Editor's Foreword

Dear Members,

Welcome to the 2019 issue of the HKSS Bulletin.

In this issue, Dr CHAN Kin-wai of CUHK shares with us his recent work on multiple imputation methods for handling missing data. Ms Elsa LEE and Mr Joseph MAK of C&SD brief us the Household Expenditure Survey. Mr Matthew WONG and Dr Philip YU, Chairpersons of SPC and SCC respectively, give us reports on both competitions held annually by our society.

I am very sorry to tell you that we lost two long time members, Professor S.Y. LEE of CUHK and Professor H.P. LO of CityU last year. Two memoirs, one from Professor X.Y. SONG of CUHK and other from Dr J. TSO of CityU, shared with us about these two members and friends.

Ben CHAN

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President's Forum

Ms Marion CHAN

Dear Members,

First of all, I wish to thank you for your support to the activities of the Society organised in the 2018/19 session. Some highlights of these activities are given in the *News Section* in this issue of the Bulletin. I hope the highlights and the photos attached would help recall the happy moments we shared. For instance, I still remember the very enjoyable evening when Prof. NG Kai-wang was presented the award of Honorary Membership of the Society, and his interesting sharing regarding the special experience during his youth and his academic pursuits in the statistics field in Canada and Hong Kong.

As regards academic events, we were grateful to Dr TAM Siu-ming, Chief Methodologist and General Manager of Methodology Division of the Australian Bureau of Statistics, for delivering a talk to us on the potential use of big data for improving the efficiency of estimates in official statistics production.

The Society has always made great effort to promote statistical literacy in the community and among the youths in particular. Thanks to the many academics and government statisticians involved over the years, the Society is organising the 33rd round of the Statistical Project Competition for Secondary School Students in 2018/19. Apart from this long-standing event, the "younger" Statistics Creative-Writing Competition for Secondary School Students has entered into the 10th round. My special thanks go to Dr Philip YU and Dr CHEUNG Ka-chun for their dedication in leading the Organising Committee for this event and serving as the Chief Adjudicator respectively throughout the past decade!

President's Forum

Ms Marion CHAN

It is also worth noting that the Examination Board, under the capable leadership of Mr FUNG Hing-wang, is actively exploring the idea of joint accreditation of statistical programmes offered by universities/institutions in Hong Kong by the Royal Statistical Society and our Society from 2022.

We are saddened by the loss of Prof S.Y. LEE and Prof H.P. LO last year. Yet their contributions and achievements in the statistics field will be remembered by many of us, as detailed in the two memoirs in the Bulletin.

The 2019/20 Annual General Meeting (AGM) will be held at 6:15pm on 11 April 2019 (Thursday) at the Immigration Officers Mess on 20/F of Immigration Tower in Wan Chai. I look forward to seeing you all in the AGM and the dinner to be held right after the AGM.

Last but not least, I am very honoured and privileged to have served as President of the Society for the past two years. As the out-going President, I wish to thank all my Council Members as well as all those who worked in various committees for their support in this couple of years. Without their assistance and tireless effort, the Society's functions and events would not have been carried out so smoothly and successfully.

Ms Marion CHAN

Multiple "Multiple-Imputation Methods" for Handling Missing Data

Dr CHAN Kin-wai
The Chinese University of Hong Kong

Almost all statistical outputs, including estimation, testing and prediction, are "wrong". Quantifying how wrong they are is the spirit of inference. *Variance estimation* arguably plays a central role in inference. This problem is well-known to be difficult when there is missing data in the dataset.

Multiple imputation (Rubin, 1987) is one of the most commonly used techniques for handling missing data. It is popular because it separates the jobs of handling missing data by imputers and performing inference by analysts; see Tu *et al.* (1993). Despite its many successes, multiple failures have been found over the years. This article introduces three of my recent findings related to MI.

Stacked Multiple Imputation

In Chan and Meng (2018), we found out a striking fact "*the existing MI likelihood ratio test is not guaranteed to have power*". Interestingly, it hinges closely on the variance estimation: the estimator of the variance of observed data estimator, is inconsistent under the alternative hypothesis. Estimating this variance is difficult because the fraction of missing information (FMI), i.e., the relative increase in variance due to missingness, is usually unknown. We found that the existing MI likelihood ratio test (Meng and Rubin, 1992) is (i) not invariant to parametrization, (ii) not always non-negative, and (iii) requires analysts to have non-trivial complete-data procedures.

