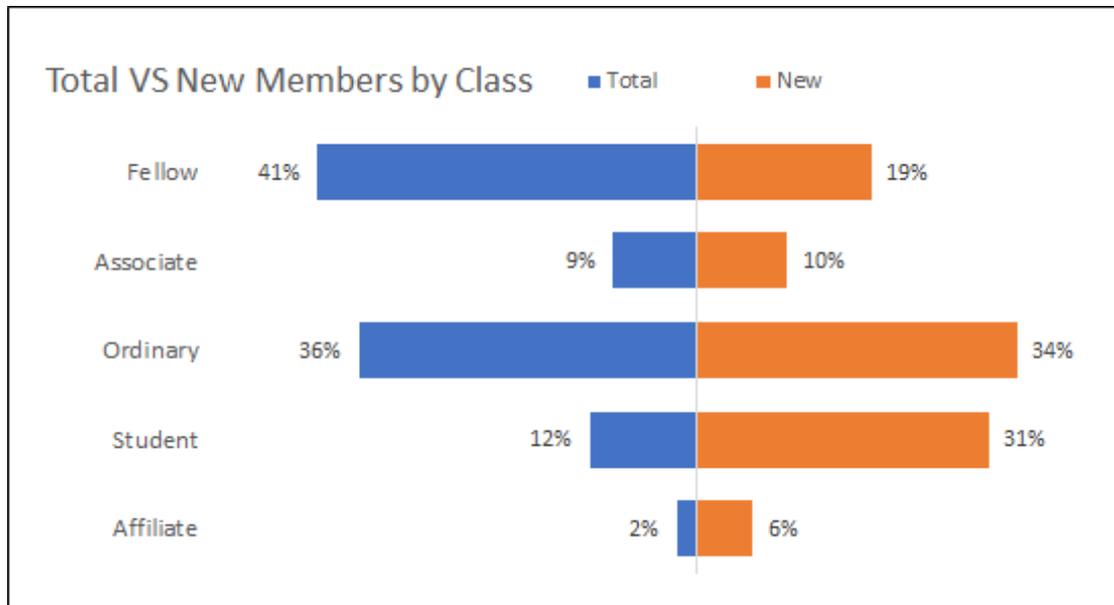
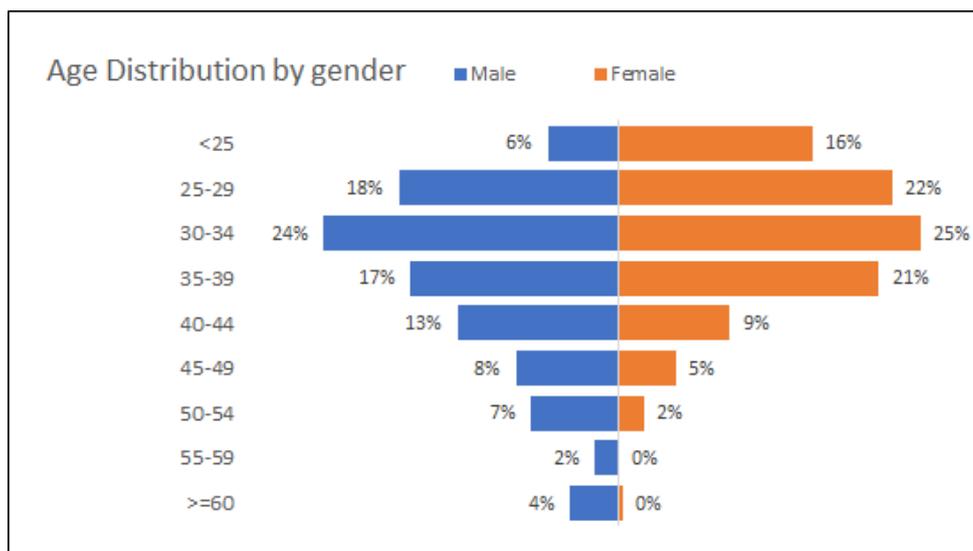


Chart 2: Total vs New Membership by Class

Most SAS members are between age 25 and 39 years old. The number of males exceeded the number of females in all age categories except age band 25. There are significantly fewer females for age band 40 and above.



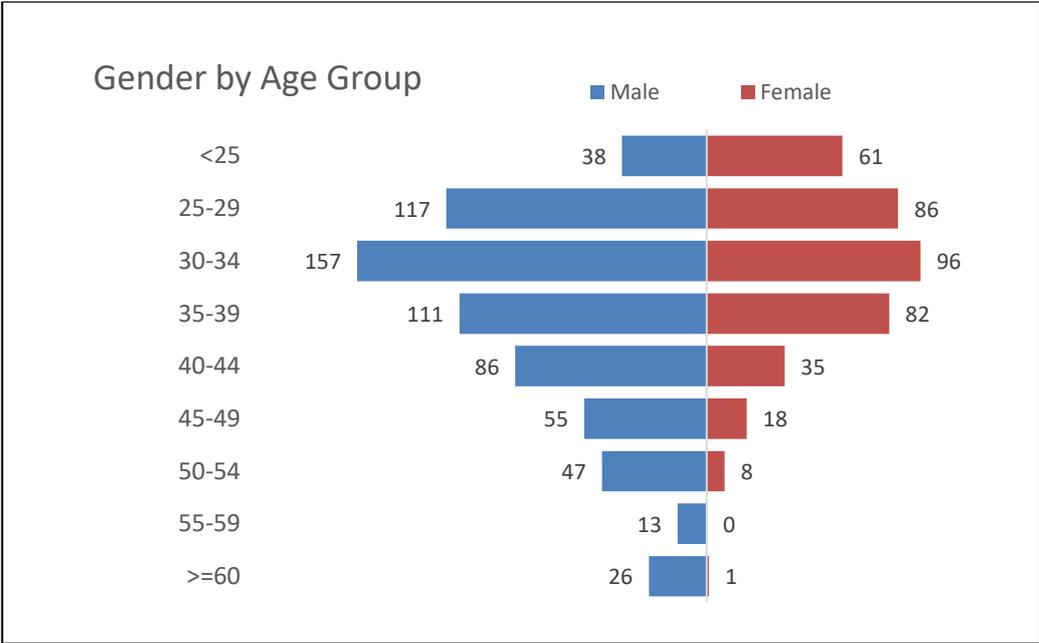
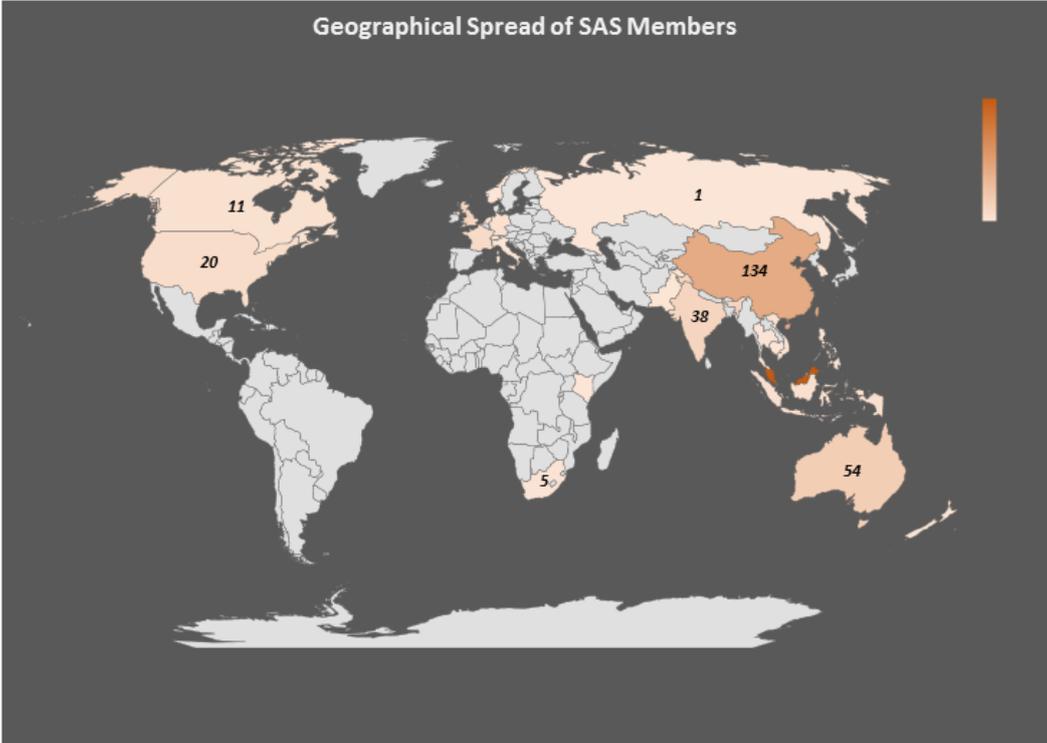


Chart 3: Male-Female ratio by age categories

Malaysians (320) represent the highest percentage (again) of our membership in 2018/2019. Singaporeans (308) followed closely behind. Members from China, Hong Kong and Taiwan (134) emerged third, followed by Australia (54) and India (38).



