

RGC Ref. No.: UGC/FDS14/H13/14 _____ (please insert ref. above)
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**RESEARCH GRANTS COUNCIL
COMPETITIVE RESEARCH FUNDING SCHEMES FOR
THE LOCAL SELF-FINANCING DEGREE SECTOR**

FACULTY DEVELOPMENT SCHEME (FDS)

Completion Report
(for completed projects only)

<p><u>Submission Deadlines:</u></p> <ol style="list-style-type: none"> 1. Auditor's report with unspent balance, if any: within six months of the approved project completion date. 2. Completion report: within 12 months of the approved project completion date.
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Part A: The Project and Investigator(s)

1. Project Title

Systematic Biases in Hong Kong's Mandatory Provident Funds and UK's Individual Savings Account

2. Investigator(s) And Academic Department(s) / Unit(s) Involved

Research Team	Name / Post	Unit / Department / Institution
Principal Investigator	Ricky Siu-kuen Wong / Assistant Professor	Department of Supply Chain and Information Management, Hang Seng Management College
Co-Investigator(s)	Wai-hung Wong / Associate Professor	Department of Supply Chain and Information Management, Hang Seng Management College
Co-Investigator(s)	Magda Osman / Reader	Biological and Experimental Psychology Group School of Biological and Chemical Sciences Queen Mary University of London
Others	Kasper Ho / Research Assistant	Department of Supply Chain and Information Management, Hang Seng Management College
Others	YiLing Lin / PhD Student	Biological and Experimental Psychology Group School of Biological and Chemical Sciences Queen Mary University of London

3. Project Duration

	Original	Revised	Date of RGC / Institution Approval (must be quoted)
Project Start Date	6 th Dec 2014		
Project Completion Date	5 th Dec 2016	31 st May 2017	21 st Nov 2016
Duration (<i>in month</i>)	24 months	30 months	21 st Nov 2016
Deadline for Submission of Completion Report	5 th Dec 2017	31 st May 2018	21 st Nov 2016

Part B: The Final Report**5. Project Objectives**

5.1 Objectives as per original application

1. To provide a comprehensive understanding of how people make decisions in real world situations, by examining how people may be susceptible to manipulations (The Key FDS Objectives);
2. To provide empirical evidence that directly answers the following four research questions: a) Are people's decisions in the UK's ISA investment subadditive?; b) Are people's decisions affected by irrelevant anchoring information?; c) When retirement protection is framed differently (gain vs. loss), are individuals' decisions affected?; and d) Are individuals' decisions in mandatory and voluntary retirement savings different in terms of their susceptibility to biases?;
3. To communicate the findings to a multi-disciplinary academic and a non-academic audience through workshops aimed at engaging governmental sectors and investors of the community;
4. To provide students with research opportunities by contributing to parts of the experiments;
5. To further enhance the PI's and Co-Is' career development by the international research collaboration; and
6. To provide the HKSAR and UK governments with a guideline about how financial institutions should 'fairly' present the fund information to the public.

5.2 Revised objectives

Date of approval from the RGC: NA

Reasons for the change:

- 1.
- 2.
3.

5.3 Realisation of the objectives

(Maximum 1 page; please state how and to what extent the project objectives have been achieved; give reasons for under-achievements and outline attempts to overcome problems, if any)

Together, five experimental studies were conducted in this granted research project. They are: 1. Subadditivity (UK-ISA), 2. Anchoring Effect (HK-MPF), 3. Anchoring Effect (UK-ISA), 4. Framing Effect (HK-MPF) and 5. Framing Effect (UK-ISA). All of these five experiments were completed. Over 600 participants from Hong Kong and the UK took part in these experiments. The empirical findings allow for a fuller understanding of how people make decisions in retirement saving and of the potential biases they suffer from.

The PI and Co-Is have managed to disseminate the research findings in the form of research articles. And, Dr. Ricky Wong and Dr. Magda Osman held two presentation sessions at Hang Seng Management College, in 2015 and 2016 respectively. During our investigation of the framing effects on people's decisions, it came to our attention that the difference in the nature of MPF and ISA may confound our results (mandatory vs. voluntary factor). To properly address this issue, we carried out two additional experimental studies that examined this factor (mandatory vs. voluntary retirement scheme). The expense incurred from these additional experiments was covered by the HSMC research fund. The PI and the Co-Is contend that this arrangement has made the arguments/hypotheses tested more rigorous. Dr. Osman and the PI contend that we will be able to aim a highly impactful journal in which our work will be considered. We are now preparing the research article for consideration by *Journal of Experimental Psychology – Applied* or *Psychological Science*. In the published articles and the working paper, we thoroughly discuss how our findings provide insights into how the government should regulate the way the information about MPF and ISA is presented to the public.

To strengthen the external validity of our laboratory studies, we recruited participants who were making MPF or ISA investment at the time of study. Nonetheless, some opportunities were given to HSMC students to contribute to our studies. Specifically, 80 students from HSMC took part in the pilot experiments. They were debriefed about the purposes and the expected pattern of results from our studies.