We re-developed the MI testing procedure so that all the aforementioned problems are eliminated. Theoretically, a particularly intriguing finding is that the FMI can be estimated consistently by a likelihood ratio statistic for testing whether the multiply imputed datasets can be regarded as samples coming from a common model. Moreover, it is robust against the falsity of the null. Computationally, we showed that performing MI test is straightforward if analysts are willing to perform an additional test by stacking all imputed datasets as one big completed dataset. The stacking principle is novel and is different from all existing MI methods.

Sieve Multiple Imputation

The above MI test (and most of the existing MI tests) assume equal FMI, i.e., the eigenvalues of the variance of observed-data estimator relative to the variance of complete-data estimator are equal. Although it is a strong assumption, there is no satisfactory MI test without assuming it.

We developed a new MI procedure called Sieve MI. Suppose there are m imputed datasets. Using the stacked MI procedure above, we can construct $m+1$ test statistics by using m individual imputed datasets and one big stacked dataset. If equal FMI is assumed, the null distribution of MI test statistic depends only on the average of FMI. In this case, these $m+1$ statistics suffice to estimates the average FMI and conduct the MI test. However, when it is not assumed, the reference null distribution depends on all individual FMI in a complicated way, and the standard MI procedure is no longer applicable.

The idea is to construct another m test statistics by stacking any $m-1$ imputed datasets. Using the resulting $2m+1$ statistics (m individual test statistics, m leave-one out stacked test statistics, and one completely stacked test statistic), the Sieve MI procedure is able to disentangle the complex link of the FMI on the MI statistics. It allows us to consistently estimate all individual FMI. Consequently, we can define a new MI test statistic and refer it to an estimated reference null distribution. It has a surprising implication: "*we can extract more information from the MI datasets than we used to have*". Hence, we can potentially further improve the MI inference.

Laminated Multiple Imputation

Multi-phase inference (from data generation to imputation to analysis) (Xie and Meng, 2017) is another challenging problem because the imputer's model and analyst's model may be uncongenial (Meng, 1994), i.e., incompatible with each other. In this case, the MI inference will no longer be valid, e.g., the standard MI confidence intervals (CIs) have incorrect coverage probabilities. A more disappointing fact is that the analyst may not have any information about the imputer's model. It is usually the case under the multi-phase paradigm. Under this situation, there is no existing method to construct asymptotically correct CIs. Hence, it has been an open problem for analyst to perform valid statistical inference without knowing the imputer's assumed model, and without any other statistical tools other than a complete-data procedure.

A new type of MI, called laminated multiple imputation, is proposed. The idea is that "*one layer of missingness requires one layer of multiple imputation*". Assuming congeniality, the only missingness is the missing data themselves. However, without congeniality, an extra layer of missingness is the missing knowledge of imputer's model. In order to retrieve all necessary information about the imputer's model, the imputer should divide the observed dataset into many subsamples, and then perform the standard MI on each of the subsamples. A new MI combining rule is then derived. Using the laminated MI procedure, analysts can construct asymptotically correct CIs solely by using the imputed datasets without knowing any other information about the imputers.

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The 2019/20 Household Expenditure Survey -
Heritage & Breakthrough

Ms Elsa LEE and Mr Joseph MAK
Census and Statistics Department

Introduction

In accordance with established policy, a Household Expenditure Survey (HES) is conducted once every five years to collect up-to-date information on the expenditure patterns of households in Hong Kong. This information is essential for updating the expenditure weights of consumer goods and services used for compiling the Consumer Price Indices (CPIs). The last round of HES was conducted in 2014/15 and a new round of the survey is being prepared for implementation in 2019/20. This article outlines the major features of the 2019/20 HES and the rebasing of the CPIs.

Importance of HES

The main purpose of conducting 2019/20 HES is to update the expenditure weights of consumer goods and services used for compiling the CPIs. Updating the expenditure weights of the CPIs is required because the expenditure patterns of households change over time, albeit slowly, in response to factors such as changes in lifestyles, emergence of new products and services, changes in population profile and income level. For example, the last HES conducted in 2014/15 showed that people spent more on information technology and telecommunications equipment when compared with five years before. Meanwhile, new items such as smart wearable devices, post-natal care services and event catering services gained importance in the consumer market.