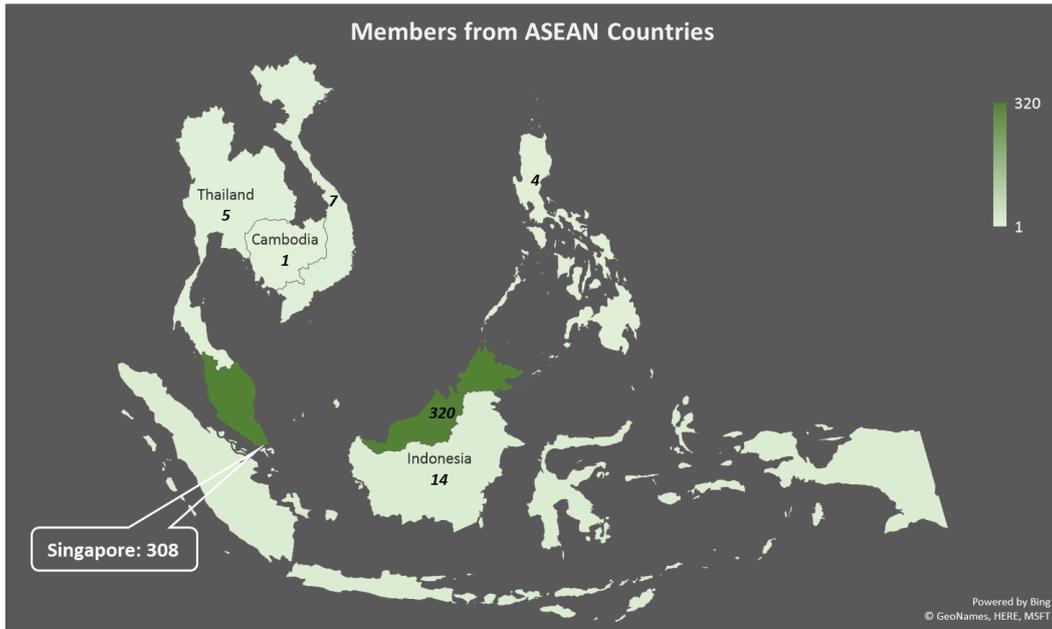


Chart 4: SAS members split by Nationalities

A high proportion of our members are also members of the UK Institute & Faculty of Actuaries (“IFoA”), followed by US Society of Actuaries (“SOA”), the Institute of Actuaries in Australia (“IAAust”) and the Casualty Actuarial Society (“CAS”) respectively. The remaining members (except students) are from other actuarial societies such as Germany, France and Switzerland.

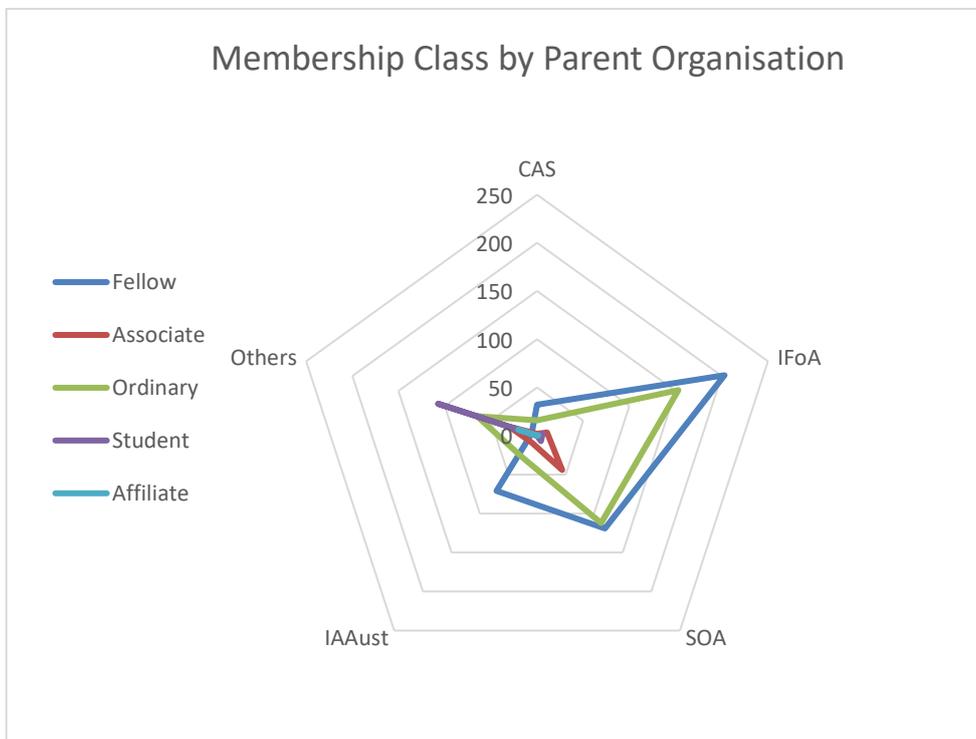


Chart 5: Membership Class by Parent Organisation

New Fellows

The following 21 members have completed their examinations and professionalism courses, and attained the SAS Fellowship status during the year 2017/2018.

Teh Kim Yuan Billy	Seah Pei Rui Nicole
Hong Yee Cheng Amy	Wong Soon Leong
Tan Jian	Chu Hui Wen Hazel
Cheong Chen Siang	Toh Yun Ying
Kadan Puthanveedu Dhanesh	Loh Yit Cheong
Kok Chan Wai	Wong Jing Yean
Yip Jing Min Jenson	Teng Hui Ling
Kwek Ee Ling	Tan Siaw Shing
Wee Hsien Paul	Chen Luying
Lee Soon Huat	Chong Zhikang
Chin Mei Yen Joanne	

Table 2: New Fellows in 2017/2018

The SAS would like to congratulate all our new Fellows for their great achievement.

Executive Director's Message



Chi Cheng Hock

I took up this position almost a year ago, in April 2018. While the SAS has been running fairly smoothly since it was founded in 1976, it is befitting of a professional association to always keep improving, and I was engaged to help this process along.

Patsy, for many years now, and Clarice, more recently, have been diligently managing the affairs of the SAS, and supporting the Council and the various committees in their duties and initiatives, largely on their own before then. However, it was time for a re-organisation of the SAS office and I was tasked to find ways to make even better use of their time, and to free them to take on more value-adding roles. Soon after the Annual General Meeting on 29th March 2019, you will receive a circular outlining how this re-organisation looks like.

Much of what I have worked on in the past year was largely in the background and which was not visible to the membership at large. Internal processes have been streamlined and documented, and the allocation of responsibilities and accountability, especially between the Secretariat and the volunteers, have been made clearer. One visible change has been the move to issue electronic receipts rather than hard copy ones. Insurance coverage has been expanded to protect the SAS, and its officers, staff and volunteers, against liability arising from the many events it organises and against work injury compensation obligations. We are also working to ensure that our membership database is constantly updated, which will improve our communications with our members.

The website has been made more secure and will shortly migrate to an even more secure platform. At the same time, minor improvements will be made to the website which will make it easier for members and the public to access information, and to interact with the SAS – for example, in registering for events, updating Continuing Professionalism Development (“CPD”) records or in applying for membership. These enhancements should become apparent in the second half of this year.

While my principal role is to support the Council in the implementation of the policies it adopts, I am also very interested in making members’ interaction with the Secretariat more fruitful. Feel free to let me know what improvements you will like to see from the Secretariat. You can drop me your thoughts at chenghock@actuaries.org.sg. I cannot promise to implement all your suggestions at short notice, but I can promise you that they will all be given careful consideration.

I look forward to serving you until the end of this year, when my term ends.

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

In 2018, the Life Insurance Committee actively engaged the fellow actuaries in Singapore in projects and conference to help the members stay professional, stay relevant.

An IFRS17 project workgroup was set up and began discussions on the new IFRS17 standard since June 2018. Meetings were held on average once a month with participation of over thirty actuaries in the industry. Discussions involved the interpretation of the new IFRS17 standard and ways to meet the new standard's requirements in the Singapore life insurance industry context. As of January 2019, the following topics have been thoroughly discussed: contract boundary, measurement models, discount rates, combination and separation of contracts, risk adjustment, measurement of reinsurance contracts held, measurement of options and guarantees, and expense. Summaries have been prepared and shared with other bodies including ISCA and the LIA FRS 117 workgroup. Further topics to be discussed in 2019 include measurement of participating contracts, coverage unit, and fair value approach for transition.