This funded project has brought together academics from Hong Kong and the UK. The international research collaboration has been further extended. As will be detailed in Section 12, this funded project certainly further shapes the career development of the investigators, by bringing international research collaboration with an academic from University College London, UK.

Summary of objectives addressed to date

Objectives <i>(as per 5.1/5.2 above)</i>	Addressed <i>(please tick)</i>	Percentage Achieved <i>(please estimate)</i>
1. To provide a comprehensive understanding of how people make decisions in real world situations, by examining how people may be susceptible to manipulations;	✓	100%
2. To communicate the findings to a multi-disciplinary academic and a non-academic audience through workshops aimed at engaging governmental sectors and investors of the community;	✓	100%
3. To provide empirical evidence that directly answers the following four research questions: a) Are people's decisions in the UK's ISA investment subadditive?; b) Are people's decisions affected by irrelevant anchoring information?; c) When retirement protection is framed differently (gain vs. loss), are individuals' decisions affected?; and d) Are individuals' decisions in mandatory and voluntary retirement savings different in terms of their susceptibility to biases?;	✓	100%
4. To provide students with research opportunities by contributing to parts of the experiments;	✓	100%
5. To further enhance the PI's and Co-Is' career development by the international research collaboration; and	✓	100%
6. To provide the HKSAR and UK governments with a guideline about how financial institutions should 'fairly' present the fund information to the public.	✓	100%

6. Research Outcome

6.1 Major findings and research outcome

(Maximum 1 page; please make reference to Part C where necessary)

We published the first research article entitled "*Saving for a better retirement: How risk attitudes affect choice of retirement scheme*", which shows the core findings from Studies 2 and 3. Our major hypotheses tested were the effects of personal risk preferences and irrelevant anchors on how people allocate their savings to products in MPF and ISA retirement schemes. We also hypothesised that individual risk attitude affected people's MPF and ISA risk exposure. To that end, the present findings have brought us feel-good and feel-bad news. The bad news is that irrelevant anchors (i.e. percentage of savings allocated to a fund in an exemplar form) presented to people seem to affect how they allocate savings to different retirement products, to a certain extent. In particular, people may end up with a risky retirement portfolio than they would have without being influenced by irrelevant anchors. The policy maker should guide how the service providers avoid irrelevant information, especially when it does not help people's decision making. The good news is that retirement investment decisions are largely determined by people's own risk preference. Risk preference is the prominent factor that determines people's risk exposure in MPF and ISA schemes. More importantly, both studies have suggested that risk attitude is sufficiently strong to mute the anchoring effects. In light of the significant role of individual risk attitude, we recommend that knowing one's preference is important.

We find the results from Studies 4 and 5 that examine the effects of attribute framing (i.e. positive frame: 20% making a loss versus negative frame: 80% making a profit) more impactful and interesting than those from Studies 2 and 3. When it comes to the context of retirement saving, framing effects were found at a macro level in voluntary retirement schemes. As predicted by our hypotheses, individuals contributed larger amount to the overall retirement saving when the retirement saving was framed positively than when it was framed negatively. This result is particularly alerting: Banks may decide how to present the chance of retirement saving products leads to profit (or losses). Attribute framing also affects the information-processing of individuals. When the retirement scheme is negatively labelled, individuals rely on a larger number of sources of information than when it is positively labelled. This finding, in particular, helps shed lights on the cautiousness of people's decision when it comes to investment decisions that are highly consequential.

The findings from Studies 4 & 5 and the additional experiments have shown that there are framing effects on how individuals perceive the extent to which MPF or ISA providers behave ethically. Under the negative frame (compared to positive), individuals in Hong Kong and UK judged that the banks were involved in unethical behaviour and provided them with misleading information.

6.2 Potential for further development of the research and the proposed course of action
(*Maximum half a page*)

We contend that our research has opened avenues for future studies on decision-making in retirement saving schemes. Firstly, our findings have shown that people's choices of retirement products are very different in voluntary and mandatory retirement schemes. Under the mandatory setting, people tend to invest more in risky products than they do under the voluntary setting. Future studies should focus on the appropriateness of mandatory (vs. voluntary) nature of retirement scheme in different countries.

Secondly, the findings from our Studies 5 and 6 that examined the attribute framing effect suggest that people's judgement and decisions are different when the retirement scheme is positively or negatively framed. It is plausible that the positive and negative frames trigger different cognitive processes that explain our findings. Further studies may consider the use of eye tracker that helps investigate people's attention to positive and negative information about retirement saving.

7. Layman's Summary

(*Describe in layman's language the nature, significance and value of the research project, in no more than 200 words*)

Over three million people in Hong Kong and 21 million people in the UK are saving for retirement under the Mandatory Provident Fund (MPF) and Individual Savings Account (ISA) schemes, respectively. Yet, we know very little about how factors such as risk attitudes and attribute framing (positive attribute or negative attribute of retirement saving) impact retirement investment choices. Firstly, our research shows that the profile of retirement investment portfolios was best predicted by personal risk attitudes. Recently, the Hong Kong government has implemented a MPF default system, known as Default Investment Strategy. If people contributing to MPF do not indicate their investment choices to the MPF provider, the MPF providers will, by default, make investment decisions on their behalf. However, this one-size-fits-all approach may be inappropriate. Individual risk preferences should be factored in.