Apart from updating the expenditure weights of the CPIs, the HES results are also useful for various analytical purposes. For instance, they are useful for estimating certain components of private consumption expenditure in the national accounts, formulating social and economic policies by the government, conducting research studies on household consumption behavior, and comparing standard of living among economies. Moreover, to broaden and enrich the poverty analysis which adopts household income as the sole indicator in the core analytical framework, the Commission on Poverty has made use of the household expenditure data obtained from the 2014/15 HES as supplementary information for analysing poverty in an alternative dimension. By referring to the poverty lines derived from the core framework, the expenditure patterns of poor households in Hong Kong were examined to review their living standards in terms of household expenditure.

Survey methodology

The survey methodology and procedures of the 2019/20 HES will make reference to those used in the previous rounds, with necessary changes to further enhance the reliability of the survey results.

The 2019/20 HES will cover all land-based domestic households in Hong Kong. Marine households, collective households and those households away from Hong Kong during the reference period will not be included in the survey. A stratified proportionate sample design will be adopted and a sample of some 13 000 quarters will be drawn and all relevant households residing therein will be enumerated. Households receiving Comprehensive Social Security Assistance will be covered in a special survey to be conducted along with the 2019/20 HES for updating the weighting system of the Social Security Assistance Index of Prices by the Social Welfare Department.

The survey will be conducted for a whole year from October 2019 to September 2020 to take into account seasonal variations in consumer spending in different periods in a year.

Households selected for the survey will be divided into 26 sub-groups and households in each sub-group will be requested to provide information on personal and household particulars, as well as data on all items of expenditures incurred by all household members during a two-week survey period. Apart from the above daily expenditure diary, separate questionnaire schedules listing out items requiring regular payments (such as rent, water and sewage charges, telephone bills) and some commodities and services which may be purchased occasionally (e.g. electrical appliances and outbound travel) are provided to facilitate the respondents in recalling other expenditure items to be reported for a calendar quarter period.
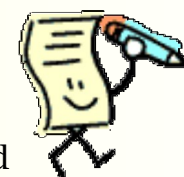
Response rate

As a diary-keeping type survey which requires all household members to provide details of all expenditure items for a long time period, the HES is one of the most data-demanding household surveys conducted by the Census and Statistics Department (C&SD) and understandably the response rate is usually lower when compared to those achieved in other surveys. The response rate of the last round of HES conducted in 2014/15 was 72.3%. In fact, the response rate of HES in Hong Kong is relatively high when compared with that of similar expenditure surveys in other advanced economies such as Australia, Canada, the US and the UK[1]. Having said that, C&SD will continue to make efforts to maintain the response rate at a reasonable level.

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[1] Response rates of similar expenditure surveys conducted in other economies: 66% for the 2015-16 HES in Australia, 58% for the 2016 Consumer Expenditure Survey in the US, 43% for the 2017/18 Living Costs and Food Survey in the UK, and 41.3% for the 2017 Survey of Household Spending in Canada.

With reference to past experience, publicity plays an important role in securing a high response rate. Measures such as press releases and feature articles in newspapers and magazines will be utilised throughout the survey period to increase public awareness of the survey. Appeals will also be made to mutual aid committees, public housing estate management offices and other similar bodies for assistance to get access to selected respondents.

In addition, as an incentive to increase households' participation in the 2019/20 HES and to show our appreciation to the cooperating households for their substantial efforts made, as practiced in the previous rounds of HES, an honorarium of $200 will be given to each household that completes the survey.

Enhancement in questionnaire

In HES, underreporting is a potential issue which may exist in some cases due to memory lapse or proxy reporting. We believe that enhancing the convenience in completing the expenditure diaries is an effective way to minimise underreporting as well as to lower the dropouts during the 2-week reporting period. To better align with the respondents' spending experiences, the question flows in the 2019/20 HES questionnaire will be re-designed in order to minimise the respondents' burden in re-grouping and recalling the multiple expenditure items from the same outlet.

In addition, the 2019/20 HES will offer households with an online self-reporting option via a dedicated Internet e-Questionnaire System using mobile devices or desktop computers. Apart from being an additional data reporting channel, this also provides a convenient means for reaching out to individual household members for direct and instant reporting of their personal expenditures at any time, especially using mobile phones, thereby reducing potential underreporting that might otherwise be incurred due to proxy reporting.

Providing assistance in data reporting

C&SD will continue to offer necessary assistance to respondents in completing the expenditure diary. For instance, the field officers will contact the respondents from time to time to help them complete the diaries. This can help clarifying dubious points with the respondents and reduce the possible bias arising from memory lapse.