In August 2018, the workgroup organised another successful flagship event – the Life Insurance Conference. The conference hosted over 150 participants. Twenty speakers generously shared their thoughts, knowledge and experience on how actuaries could “extend our borders and enable our industry”. Inspiring speeches given by various experts on insurtech, data analytics, IFRS, underwriting, etc., have led to many interesting interactive sessions over the two days. The panel session by the industry leaders gave the audience ideas how to challenge the traditional boundaries that have over time formed the comfort zone, leading into the future of insurance. Special thanks are extended to the organising committee and sponsors to make this event possible.

Mr. Harry Lee and Mr. Maple Lam will step down as co-chairs of the Life Insurance Committee. The Life Insurance Committee would like to express sincere gratitude for their contribution over the years. The new chairs have been identified and will be formally announced in due course.

Maple Lam, Chair

Harry Lee, Co-Chair

Life Insurance Committee

General Insurance Committee

The 2018/2019 year continues to be a challenging one, with limited risk adjusted rate growth and increasing pressure on loss ratios and reserves. How realistic are the business plan assumptions, relative to the recent underwriting and investment performances? Are reserving functions holding the line, or is inadequate reserving leading to insufficient premiums? Is future claims inflation being appropriately captured, particularly in relation to long-tailed business?

These are the kind of questions increasingly asked of actuarial functions by the board, governing bodies (Lloyds) and even regulators (PRA). This presents both a challenge and an opportunity. Actuaries need to demonstrate sufficient challenge, independence and objectivity in their views. In doing so, actuaries can enable a more robust underwriting process whilst highlighting the value they can add to the business.

The GI conference this year was well attended and received, continuing a successful collaboration with the CAS and with the always-entertaining student competition. This year's competition exhibited a fun play on the Shark Tank theme, and put the impressive candidates under simulated investor pressure.

In terms of working parties, the main one this year was around IFRS 17. Understandably, the focus has been on the life side of things given the anticipated impact. There is however less guidance available about which components are actually relevant to non-life business in Singapore. General insurance actuaries need to interpret the reams of publications pushed out by industry marketers and narrow down some actionable steps for their respective companies. To help with this, the phase I Actuarial Guidance Notes are being drafted and aim to focus on the key issues i.e., recognition of an insurance contract, contract modification, level of aggregation, measurement models, risk adjustment, discounting, contract boundaries and ceded reinsurance. Thankfully, the IASB has deferred the new insurance contracts standard by one year to 2022, which was very welcome.

Additionally, the cyber risk working party continues to progress. A recent survey by Marsh & McLennan Asia Pacific Risk Center ranked cyber-attacks and data-fraud as the #1 risk of doing business in Singapore. Whilst it is clearly a significant risk, understanding and coverage in the industry remains inconsistent, and quantification is even more difficult.

The follow-up Actuarial Guidance Note GN02 has now been drafted following the approval of the Standard of Actuarial Practice GN01 last year. Developed in conjunction with the Professional Affairs Committee, GN02 considers the non-compulsory components of the Standard i.e. what a certifying actuary should do as best practice whilst GN01 focused more on what must be done by a certifying actuary.

I express my thanks to all committee members for their valuable contribution in representing non-life actuaries in Singapore.

Darren Ma
Chair, General Insurance Committee

Health Insurance Committee

Currently, as of end January 2019, we have 21 volunteers in the Health Committee. 6 of these volunteers are new in 2019.

Notable activities in 2018:

1. Participation in the Actuarial Training Seminar, Hanoi, 6-7th September 2018

Subhash Chandra represented the Health Committee at this seminar, organised by the SAS International Committee.

2. Health & Retirement Conference (“HRC”), 11-12 October 2018

Attendance broke previous records, with 165 participants (123 paying delegates), up from 131 in 2017 (89 paying delegates).

We made a total surplus of \$37,000, which can be mainly attributed to the large number of paying delegates, flexibility of Resorts World Sentosa, as well as our cautious management of expenses, and success in attracting conference-specific sponsorship.

Our theme was Technological Transformation: Applying Intelligence, Augmenting Insights; and we had a diverse range of speakers and topics representing insurance, technology, government and academia. The two keynote speakers (Dr Bern Shen and Mr. Soh from the CPF) were very popular. In particular, Mr. Soh attracted more than 20 questions on sli.do.

We managed to secure event-specific sponsorship from Focus Core and the SOA respectively. The CPF Board was also a big supporter with about 17 delegates turning up in support of Mr. Soh. Kudos go to the energetic and focused organising committee as we were able to confirm speakers, sponsors and program early, and logistics planning went very smoothly too.

We used sli.do for the first time at the HRC this year – many people posted frank questions and comments, though only 1 speaker used it during their presentation to poll the audience.

We ran a quick poll for topics of interest for future conferences, with “government & social policy” and “issues of local interest” coming up at the top followed by “actuarial topics”, beating out other choices such as “innovations in medical science”, “topics of international relevance”, etc.

Active sub-committees are:

1. Medisave Projection Tool sub-committee

The Health Committee has expressed interest to continue with this project, with new volunteers taking over from previous workstream leads.

2. International Health Care Funding sub-committee

The IAAHS asked for volunteers to contribute to this project which involves a collation of key information on health care funding models and metrics from the various countries. The SAS Health Committee will be contributing information for 5 Asian countries.

The committee has also elected a deputy chair, Subhash Chandra.

Leong Siao Wearn
Chair, Health Insurance Committee

Retirement Committee

First and foremost, I would like to extend a big “thank-you” to our SAS members for their presence and participation in our Health & Retirement Conference (HRC) 2018, where distinguished guests and panelists held court on Technological Transformation: Applying Intelligence and Augmenting Insights.

It was a resounding success as crowds turned up in droves to catch our keynote speakers: Dr. Bern Shen and CPF Deputy Chief Officer (Services) Mr. Soh Chin Heng as they shared insights on cutting-edge technological innovations in healthcare and CPF retirement adequacy respectively.

Dr. Shen, who sits on the boards of UCSF Institute for Health Policy Studies, Institute for the Future and The Heath Trust, has, under his belt, three decades of clinical, technology industry and start-up investor experience, and spoke at length about the ripple effects of healthtech innovations on disease networks and socio-technical systems.

Mr. Soh, the public face of information dissemination and education of CPF schemes, discussed how the government is taking definitive steps to enhance our retirement policies, taking into account longevity and long-term disability risks.

We also had speakers who drew from a wealth of experience in education, big data, finance, statistics, product marketing, claims adjustments, insurance, engineering, policymaking and most certainly, the actuarial field.

With the 22nd Asian Actuarial Conference scheduled to be held in Singapore in October this year, our normal HRC format will be suspended for the time being, but the Life and Retirement Committees are working in tandem to put together a Life and Retirement Conference (“LRC”), tentatively slated for the end of July 2019. This will be a one-day conference and we are planning to field a diverse panel of speakers with expertise spanning a plethora of related and adjacent fields, so be sure to save the date and get your reservations in early as tickets sell out fast.

Beside the LRC 2019, the Retirement Committee is keeping ourselves engaged in the retirement landscape here in Singapore. Amidst growing – and valid – concern that Singaporeans would not have sufficient saved income to meet their retirement needs, we are in the process of exploring whether the SAS and the Institute and Faculty of Actuaries (“IFoA”) can work together to raise awareness of the prevalence of insured longevity risk in Singapore, as well as to investigate potential solutions. This campaign will be rolled out in multiple phases in order to develop the necessary evidence base and engagement with key stakeholders such as policymakers, researchers and insurers. As the chair of the Retirement Committee, I’m very excited about this promising joint project and the dividends it will yield. I will continue to keep all of you in the loop regarding the progress of this initiative and collaborative effort.

As always, the Retirement Committee is actively seeking new blood to infuse fresh insights, ideas and innovation within the committee. If you are interested in a more hands-on, front-seat view of our industry and how we are making a difference, please contact me at marcus.mk.kok@sq.pwc.com

Marcus Kok
Chair, Retirement Committee

Enterprise Risk Management Committee

The 4th SAS ERM - ESSEC CREAR Cyber Risk Conference 2018 was held on 26-27 July 2018 at the ESSEC Singapore Campus. This conference was jointly organised by Singapore Actuarial Society and ESSEC Business School ("ESSEC"). This was the first time the SAS has organised a conference with a focus on a particular topic, cyber risk, rather than the usual insurance related themes. This is also the first time the SAS has partnered with a non-actuarial institution to organise a conference in Singapore.

Leveraging on the network of ESSEC, and together with the hard work from the SAS ERM organising committee, we managed to invite over 17 renowned international (from countries including US, Switzerland, Australia, Hong Kong and India) and local cyber risk professionals and experts to speak at the conference. This conference had delivered an exceptional suite of high-quality presentations from a wide range of fields such as regulators, underwriters, brokers, IT specialists, lecturers and researchers, as unanimously agreed. We have managed to cover in-depth contents in the new emerging domain of cyber risks from 4 components, namely cyber risk threats and developments, cyber risk management, cyber risk modelling techniques and cyber risk insurance products, during the conference.