Secondly, compared to positive framing, negative framing reduces the amount of money that people contribute to the retirement saving scheme, but leads to more cautious decision-making through relying on different information sources. In light of the fact that retirement decisions involve high levels of uncertainty, basing decisions on different information sources is likely to lead to less biased judgements and decisions.

Part C: Research Output**8. Peer-Reviewed Journal Publication(s) Arising Directly From This Research Project**

(Please attach a copy of the publication and/or the letter of acceptance if not yet submitted in the previous progress report(s). All listed publications must acknowledge RGC's funding support by quoting the specific grant reference.)

The Latest Status of Publications				Author(s) (denote the corresponding author with an asterisk*)	Title and Journal / Book (with the volume, pages and other necessary publishing details specified)	Submitted to RGC (indicate the year ending of the relevant progress report)	Attached to this Report (Yes or No)	Acknowledged the Support of RGC (Yes or No)	Accessible from the institutional repository (Yes or No)
Year of Publication	Year of Acceptance (For paper accepted but not yet published)	Under Review	Under Preparation (optional)						
2018				Wong, RS; Osman, M*; Wong, WH; Lin, Y; Ho, K	<i>Saving for a better retirement: How risk attitudes affect choice of retirement scheme, Psychological Reports 0(0) 1-18</i>	2016	Yes	Yes	Yes
		✓		Lin, Y*; Osman, M; Wong, RS; Harris, AJL; Wong, WH	<i>Nudged into Retirement</i>	No	Yes	Yes	NA
			✓	Wong, RS*; Osman, M; Wong, WH; Lin, Y	<i>How does framing retirement protection affect choice of investment and judged ethics of banks?</i>	No	No	Yes	NA

9. Recognized International Conference(s) In Which Paper(s) Related To This Research Project Was / Were Delivered

(Please attach a copy of each conference abstract)

Month / Year / Place	Title	Conference Name	Submitted to RGC (indicate the year ending of the relevant progress report)	Attached to this Report (Yes or No)	Acknowledged the Support of RGC (Yes or No)	Accessible from the institutional repository (Yes or No)
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July, 2015 Hong Kong	Anchoring-and-adjustment Heuristics in Retirement Protection	The 20 th Asia Pacific Decision Sciences Institute Conference	2015	Yes	Yes	Yes
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10. Whether Research Experience And New Knowledge Has Been Transferred / Has Contributed To Teaching And Learning

(Please elaborate)

1. Apart from providing local students with research opportunities as participants, the research assistant, Mr. Kasper Ho, was guided by the PI. Mr. Ho is now capable of using regression modeling, logistic modeling, univariate repeated measures, Qualtrics online platform and SPSS syntax commands for data coding and data merging. Mr. Ho has now completed a Master programme at City University of Hong Kong.
2. The PI has designed a course that will be considered as a General Education module, namely "Judgement and biases in everyday lives". The research findings stemming from this project will form a core part and will be integrated into this course.
3. The PI is currently leading three groups of final year project for the BBA-SCM programme this academic year. The PI thoroughly covered the major findings from this project with two of the three groups. And, these two final year project groups have extended some of the research ideas to a different context (supply chain management).

11. Student(s) Trained

(Please attach a copy of the title page of the thesis)

Name	Degree Registered for	Date of Registration	Date of Thesis Submission / Graduation
NA			

12. Other Impact

(e.g. award of patents or prizes, collaboration with other research institutions, technology transfer, teaching enhancement, etc.)

Research collaboration has been established with Dr. Osman and Yiling Lin from Queen Mary University of London, UK. The PI and Dr. Osman are currently working on other grant proposal. This project leads to collaboration with another research institution that was not expected in the first place, University College London, UK. The PI and the Co-Is submitted an article entitled "Nudged into Retirement" for which Dr. Adam Harris from University College London, UK is one of the co-authors. Without the FDS's support for this funded project, the collaboration with Dr. Adam Harris would be unlikely.

13. Public Access Of Completion Report

(Please specify the information, if any, that cannot be provided for public access and give the reasons.)

Information that Cannot Be Provided for Public Access	Reasons
Not applicable	

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THE LOCAL SELF-FINANCING DEGREE SECTOR**

FACULTY DEVELOPMENT SCHEME (FDS)

Completion Report - Attachment

(for completed projects only)

RGC Ref. No.: UGC/FDS14/H13/14

Principal Investigator: Ricky Siu-kuen Wong

Project Title: Systematic Biases in Hong Kong's Mandatory Provident Funds and UK's Individual Savings Account

Statistics on Research Outputs

	Peer-reviewed Journal Publications	Conference Papers	Scholarly Books, Monograph s and Chapters	Patents Awarded	Other Research Outputs (Please specify)
No. of outputs arising directly from this research project [or conference]	1 (published), 1 (under review) 1 (working paper)	1	0	0	0