Data confidentiality

The 2019/20 HES is to be conducted under Part IIIA of the Census and Statistics Ordinance (Cap. 316). The data collected in the survey regarding individual persons and households will be kept in strict confidence and will not be released to any unauthorised parties, including other Government departments. To enhance the respondents' confidence in providing the required data, interviewers will explain to the selected households the various measures adopted to safeguard the confidentiality of data provided by individual households and persons. For example, household reference number will be used for identification purpose without the need of any names or addresses; only designated officers who have signed an undertaking to refrain from disclosing any information collected from individual households can access the completed questionnaires; individual questionnaires would only be kept for two years and would then be destroyed; and only aggregated information will be released.

Rebasing of the CPIs

The results obtained from 2019/20 HES will be used to update the expenditure ranges of the CPIs, the CPI basket (i.e. to add new items and delete obsolete ones from the CPI basket based on their latest significance and popularity) and the respective expenditure weights attached to individual commodity/service items.

To assess the impact of changes in expenditure weights on the CPIs, comparisons of the year-on-year rates of change in the CPIs compiled based on the old and new expenditure weights will be undertaken. Past experiences show that the new CPI series generally show smaller year-on-year rates of increase than the old series. This is attributable to the fact that people tend to buy more of the goods and services with relatively smaller price increases (or relatively larger price decreases) and less of those with larger price increases (or smaller price decreases). Due to such substitution effect, CPIs based on fixed consumption patterns tend to over-estimate price increases or under-estimate price decreases over time. Nevertheless, the differences in year-on-year rates of change in the CPIs compiled based on the old and new expenditure weights would not be very significant (e.g. around 0.1-0.2 percentage point in general in the 2014/15 round).

Major results of the HES and the 2019/20-based CPIs will be released to the public around Q2 2021. The existing 2014/15-based CPI series will be published in parallel until the reference month of December 2021 and will then be discontinued.

Concluding remarks

  The HES is an important survey to obtain up-to-date information on consumption patterns of households in Hong Kong. The data will provide the major source to update the expenditure weights and the basket of consumer goods and services used to compile the CPIs. Respondents' cooperation is of paramount importance to make the survey a success.
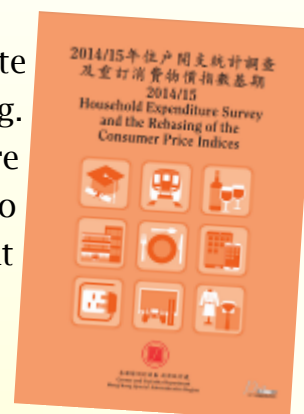
References

  For major findings of the 2014/15 HES and the rebasing of the CPIs, readers may refer to the report *2014/15 Household Expenditure Survey and the Rebasing of the Consumer Price Indices* available on the website of the C&SD (www.censtatd.gov.hk/ hkstat/sub/sp290.jsp?productCode=B1060003).

CPI basket of consumer goods and services

HES round	Items added, e.g.	CPI basket	Items deleted, e.g.
1994/95	• Air purifier • Electronic dictionary • Service charges for cable TV and mobile telephone		• Conventional records • Conventional record player
1999/2000	• Digital camera • Massage chair • Notebook computer • Sushi		• Kerosene stove • Typewriter
2004/05	• Cyber café charges • Digital single lens reflex camera • DVD recorder • Olive oil		• Radio pager • Walkman
2009/10	• Japanese alcoholic drinks • Mini warehouses • Ngong Ping Cable Car fares • School fees on playgroups		• Cyber café charges • Repair service charges on sound equipment
2014/15	• Smart wearable devices (e.g. smart watch) • Event catering service • Post-natal care service		• Fax machine • Video rental fee • Blank recording media (e.g. blank disc)

2017/18 Statistical Project Competition for Secondary School Students

Mr Matthew WONG
Chairperson, Organising Committee of the Competition

The Hong Kong Statistical Society (HKSS) has been organising the Statistical Project Competition (SPC) for Secondary School Students annually since 1986/87 with the primary objective of encouraging students to understand the local community in a scientific and objective manner through the proper use of statistics, thereby promoting their social awareness and sense of civic responsibilities.

The 2017/18 SPC, jointly organised by the Hong Kong Statistical Society and the Education Bureau and sponsored by the Hang Seng Indexes Company Limited, is the 32nd round. To help interested participants better prepare for the Competition, an exhibition of past winning projects and a briefing seminar was held on 21 October 2017 at the City University of Hong Kong. The winners of the last round were also invited to share their experiences.