The conference also attracted a highly diverse group of delegates that added to the vast perspectives and exchanged innovative ideas. In particular, we had representatives from regulators, academics and insurance practitioners to debate and discuss in a panel discussion on day 1 of the conference titled "*How Insurance Industries, Academics and Regulators can join hands to counter cyber threats in Singapore*".

The ESSEC conference venue, despite its location been slightly away from the city, was a great choice with good atmosphere to enable very interactive presentations. The audience felt comfortable to raise questions, staying attentive and engaging. The ERM Committee has received excellent comments after the conference from both participants and speakers. Many have commented that the quality of speakers was excellent, topics were interesting and the discussion were engaging. In fact, this was one of the few conferences where I saw many participants and speakers staying behind after the conference for networking, exchanging contacts and wanting to keep in touch with each other.



Picture 13: Cyber Risk Conference - A small celebration we had together with Prof. Marie Kratz (ESSEC) and some overseas speakers after the two-days Cyber Risk Conference. A picture paints a thousand words, showing the success and great friendship we have built during the conference.

Despite the good success of organising the conference, the ERM Committee was rather disappointed with the less than expected sign-up for the conference. The actuarial community did not seem to be very interested in the topic of cyber risk. The general feedback we received was the actuaries felt that they did not need to be cognizant of cyber threats since this is an area that is only relevant to IT professionals. In our view, such thinking is inappropriate because actuaries ought to be concerned and be exposed to emerging trends such as cyber risk that could have pose significant impact as well as opportunities to the insurance industry. Whilst such mindsets will take time to change, this points to the obvious need to raise risk management awareness and interests within our SAS community.

The ERM Committee will continue to organise other events in future that we believe would be beneficial to the SAS members. We look forward to the greater support from the SAS community in the new year. Lastly, I would like to thank ESSEC Business School, especially Professor Marie Kratz, and all the ERM Committee members who have put in their time and effort in the planning of the conference. There were many invaluable takeaways from the conference, and the memories and friendship we built will last for a long time.

Raymond Cheung
Chair, Enterprise Risk Management Committee

Data Analytics Committee

The committee's role is to raise awareness on analytics skills that will be in demand in the near future and to share knowledge on applications of analytical practices and data technologies with SAS members and practice committees.

The committee has three sub-committees / task forces:

- 1) Education sub-committee – to help members to upgrade their analytical/programming skills by way of conducting machine learning courses, workshops, sharing relevant webinars, online courses and research papers.

We conducted two series of Machine Learning with Python – Introductory Course Series (5 evening sessions).

Scope: Data science methodology, Introduction to Python (Language/coding/libraries), Data manipulation/visualisation, Exploratory data analysis, Families of machine learning, Practical case study (predict Titanic survivors) with pros-cons of different machine learning tools.

Our talented Teacher: Karthikan Selvaraj, Data Scientist at Aviva Quantum

See the feedback of 4 participants:

<https://docs.google.com/document/d/1fBdkFzv9GXYqEtdzDT475WKhlcO07DQOEwOCTJeSKE0/edit>

and a highly liked LinkedIn Post:

<https://www.linkedin.com/feed/update/urn:li:activity:6450287761764208640/>

Following the success of the first two series, another one will take place in April 2019.



Picture 14: Our Talented 32 participants

2) Project/Kaggle/Publications sub-committee – To provide opportunities for members to gain practical experience in advanced predictive modelling techniques and data analytics.

In 2018, the project team of DAC started on a few projects with the aim of:

- a) building analytics use case for publication and promotion of actuaries' analytics skillset
- b) exploring new analytics technique and putting learning into practice. For example, the team got together in Q4 2018 to participate in a live Kaggle competition that studied an online merchant's sales conversion using its google analytics data

Also, the team is looking into leveraging the LTA public data to study the effect of environmental variables in affecting road incidents.

Contact twchyin@yahoo.com or frederic.boulliung@partnerre.com if you are interested to join this sub-committee, (basics knowledge in R or Python and machine learning is needed – participants of our Machine Learning courses that we provide would have sufficient knowledge).

3) Networking/Conference Taskforce – To network with institutions, other actuarial societies, academia and corporate innovation labs, etc., with the objective of gaining access to relevant speakers, teachers, volunteers and experts who can support our committee to achieve its objectives and help other SAS committees with their initiatives relevant to analytics.

Key achievements in 2018:

- provided several speakers for SAS afternoon forums
- helped MAS to organise a meeting (Data Analytics Circle) with a dozen of head of analytics labs in our Industry
- engaged with an SMU professor regarding a presentation for their students
- engaged with several similar committees of other societies worldwide
- published an article in “the Actuary” magazine of the UK actuarial profession <http://www.theactuary.com/news/2018/06/learn-how-to-be-an-actuary-of-the-fifth-kind/>

Committee webpage: http://www.actuaries.org.sg/?q=big_data

Frederic Boulliung, Chair
Saliya Jinadasa, Deputy Chair
Data Analytics Committee

Reports from the Support Committees

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

International Committee

2018 marked another amazing year for the SAS and the International Committee, especially for the accomplishments that we have achieved under the SAS' vision in promoting the actuarial profession and providing actuarial education in the ASEAN region.

On 6th and 7th September 2018, the SAS and the Casualty Actuarial Society (CAS), with the support of the Ministry of Finance (MoF) of Vietnam, jointly organised the Actuarial Seminar on “*Embrace Changes in Insurance*” in Hanoi, Vietnam. The seminar was attended by over 100 delegates including insurance supervisors and regulators from the MoF, Insurance Association of Vietnam, actuaries and insurance practitioners from life and general insurance companies, as well as university professors and students.



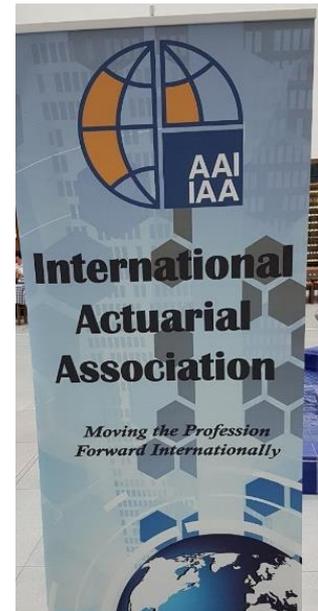
Picture 15: Group photo from the Hanoi Seminar. This marked the 4th international actuarial training seminar conducted by the SAS in the ASEAN region since 2015.

On 12th and 13th November 2018, the SAS and the Insurance Association of Cambodia (IAC) jointly organised the Actuarial Seminar on “Current Trends in Insurance Industry” in Phnom Penh, Cambodia. It was the second seminar conducted by the SAS for Cambodia, and it attracted close to 100 participants from insurance supervisory bodies, regulatory departments, trade associations, local and foreign insurance companies, and received local media coverage. Besides technical actuarial topics, the seminar also covered many areas such as IFRS 17 and implications on Cambodia insurance industry, technology and innovation in insurance.



Picture 16: Welcome remark given by the Chairman of the IAC, Mr. Huy Vatharo, at the Phnom Penh Seminar

As part of our international outreach, Jill Hoffman represented the SAS at the International Actuarial Association (“IAA”) council and committee meetings in Berlin. The IAA council and committee meetings were held immediately prior to the International Congress of Actuaries (“ICA”) and saw a record number of new attendees. It was also the twentieth anniversary of the modern reincarnation of the IAA, and was a period of reflection on how best to move forward. At the President’s Forum, which opened the meetings, there was a roundtable discussion surrounding collaboration between committees, and a call for more sharing and trust between the various actuarial bodies. The SAS was singled out for its work in Cambodia and Myanmar in the previous year. These efforts to promote the actuarial profession have gained a lot of attention for the SAS at the international stage.



Picture 17: The purpose of the IAA is to encourage the development of a global actuarial profession

Beyond the above education initiatives, the International Committee has also supported efforts in establishing local actuarial profession in Vietnam, and promoting the Global Mentorship Program organised by the Actuaries Without Borders (AWB), a special interest section of the IAA.

Looking into 2019, the International Committee will continue to reach out and support other ASEAN countries in growing the actuarial profession and local actuarial talent pool. We also strive to expand the efforts to bring awareness and actuarial education to universities and students. To this end, we will welcome like-minded members to join us as volunteers and take these important initiatives to the next level!

Last but not least, I would like to thank the members of the International Committee for their continued support, the sponsors of the 2018 SAS International Committee Education Initiatives Fund – namely, Gen Re, Milliman, Nicholas Actuarial Solutions, NMG Consulting and RGA Reinsurance, as well as each and every speaker of the Hanoi and Phnom Penh seminars (the list of speakers is acknowledged in the Volunteer List). The events would not be possible without your passion and commitment, so a sincere thanks from the SAS.