The Competition is divided into two Sections, namely Junior Section for Secondary 1 to 3 students and Senior Section for Secondary 4 to 6 students. Junior Section participants are required to submit their projects in the form of a poster on one of the following themes: population, economic development or education, while Senior Section participants in the form of a report with their own choices of themes. In addition to the First, Second, Third and Distinguished Prizes, each Section of the Competition also offers the Hang Seng Indexes Company Limited Prize for the Best Index Application and the Department of Management Sciences, the City University of Hong Kong Prize for the Best Graphical Presentation of Statistics.

The 2017/18 SPC received very fabulous responses. A total of 123 statistical projects from 555 students of 35 secondary schools were received. Of the 123 entries received, 79 entries were for the Junior Section and 44 for the Senior Section.

An adjudication panel, led by Dr Geoffrey TSO of the City University of Hong Kong and comprised some 40 academics from local tertiary institutions and statisticians working in the Government, was set up for the Competition. Panel members scrutinised all the received projects stringently, shortlisted the more outstanding entries, and interviewed students of the shortlisted projects before determining the winning teams of the various awards.

A prize presentation ceremony was held on 23 June 2018, jointly with the Statistical Creative-Writing Competition (SCC) for Secondary School Students, at the Rayson Huang Theatre, The University of Hong Kong. The guests invited to officiate at the ceremony were Mr Leslie TANG, Commissioner of the Census and Statistics Department, and Mrs HONG CHAN Tsui-wah, Deputy Secretary for Education.

Regarding the results of the Competition, students of S.T.F.A. Lee Shau Kee College, who used official statistics to study single-parent families, won the First Prize of the Junior Section. Students of Stewards Pooi Kei College won the Second Prize, while students of another team of Stewards Pooi Kei College won the Third Prize. Students of Kwun Tong Government Secondary School won the Prize for the Best Index Application, while students of Shung Tak Catholic English College won the Prize for the Best Graphical Presentation of Statistics.

As for the Senior Section, the statistical report from students of Chiu Lut Sau Memorial Secondary School was appraised as the best amongst all the projects. They applied statistics from multiple facets to study organ donation in Hong Kong. Students of Hoi Ping Chamber of Commerce Secondary School won the Second Prize, while students of King's College won the Third Prize. Students of HKUGA College won the Prize for the Best Index Application, while students of another team of King's College won the Prize for the Best Graphical Presentation of Statistics.

I would like to take this opportunity to express my gratitude to all the members of the Organising Committee and the adjudicators of the 2017/18 SPC for their kind support. I would also like to thank the patrons of the Competition, Mr Leslie TANG, Commissioner of the Census and Statistics Department, and Mrs HONG CHAN Tsui-wah, Deputy Secretary for Education; the sponsor of the Competition, the Hang Seng Indexes Company Limited; as well as the Department of Management Sciences of the City University of Hong Kong which had also rendered financial support to the event.

◄ Teacher and Students from S.T.F.A. Lee Shau Kee College, First Prize winner of the Junior Section of the 2017/18 SPC, shared the memorable moment with the Patrons and Honorable guests.

► Teachers and students from Chiu Lut Sau Memorial Secondary School, First Prize winner of the Senior Section of the 2017/18 SPC, shared the memorable moment with the Patrons and Honorable guests.

Report on the
# Statistics Creative-Writing Competition for 2017/18

Dr Philip L.H. YU
Chairperson, Organising Committee of the Competition

The Hong Kong Statistical Society and Education Bureau jointly organised the Statistics Creative-Writing Competition (SCC) for Secondary School Students for the first time in 2009. The key objectives of the Competition are to raise the interest of students in statistics and its application; and to encourage students to creatively express in words the daily application of statistical concepts or incorporate statistical concepts into a story in a scientific and objective manner.

The 2017/18 SCC is the 9th round of the Competition. A briefing seminar was held on 21 October 2017 to give an introduction of the Competition for interested schools and students. The rules of the competition and our adjudication criteria were introduced during the seminar. Also, Dr CHEUNG Ka-chun of Department of Statistics and Actuarial Science, The University of Hong Kong was invited to give an introduction on the theme topic "Dispersion".

The 9th round of the SCC was completed with a total of 29 entries of Junior Section and 38 entries of Senior Section received. Altogether, 160 students from 24 schools participated in the Competition. An adjudication panel, which was led by Dr CHEUNG and comprised colleagues from Mathematics Education Section of the Education Bureau, university teaching staff and professional statisticians, was set up for the Competition. Having undergone stringent scrutiny by the adjudicators, outstanding entries were selected for receiving the awards finally.
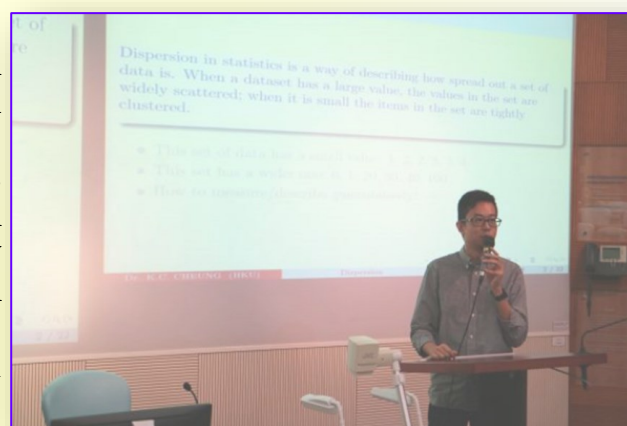
▲ Dr CHEUNG Ka-chun introduced the theme topic "Dispersion" in the briefing session of the 2017/18 SCC.

A prize presentation ceremony was held on 23 June 2018, jointly with the Statistical Project Competition (SPC) for Secondary School Students, at Rayson Huang Theatre, The University of Hong Kong. The guests invited to officiate at the ceremony were Mr Leslie TANG, Commissioner for Census and Statistics and Mrs HONG CHAN Tsui-wah, Deputy Secretary for Education.

Apart from the champion, runner-ups, distinguished prizes and entry prizes, a thematic prize, named as "Department of Statistics & Actuarial Science, The University of Hong Kong Prize for the Best Thematic Writing", has been introduced since the 2011/12 round. The theme topics set so far are "Correlation", "Outlier", "Missing Data", "Linear Regression", "Survey Sampling", "Discrete Probability Distribution" and "Dispersion". In addition to this, the PolyU Hong Kong Community College has been sponsoring a new thematic prize since the 2014/15 round, namely the "PolyU Hong Kong Community College Prize for the Best Article Presentation" and the award will be given to the entry with the best presentation skills.

In line with the development of mathematics education in Hong Kong, and providing teachers with more references, booklets of winning entries in the SCC had been published. To enhance the overall quality of the booklets, the booklets also included several invited articles written by university professors, school teachers and statisticians from the Census and Statistics Department. We believe that through reading a series of interesting articles and creative stories in the booklet, many students will be able to gain knowledge of statistics and recognised how important the proper use of statistical concepts in analysing problems. The booklets are issued for free distribution to secondary schools and are available in the HKSS website for free download.

I would like to take this opportunity to express my gratitude to all the members of the Organising Committee and the adjudicators in the 2017/18 SCC for their help and support. Their strenuous efforts have undoubtedly contributed to enhancing students' statistical literacy and raising their interest in statistics. I would also like to thank the Department of Statistics and Actuarial Science of The University of Hong Kong and the PolyU Hong Kong Community College for sponsoring the prizes in the Competition.

◄ The winning team of the "PolyU Hong Kong Community College Prize for the Best Article Presentation" presented their project during the ceremony.

▲ Photo of the officiating guests with the Organising Committees of SPC and SCC for 2017/18.

◆ Personnel Changes (New Appointments, Promotions and Retirements)

● Professor YIN Guosheng of the Department of Statistics and Actuarial Science of The University of Hong Kong was conferred the Patrick S C POON Endowed Professorship in November 2018.

● Professor SONG Xinyuan was appointed as the Chairlady of the Department of Statistics of The Chinese University of Hong Kong in August 2018.

● Dr WANG Chen, Dr LIU Zhonghua and Dr LI Wentao joined the Department of Statistics and Actuarial Science of The University of Hong Kong as Assistant Professors in July, August and December 2018 respectively.

● Dr CHAN Kin-wai and Dr LIN Zhixiang joined the Department of Statistics of The Chinese University of Hong Kong as Assistant Professors in August 2018.

◆ Academic Activity

● The Department of Management Sciences of the City University of Hong Kong held the 2nd International Conference on Econometrics and Statistics in June 2018.

◆ Professional Services

Representatives of the Council met with Ms Gemma VAN HALDEREN, Director of Statistics Division of the United Nations Economic and Social Commission for Asia and the Pacific when she visited Hong Kong on 14 December 2018. The Council briefed her about the statistical community in Hong Kong, the mission of the Society and the major work and activities of the Society, and exchanged with her the means to promote statistical literacy among the public.