Chua See Ju
Chair, International Committee

Social Committee

The Social Committee consists of members: Ocean Chiu, Jennifer Yong Fui Shiah, Chmel Oon, John Lian and Lay Hui Peh. I would like to thank the members for their heartfelt contribution to the Social Committee as well as Patsy Lau and Lau Guan Kiat.

The Social Committee continued to provide exciting events for members to network and to have fun. In 2018, we organised 2 new events, the F1 Karting event which drew members who loved the outdoors and karting. The registration was fully signed up within a day! The Movie Night screening was the first to organised by the Social Committee to attract movie enthusiasts. Over 40 participants enjoyed the movie and the popcorns.

The classic Quiz Night with Raymond Cheung as the quiz master has been an astonishing and a very enjoyable event in the SAS social calendar for a number of years. Everyone had so much fun at the 2018 event, which created a strong team bonding spirit to resolve hard quizzes.

The Bowling event continued to be well-attended and our yearly Rock-Climbing event attracting adventurous members to come forward.

We also rolled out an SAS Social Survey to hear from members as we continue to be passionate about organising events that members love! We look forward to this 2019 year to offer more interesting social events.

Ocean Chiu
Chair, Social Committee

Education and Career Committee (ECC)

The ECC is a melting pot of professionals from various disciplines and student representatives from universities in Singapore, allowing us to leverage on our network and knowledge to achieve our aims of:

- Providing avenues such as workshops and forums through skillsets identification, allowing actuaries to gain value-added skills and knowledge, increasing their value and relevance in the respective organisations
- Providing a platform with the vision of bridging the gap between students and the actuarial profession, increasing standards and retention of new actuaries through better alignment of the understanding and expectations of the profession.

The ECC is chaired by Bernice Zhang and meets every 2 months. It is powered by the thankless efforts of our members who participated in the:

- Afternoon Forum sub-committee, chaired by Frederic Boulliung
- Speakers and Influencers sub-committee, chaired by Zhou Erjie
- Universities sub-committee, chaired by Zhou Minjian

Members who worked across the sub-committees are Chen Mingyang, Glenn Tan, Joe Lim, Jeremy Lim, Li Na, Yeo Yao Hui, Brandon Lum, Valerie Poh, Goh Jing Rong, Livia Rachmad and Jonathan Seah.

1. Afternoon Forum Sub-committee

The team strives to bring the most relevant topics to the table for members to up-skill and learn about happenings in the industry. These sessions were organised during the term, covering a range of topics across disciplines:

Date	Topic	Speaker
23 Mar 2018	Data science demystified: the typical end-to-end data science workflow	Dr. Luo Wuqiong
23 Mar 2018	What Are We Talking About When We Talk About “Data” as Insurers?	Mr. Deng Xiaodong
7 Jun 2018	Genetic testing - should actuaries in Singapore worry?	Mr. Kenneth McIvor
15 Oct 2018	A peek into the black-box (predictive modelling’s explain-ability)	Mr. Jianshu Weng
31 Oct 2018	Derivative Applications within an insurer’s ERM framework: The Past, Present and the Future	Mr. Marco Hoogendijk

We are constantly on the search for interesting sessions. Please contact Dexter Teo (dteo@deloitte.com) if you have something to share!

2. Speakers & Influencers Sub-committee



Picture 18: Speakers and Influencers Sub-committee events

Clear communication with stakeholders is such a key aspect of our function as an actuary; and there can never be enough platforms to hone these skills! This sub-committee aims to bring across workshops to improve our soft skills as actuaries across all levels.

Two sessions were held in 2018, conducted by external trainer and motivator, Claire Devine. We kept the size of our classes even smaller so that each attendee was given more time and breadth to present at each session, providing them with a platform to practise and gather feedback from fellow attendees and Claire.

With the success of these workshops, we will be rolling out more workshops for 2019 soon, so do sign up!

3. Universities Sub-committee

This sub-committee engaged with students and professionals on various platforms through the year, with the aims of:

- Promoting the actuarial profession among universities;
- Raising visibility of university students to professionals and providing platforms for students and professionals to engage in; and
- Engaging with and align requirements of universities, professionals and students.

Singapore's Got Talent

The 5th annual Singapore's Got Talent competition was organised, attracting local talents from various universities to participate. Through a thorough selection and close mentoring from our dedicated volunteers, 3 bright-eyed finalists presented their findings to a highly interactive audience at the General Insurance Conference on 1st June 2018. It was a well-received session appreciated by professionals and students alike; and this continues to be a perfect platform to showcase our local talents and bridge the gap between the industry and students.



Picture 19: Student presenting at the Singapore's Got Talent Competition at General insurance Conference

Actuarial Networking Night

The annual event was held on 15th October 2018 as a joint collaboration with NTU's Quantitative Finance & Actuarial Science Club. It was a good night of sharing amongst professionals and students alike. We are already looking forward to the next round to raise the profile of actuaries within the student community in this casual networking setting!



Picture 20: Students eager to learn from professionals at the Actuarial networking Night

Actuarial Career Fair: 9th edition



Picture 21: Actuarial Career Fair at SMU

As one of the core initiatives of the ECC to bridge the gap between companies and students, the SAS Actuarial Career Fair was held on 13th February 2019 after months of planning!

The banter and keen interaction between professionals and students wafted down the hallway of SMU's basement through the night, while a select group of nervous students awaited their turns to take a chance at internship and fresh graduate positions through speed interviews held in the background. 20 companies across a spectrum of specialisations in insurance, reinsurance, consulting and big data and more than 140 eager students from local and overseas universities graced the event.

A special "thank you" goes to SMU and Prof YK Tse for their partial sponsorship of the venue.

Thank you volunteers!



Picture 22: Thank you our ECC volunteers!

To all volunteers, speakers and companies for the support provided to the ECC. Thank you! We look forward to another exciting year!

Zhou Erjie succeeded Bernice Zhang as the new Chair of ECC starting from 2019.

If you would like to contribute, just drop a note to express your interest to Zhou Erjie (erjie.zhou@axa.com.sg). Give us a shout if you have any education-related idea or enquiry as your opinion is valued!

Bernice Zhang
Chair, Education & Career Committee

Professional Affairs Committee

In the year 2018/2019, the Professional Affairs Committee successfully ran two seminars for the prospective Appointed and Certifying Actuaries. The 7th Practising Certificate Seminar (“PCS”) was run in May 2018 and the 8th PCS was run in November 2018.

There is a steady and strong demand for Practising Certificates.

Frank McInerney
Chair, Professional Affairs Committee

Operations Committee

The Operations Committee is chaired by Frederic Weber (SAS Vice-President) and other members are Matthew Maguire (SAS President), Frank Devlin (SAS Treasurer), Raymond Cheung (SAS Secretary) and Esther Huang (SAS Webmaster).

The Committee meets every month (usually, one week before each Council meeting) and is responsible for:

- SAS Membership: management of admission of new members, and of renewal and reinstatement of membership
- SAS Website: update and improvements to match latest trends in terms of layout and functionalities
- SAS Secretariat Staff matters, staff Handbook: reviewing and updating on yearly basis
- SAS Insurance contracts: holistic review of needs and market offers
- Efficient in SAS operations: achieving it through digitalisation, insurance, better procurement, etc.

Frederic Weber
Chair, Operations Committee

Honorary Treasurer's Message



Frank Devlin

I am pleased to present you with the Audited Accounts as at 31st December 2018 for the Singapore Actuarial Society. In 2018, the SAS achieved a surplus of \$75,803 compared to a deficit of \$26,803 in 2017, with the most significant change being the greatly increased income arising from general sponsorship of SAS by various companies. I would wish to thank the sponsors and hope they continue this generosity in the future, especially in 2019 when the Asia Actuarial Conference will be held in Singapore.

The main sources of income for the SAS continue to be members' subscriptions, sponsorship, conferences and job advertisements. It was pleasing to note that given SAS's voluntary disclosure to the Controller of Income Tax previously, that during 2018 they refunded 80% of the tax penalty that had been levied.

The subscription fees collected have not been able to cover general administration costs since 2010 and so the sponsorship. The healthy surplus generated by the various conferences and the job advertisements cover the gap. Given the surplus generated, the Council agreed that there should be no increase in subscription fees for 2019.

As at end of 2018, the SAS had net current assets of \$550,364 held primarily in bank accounts and fixed deposit.

A Garanzia LLP continues to be the external auditor and the accounts have also been audited internally as good practice. The detailed financial statements can be obtained on the SAS website.

Inevitably, questions arise as to how to use the surplus to further the objectives of the Society. Over the past two years, processes have been and are being put in place to enhance the internal control structure of SAS. For example, Investment and Insurance policies were approved by Council during the year. Mr. Chi Cheng Hock was appointed last year as Executive Director to review and enhance member services as well as to oversee and drive any changes.

As part of that review, it has become clearer that the SAS infrastructure requires significant development to ensure that there is a robust platform to provide the services that a modern professional organisation would expect and so allow volunteers the time and opportunity to be more creative and organise the learning events that they value.