◆ Public Seminar

The Hong Kong Statistical Society (HKSS) held a public seminar "Mining Big Data for Finite Population Inferences" on 16 November 2018 at The University of Hong Kong. Dr TAM Siu-ming, the Chief Methodologist/General Manager of the Methodology Division at the Australian Bureau of Statistics (ABS) was the speaker for the seminar. The seminar aimed at introducing the methodologies in using Big Data sources for official statistics production. A dinner was organised after the seminar.

▲ **Some snapshots of the speaker and audience taken during the seminar and dinner.**

憶恩師李錫欽教授

　　此文謹以緬懷我們的恩師李錫欽教授，祝願他在天國一切安好。

　　李錫欽教授自 1977 在 UCLA 博士畢業後回母校任教，在統計學界辛勤耕耘三十餘年，建樹豐碩，桃李滿天下。他是中文大學統計系的創始人之一，曾經擔任統計系系主任，統計系研究生部主任，以及統計系講座教授。李教授一生獲得諸多成就和榮譽。尤其對香港統計學界和華人統計學界的發展起到重要的作用。他曾於 1986 年和 1992 年先後擔任香港統計協會的副主席和主席，於 1990 年率領統計系師生舉辦了國際泛華統計協會第一屆年會，並獲得泛華統計協會頒發的傑出服務獎。這次年會是一次里程碑式的會議，它首次在中國大陸、香港、臺灣及世界各地的統計學界之間架起了橋樑，開啟了中國統計與國際合作交流的新篇章。

　　李教授是一位慈祥而嚴格的導師。他一生指導 19 名博士生和 25 名碩士生。學生們在各個學校和機構裡成為棟樑之才。例如潘偉賢博士現任香港中文大學副校長和統計系教授。史建清博士在英國著名學府 University of Newcastle 任終生教授。朱宏圖博士在 University of North Carolina at Chapel Hill 任終身教授同時出任中國知名科技公司滴滴出行的技術總監及首席統計學家。張文揚博士在英國約克大學任系主任及終身教授。唐年勝博士獲得國家傑出青年基金，教育部「長江學者」特聘教授等諸多國家級殊榮。此外，還有眾多學生在國內知名高校及研究機構擔任重要的學術和行政職務。學生們在各自的崗位上繼承和傳播李教授做科學研究和為人處世的精神。

李教授在中文大學任教期間，每天早上 7 點左右就回到辦公室，一直工作到下班時間，這個習慣他堅持了幾十年。在香港中文大學統計系的本地學生之間曾經有句戲言叫做「同大 Lee 鬥早」，這句話的意思是如果你比李老師來辦公室更早的話，那麼你就是系裡最勤奮的學生。由此可見，李教授曾經成為我們系師生勤奮的標杆。李教授勤奮工作的態度也影響著我們，讓學生們知道何謂「天道酬勤」。

　　李教授為人風趣，興趣廣泛，尤其熱愛和擅長體育運動，在中文大學的教工網球比賽中連續幾年獲得雙打冠軍。李教授一直秉承著「認真工作，認真娛樂」的信念，在繁忙工作和學習之餘經常組織學生們參加各項體育活動和比賽，同時還帶領大家去南京、蘇州、雲南以及廣州等地的高校參觀交流，並親自教學生們如何攝影。還經常邀請學生們到他家舉行 BBQ party，大家自己動手其樂融融。李教授和我們在一起的各種溫馨場景仍然歷歷在目。印象最深的是李教授手把手地教學生們打橋牌，從最基本的「李氏叫牌法」開始，諄諄誘導，把一群橋牌門外漢培養成為了橋牌愛好者。還有一次李教授和他的學生搭檔參加一個網球友誼賽，有一盤已經是 0 ： 5 落後，再輸一局就會輸掉比賽，但李教授仍然每球必爭，並且不斷鼓勵其學生不要放棄， 最終實現大逆轉， 以 7 ： 5 的比分贏下這場比賽。由此可見，「認真、專注、堅持和永不放棄」是李教授做學問和做事情的態度，也是值得學生們終身學習的品質。

　　李老師的離世是我們大家難以彌補的損失。恩師遠去，後人追思。老師雖然離開了我們，他的精神和品德永遠是我們寶貴的財富。我們相信他在天國裡會一切安好。老師，請放心。我們都會繼續努力的。

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香港中文大學 宋心遠

2018.7.5

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In Memory of Dr H P LO

Written by Dr Geoffrey TSO Kwok-fai, City University of Hong Kong

I have known Dr. H P LO since 1989 when he joined the Department of Applied Mathematics of the City Polytechnic of Hong Kong. He was an excellent colleague to work with for over twenty years. He joined our department to help upgrading our higher diploma program of Applied Statistics to a degree program at that time, since then, there have been a lot of changes. The higher diploma program was successfully upgraded to BBA in Managerial Statistics, then became BBA in Business Analysis in 2012 when Hong Kong moved to 4 year undergraduate degree structure. The department was split into two; the Mathematics and Applied Statistics and Operations Research. City Polytechnic became the City University; and the name of the department further changed to the current name of Management Sciences. HP has been involved to play a key role when all these changes occurred. He served as the Head of Department for six years from 2003 to 2009.

HP has contributed significantly in developing applied research projects and expanding the consulting services in the department. Together with other colleagues, he was a key player helping the department developed the Centaline Property Index, Hong Kong Consumer Satisfaction Index, Hong Kong Sustainable Development Index, and Chinese Consumer Confidence Index: two places across straits. Furthermore, the department has a Statistical Consulting Unit found by Professor Y V HUI; HP has served as the Director of this unit for many years. Under his leadership, this unit has encouraged colleagues to provide consulting services. More importantly, the unit has provided opportunities and trained many students as research assistant, fieldwork manager and supervisor. Many of the former colleagues and student helpers who worked in the unit highly appreciated HP's guidance. In my opinion, HP is a good scholar who is keen to do academic research and a highly delegated teacher. He provided outstanding teaching to inspire students to actively learn and explore their potentials. He is a kind and very considerate person who always thinks of other people first, as well as a committed and caring supervisor for his graduate students. He is a gentleman to everyone. I am so pleased to have such a good colleague and friend.

◆ *Social Activity*

      A dinner was organised on 7 September 2018 in order to present Professor NG Kai-wang the award of Honorary Membership of the Society in recognition of his outstanding contributions to the statistics profession. Twenty-six members participated and all had an enjoyable evening with Professor NG. More photos are available at the HKSS website.
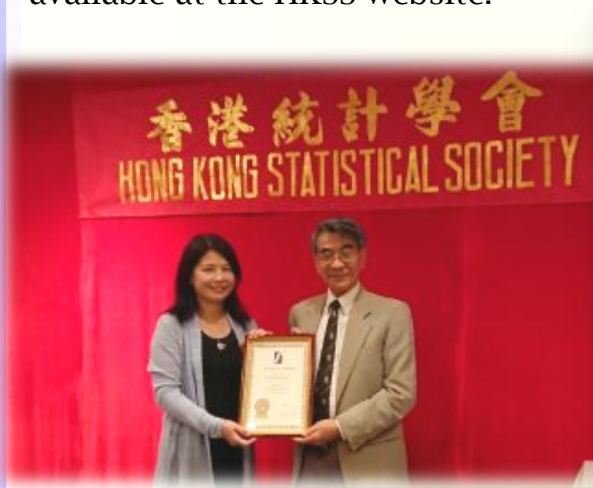
◆ *Social Activity*

     A visit to the T·PARK [源·區] was jointly organised by the Society and the Association of Government Statisticians on 10 February 2019. A total of 27 members and their families participated. All participants enjoyed the visit. Some snapshots of the visit are given here to highlight this enjoyable social activity.

◆ Service Award of the Society

The Society would grant its Service Award every three years to show recognition to members who have rendered sustained and/or significant support to the running of the Society and its activities. Nominations for the 2017/18 round were invited openly from all members in March 2018. A Selection Committee was set up to examine the nominations and decide who should receive the award. The composition of the Selection Committee of the Award was as follows:

Chairperson:	Professor LI Wai-keung
Members:	Professor CHEUNG Siu-hung
	Professor Alan WAN Tze-kin
Secretary:	Ms Gloria MA Wai-sze

The Selection Committee selected the following five awardees (in alphabetical order of family name):

(i)   Ms Kitty CHAN Suet-lai

(ii) Ms Carly LAI Yuk-ling

(iii) Professor Stephen LEE Man-sing

(iv) Professor TANG Man-lai

(v) Mr Don WU Chi-wai

The awards had been presented in the Annual General Meeting for the 2017/18 Session. Congratulations to the awardees!