As such, a new website provider has been appointed with the aim, over the next six months, to enhance the SAS website, to provide "one version of the truth" and to increase operational efficiency within the SAS Secretariat. I am very pleased that Mr. Chi agreed to extend his term as Executive Director for another year to take this project forward along with the other business as usual activities with which he is involved. SAS owes Mr. Chi a significant debt of gratitude not only for his engagement with SAS over the years, but especially his current contribution as Executive Director – far above the job description working hours.

Another use of the surplus in 2019 will be to provide liquidity for the Asian Actuarial Conference that SAS is organising in 2019. Whilst we expect the Asian Actuarial Conference to generate a surplus, there is very significant expenditure in the first half of 2019. We expect the income from attendees and any sponsorship would only occur in the second half of 2019.

The surplus can also be used to support the smaller conferences, where there is an actuarial interest but not the critical mass of attendees to cover all conference expenses. Not all conferences can be as financially successful as the life or health and retirement conferences, but the smaller conferences may relate to matters which have significant value in the future.

SAS Accounts

SINGAPORE ACTUARIAL SOCIETY			
Balance Sheet as at 31/12/2018		all amounts in SGD	
Current Assets	2018	As Reclassified 2017	
Cash in hand	0	0	
Fixed Deposit	261,417	260,899	
Bank Balance	377,148	348,863	
PayPal Balance	1,014	100	
Rental/SP Deposit	11,030	11,380	
Receivables	11,084	45	
Prepayments	8,284	5,553	
Non-Current Assets			
Plant and Equipment	8,772	13,168	
TOTAL ASSETS	678,748	640,007	
Current Liabilities			
Payables	15,581	76,945	
Deferred Income (Advance Subscription Fees)	104,032	79,731	
TOTAL LIABILITIES	119,613	156,675	
NET ASSETS	559,135	483,332	
Represented by:	2018	2017	
Accumulated Fund at the beginning of the year	483,332	510,135	
Surplus / (Deficit) arising during the year	75,803	-26,803	
BALANCE AT THE END OF THE YEAR	559,135	483,332	

Table 3: SAS Balance Sheet as at 31 December 2018

Due to rounding, numbers presented throughout this section may not add up precisely to the totals provided.

SINGAPORE ACTUARIAL SOCIETY		
Income & Expense Account for the year ended 31/12/2018		all amounts in SGD
Income	2018	As Reclassified 2017
Subscription & Entrance Fees	144,557	126,445
Job Credit Scheme	1,602	1,681
Bank Interest on Fixed Deposit	517	1,422
Sponsorship	117,000	47,601
Job Advertisements	23,100	19,800
AGM & Dinner	229	862
Social Events	188	220
Miscellaneous	305	0
Forums	2,314	2,680
Career Fair	5,250	3,000
Life Insurance Conference	112,396	96,064
Health & Retirement Conference	82,001	76,101
General Insurance Conference	39,899	50,294
Practising Certificate Seminar	19,026	16,080
Enterprise Risk Mgmt Conference	6,800	0
Data Analytics Committee Events	8,397	10,857
International Committee training events	21,135	12,000
TOTAL INCOME	584,716	465,106
Expenses		
Depreciation of plant and equipment	7,142	9,571
Office Rent	39,290	26,194
Office Maintenance	1,440	1,355
Admin. Staff Salaries & Benefits	166,301	151,545
Professional Service	43	12,293
Audit Fee	4,148	3,600
Tax Services	7,517	2,680
Postage, Stationery & Printing	1,655	3,301
Transport	215	700
Travel	4,268	0
Telephone & Internet	4,288	3,394
Website	15,168	5,641
Insurance	9,641	6,555
Bank Charges	57	37
IncomeTax	(2,899)	0
Tax penalty	(8,151)	10,897
IAA	7,870	8,382
Council & Committees' Refreshments	10,996	11,529
Sponsorship	5,000	5,000
AGM & Dinner	10,792	7,665
Social Events	10,199	11,308
Forums	8,612	21,767
Career Fair	2,559	1,561
Life Insurance Conference	68,965	68,884
Health & Retirement Conference	45,314	48,165
General Insurance Conference	41,381	45,599
Practising Certificate Seminar	6,045	5,696
Data Analytics Committee Events	3,053	10,138
Enterprise Risk Mgmt Conference	26,133	0
International Committee Training Events	12,009	8,452
Withholding Tax	(138)	0
TOTAL EXPENSES	508,913	491,909
NET SURPLUS / (DEFICIT)	75,803	-26,803
To enhance comparability with current year's financial statements the following items were reclassified in respect of 2017 financial statements:		
	As Reclassified	As previously reported
Income Sponsorship	47,601	61,201
Income Data Analytics Committee Events	10,857	9,257
Income International Committee training events	12,000	-
Speakers' Gifts and Competition Prizes	-	2,104
Expenses Forums	21,767	21,263
Expenses Data Analytics Committee Events	10,138	8,538

Table 4: SAS Income and Expense Account as at 31 December 2018

An Analysis showing the causes of the 2018 Surplus by comparison with 2017 Deficit.

Published 2017 Deficit		(26,803)
Conferences increase in surplus 2017 to 2018		
Life Insurance Conference	16,252	
Health & Retirement Conference	8,752	
General Insurance Conference	(6,178)	
Practising Certificate Seminar	2,597	
Enterprise Risk Management Conference	(19,333)	
Data Analytics Committee Events	4,625	
International Committee training events	5,578	
sub total		12,294
Change in Income or Expenditure from 2017 to 2018		
Job Advertisements		3,300
General sponsorship		69,399
Subscription and Entrance Fee Increase		18,112
Forums		12,285
Council & Committees' Refreshments		533
Depreciation		2,429
Office rent		- 13,097
Website		- 9,527
Audit/tax consultant fees		- 5,385
Tax penalties and income tax		19,048
Travel		- 4,268
AGM dinner		- 3,127
Other		609
2018 Surplus		75,803

Table 5: Analysis of Surplus as at 31 December 2018

The income sources for the year 2018 are shown below. Conferences and events, members' annual fees and admission fees, and sponsorship contributed 51%, 25% and 20% respectively to the total income. In particular, members' annual and admission fees increased by about 14% from the previous year due to new members and increased subscriptions.

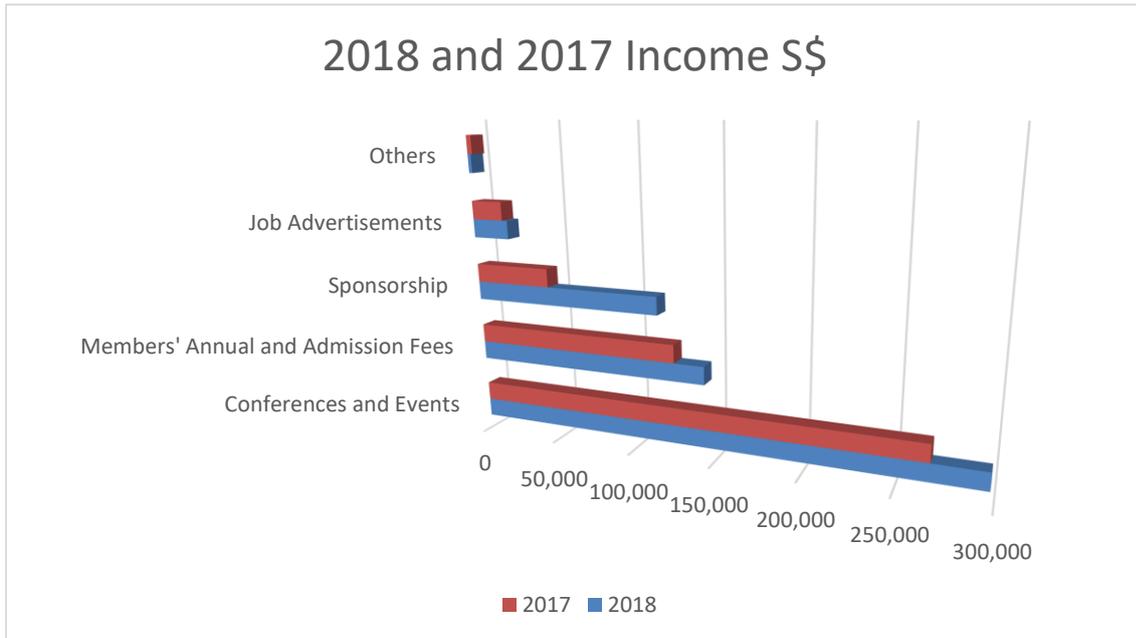


Chart 6: Income (in S\$) Comparison between 2017 and 2018

Conferences and events, and staff costs contributed to the bulk of the expenses in year 2018 at 46% and 33% respectively, similar to year 2017. The increased office rental cost reflects the full year of rental due to the increased floor space. During part of 2017, SAS offices covered a smaller floor space.

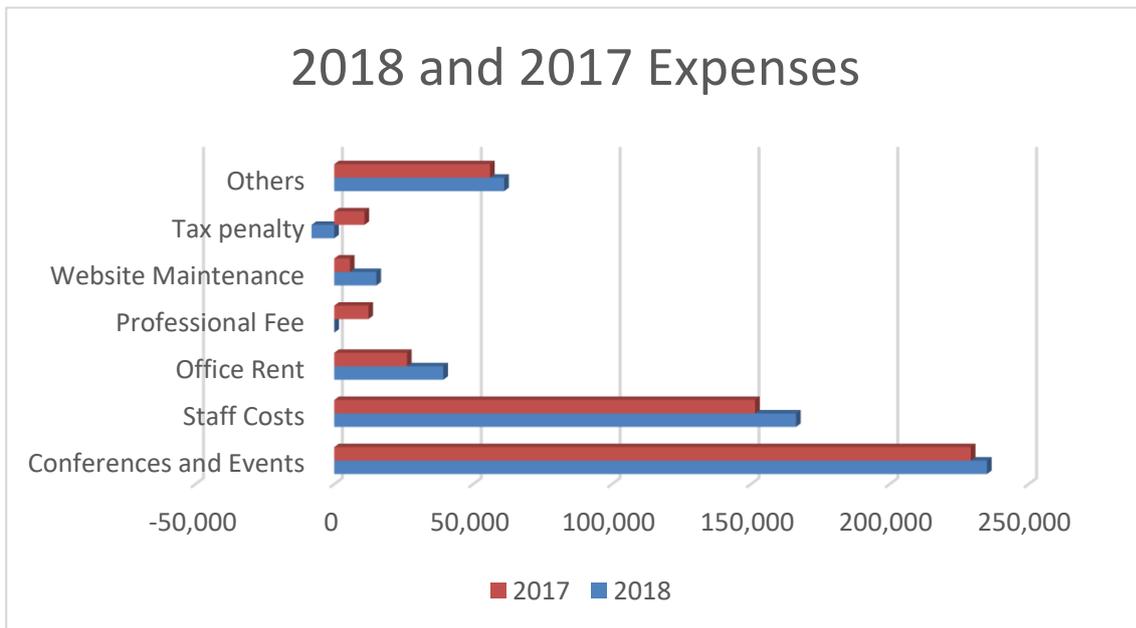


Chart 7: Expenses (in S\$) Comparison between 2017 and 2018

There was a significant surplus from two of the major conferences organised during the year and smaller surpluses in relation to the Data Analytics Committee python training events, the Practising Certificate Seminars and the International Committee training events. The SAS members continued to enjoy subsidies for the SAS AGM and Annual Dinner, public speaking Courses and social events organised during the year.

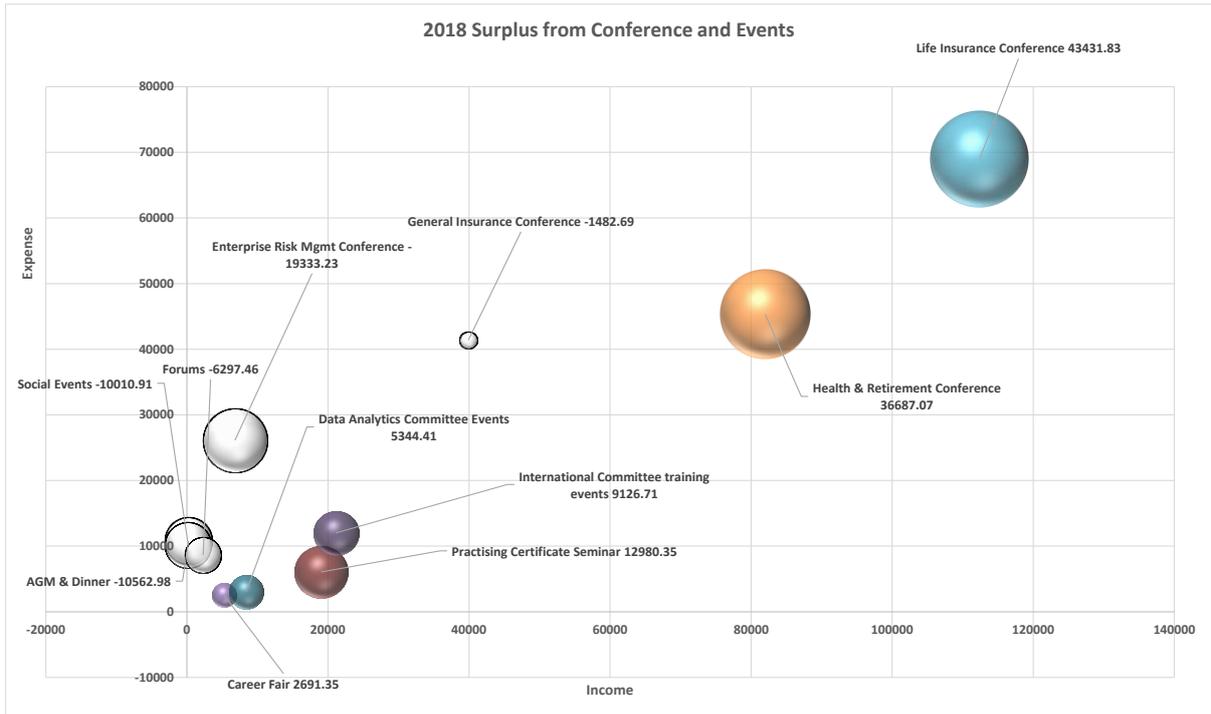
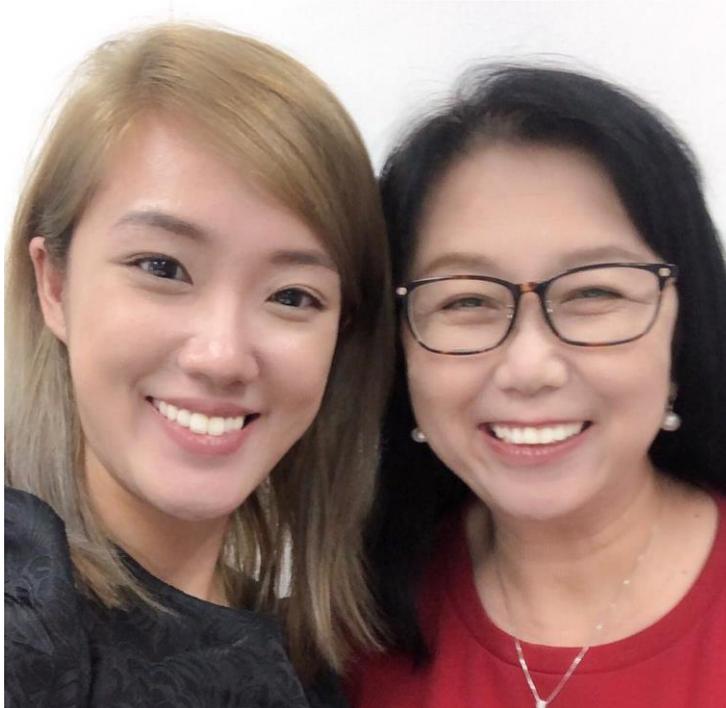


Chart 8: 2018 Surplus from Conference and Events

SAS Secretariat

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.

Clarice Soh joined SAS in August 2017. She helps in the area of SAS accounts, the collection and disbursement of payments and the maintenance of the SAS membership database.



Picture 23: Our SAS Secretariat: (Left) Clarice Soh; (Right) Patsy Lau

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

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

Honour Roll for 2018/2019

The SAS would like to thank the following members, in alphabetical order, for their contribution and dedications as SAS volunteers in 2018/2019:

Name of Volunteer	Committee
Aditya Tibrewala	AVWP
Alap Mehra	AVWP
Albertus Teddy	HIC/HRC
Andrew Heikes	CWP
Andy Kok	IFRS
Anthony Atkins	IFRS/AVWP
Bernice Zhang	IFRS/GIC
Bingxu Duan	IFRS
Brandon Lum	ECC
Candy Goh	IFRS
Catherine Yap	IFRS
Chan Zhan Liang	AVWP
Charlene Lee	LICC
Charles Hang	IFRS
Chen Lu Ying Kate	DAC/IC
Chen Mingyang	ECC
Cheng Yean May	AVWP
Cheung Kwok Kei	IFRS/PAC
Chiang Yue Jun	IFRS
Chmel Oon	SC
Chong Wen Ang	IFRS
Choo Oi San	VAS
Chua See Ju	SASC/IFRS/IC/VAS
Colin Priest	DAC
Danny Quant	SASC/IC/VAS/RC
Darren Ma	GIC/IFRS
Derek Wong	GIC
Dipti Kalyandurgmath	DAC
Eric Seah	SASC/HIC
Erjie Zhou	DAC
Esther Huang	SASC/ERMC/OC
Evelyn Foong	HIC
Felicia Er	GIC/IFRS

Name of Volunteer	Committee
Frank Devlin	SASC/DAC/PCS/OC
Frank McInerney	PAC
Frederic Boulliung	DAC
Frederic Weber	SASC/PAC/PCS/CAS/OC
Gideon Tan	HIC/HRC
Glenn Tan	ECC
Han Rongze	HIC/DAC/RC/HA
Harry Lee	IFRS
Herbert Van Der Merwe	HIC
Hitesh Shah	SASC/RC
Ho Bing Kun	IFRS
Hubert-Jan van de Laar	VAS
Huynh Ly Duyen	IFRS
Ian Lee	ERMC
Pierre Maria	IFRS
Ivan Zheng	IFRS
Jack Yong	IFRS
Jacky Chew	IFRS
James Richardson-Hay	VAS
Jaren Kueh	HIC
Jasmine Koh	GIC/IFRS
Jennifer Yong	GIC/CWP/SC
Jeremy Lim	ECC
Jeremy Weight	IFRS
Jessica So	GIC/CWP
Jessica Sum	PAC/VAS
Jia Yi Koh	LICC
Jill Hoffman	SASC/IC
Jing Kang Lim	IFRS
Jing Rong Goh	ECC
Joanne Yeo	LICC
Joe Lim	ECC

Name of Volunteer	Committee
Joey Zhou	SASC/CAS
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John Tan	IFRS
John Xie	DAC
Jonathan Seah	ECC
Joseph Toh	HIC/HRC
Judy Ng	IFRS
Julia Aslett	HIC/HRC
Julien Parasie	ERMC
Karthikan Selvaraj	DAC
Kok Ern	IC
Kok Yang Goh	IFRS
Krystle Lim	LICC
Kyle Huang	HRC
Lau Guat Kiat	PT/HRC
Lau Seng Kieh	IFRS
Lay Hui Peh	SC
Lee Wai Yi	PCS
Lee Wen Yee	RC
Leng Diep	CAS
Leo Liu	DAC
Leong Siao Wearn	HRC
Li Na	ECC
Li Xue	IC/CWP
Lim Siang Thnia	SASC/PCS/LICC/ IFRS
Lim Tien Yung	HIC/HRC
Livia Rachmad	ECC
Low Yik-Hua	IFRS
Manomi Mukherjee	ERMC
Maple Lam	LICC
Marcus Kok	RC/HRC
Mark Whatley	RC
Matthew Maguire	SASC/GIC/PAC/ PCS/OC
Mehul Dave	GIC/IFRS/PCS
Michael Goodwin	VAS
Min Jian Zhou	DAC
Moo Suh Sin	IFRS

Name of Volunteer	Committee
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Ng Chun Nam	CAS
Ng Yen Siang	IFRS
Nicholas Yeo	CAS
Nigel Goh	IFRS
Noelle Lee	HIC/HRC/RC
Pei Shan Lee	IFRS
Phan Ngoc Hung	IC
Philip Eng	IC
Philippe Domart	CWP
Phua Xi Kun	HIC/HRC
Raymond Cheung	SASC/OC/GIC/ AVWP/ERMC/PAC/ PCS/VAS
Richard Holloway	PAC
Robin Hu	HIC/HRC/LICC
Ronald Foo	IFRS
Rui Rui Zhang	IC
Saliya Jinadasa	DAC
Sally Shing	HIC
Sean Loke	IFRS
Shao Guang Chen	IFRS
Shong Kay Ying	HIC/HRC
Siva Kumar	CAS
Soon Leong Wong	IFRS/HIC
Sophie Chan	IFRS
Subhash Chandra	VAS
Sun Shubian	CAS
Suthee Chintawongvanich	CAS
TAN Yong Zhi Clint	AVWP
Tan Zi Yu	AVWP
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Name of Volunteer	Committee
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Wei Chyin Tan	DAC
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Yen Seng Cheah	IFRS
Yeo Yao Hui	ECC

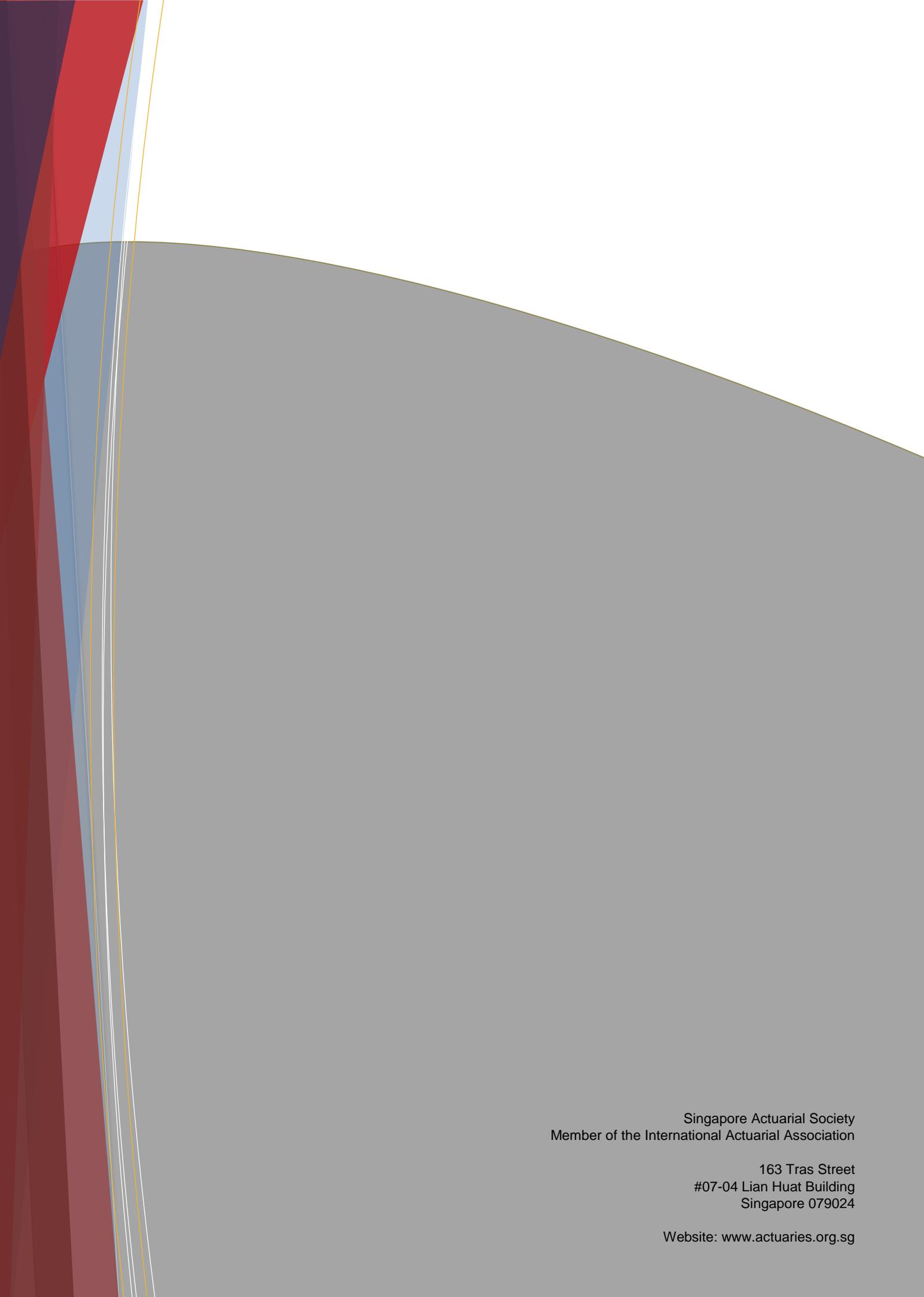
Name of Volunteer	Committee
Yi Jun	HRC
Yin Lawn	GIC/AVWP
Yu Han	IFRS
Zhou Minjian	ECC
Ziling Yong	IFRS

Legend

Abbreviation	Role
AVWP	Autonomous Vehicle Working Party
CAS	Cambodia Actuarial Seminar Speaker
CWP	Cyber Risk Working Party
DAC	Data Analytics Committee
ECC	Education & Career Committee
ERMC	Enterprise Risk Management Committee
GIC	General Insurance Committee
HA	Honorary Auditor
HIC	Health Insurance Committee
HRC	Health & Retirement Conference
IC	International Committee
IFRS	IFRS17 Working Party
LIC	Life Insurance Committee
LICC	Life Insurance Conference Committee
OC	Operations Committee
PAC	Professional Affairs Committee
PCS	Practising Certificate Seminar Speaker
PT	Part-Time Help
RC	Retirement Committee
SASC	SAS Council
SC	Social Committee
VAS	Vietnam Actuarial Seminar Speaker

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