RGC Ref. No.: UGC/FDS13/B01/16 (please insert ref. above)

RESEARCH GRANTS COUNCIL COMPETITIVE RESEARCH FUNDING SCHEMES FOR THE LOCAL SELF-FINANCING DEGREE SECTOR

FACULTY DEVELOPMENT SCHEME (FDS)

Completion Report

(for completed projects only)

- Submission Deadlines: 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.

Part A: The Project and Investigator(s)

1. Project Title

Corporate Social Responsibility, Income Distribution and Social Welfare

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

Research Team	Name / Post	Unit / Department / Institution	
		Vice President (Research), Chu Hai College of Higher Education	
Co-Investigator(s)	CHAO Chi-Chur / CHC Visiting Research Professor EE Mong Shan / CHC Visiting Research Fellow	Deakin University, Australia	
Others	LI Jie / CHC Visiting Senior Fellow	Jinan University, Guangzhou	

3. Project Duration

	Original	Revised	Date of RGC / Institution Approval (must be quoted)
Project Start Date	1 January 2017		
Project Completion Date	31 December 2019	31 December 2020	2 July 2020
Duration (in month)	36	48	2 July 2020
Deadline for Submission of Completion Report	31 December 2020	31 December 2021	2 July 2020

Part B: The Final Report

5. Project Objectives

- 5.1 Objectives as per original application
 - 1. Identify the short-run impacts of CSR activities on firm output and profits, with a focus on income distribution and social welfare;
 - 2. Ascertain the long-run effect of CSR activities on firm entry/exit in the industry by checking whether or not the CSR activities can raise the firm concentration ratio in the long run;
 - 3. Obtain the overall effects of CSR activities on income distribution and social welfare by assessing the short-run direct effect coupled with the long-run indirect effect via a firm entry/exit channel;
 - 4, Ascertain the income distributional and welfare effects of government policies complimentary to the CSR activities, such as lower taxes on foreign capital, on the economy.

5.2	Revised objectives N/A	
	Date of approval from the RGC:	
	Reasons for the change:	

5.3 Realization of the objectives

As the Principal Investigator, I assembled a team of Co-investigators and other researchers to conduct this project.

I together with Chao Chi-Chur of Deakin University in Australia and Li Jie from Jinan University in Guangzhou worked on developing the theoretical models and analyzing by using the models the various effects of corporate social responsibility or similar policy initiatives.

We engaged Mong Shan from Deakin University, Australia and Li Jie to visit us to collect data and conduct empirical tests for the models.

As a result, we have obtained rich and fruitful research outcomes. Three research papers were written and then published in respected SSCI journals. All publications acknowledged the support of the RGC grant. See the attachments.

In addition, the PI presented a paper at RMIT in Melbourne, Australia for sharing the research results with an international body of scholars. Useful feedbacks were received for improving the final versions of research papers.

5.4 Summary of objectives addressed to date

Objectives (as per 5.1/5.2 above)	Addressed (please tick)	Percentage Achieved (please estimate)
1 Identify the short-run impacts of CSR activities on firm output and profits, with a focus on income distribution and social welfare	$\sqrt{}$	100%
2.Ascertain the long-run effect of CSR activities on firm entry/exit in the industry by checking whether or not the CSR activities can raise the firm concentration ratio in the long run;	$\sqrt{}$	100%
3.Obtain the overall effects of CSR activities on income distribution and social welfare by assessing the short-run direct effect coupled with the long-run indirect effect via a firm entry/exit channels;	$\sqrt{}$	100%
4.Acertain the income distributional and welfare effects of government policies complimentary to the CSR activities, such as lower taxes on foreign capital, on the economy.	$\sqrt{}$	100%

6. Research Outcome

6.1 Major findings and research outcome

The above stated project objectives have been fully achieved by conducting academic research relating to the objectives, presenting the pertinent research papers at the conferences and having 3 research papers published in the internationally respected SSCI journals.

In particular, a coauthored research paper, "Environmental corporate social responsibility, firm dynamics and wage inequality," was published in the International Review of Economics and Finance, July 2018, pp 63-74.

This paper utilizes a general-equilibrium framework to examine the income distributional effect of firms engaging in environmental corporate social responsibility investment. The investment raises capital rental cost and hence widens wage inequality between skilled and unskilled workers in the short run. However, in the long run, the wage gap can be mitigated via the firm exit effect. See Attachment 1.

A second coauthored research paper, "corporate social responsibility, vertical product differentiation and international competition," was published in the Review of International Economics, June 2019, pp 1108-1125.

This paper shows that the tariff in an open economy will decrease if a foreign firm switches from a purely profit-driven firm to a CSR firm. When a firm's decision to switch to CSR is endogenous, only the foreign firm will become a CSR firm. See Attachment 2.

A third research paper coauthored with CC Chao on "informal stall business, income inequality and welfare in a dual economy" will appear in the International Review of Economics and Finance in early 2022. See Attachment 3.

This paper considers an emerging economy with a dual production structure and examines the income distribution and welfare effect of supporting the urban informal sector. The analysis is extended to the scenario that skilled labor is interested in migrating to the informal sector. The policy implications of CSR applicable to both formal and informal business can be deduced in the models accordingly.

In addition, a working paper on "corporate social responsibility, wage inequality and social welfare" was presented by the PI in the workshop on Chinese Economy and Finance, November 8, 2019, at RMIT, Melbourne, Australia. See Attachment 4.

Another coauthored working paper was drafted on corporate social responsibility and pay gap: evidence from China. See Attachment 5.

Several additional working papers on CSR (in Chinese) are drafted by Li Jia, a team member. See Attachment 6.

Note that all the journal publications and working papers acknowledged the support of the FDS grant from RGC.

6.2 Potential for further development of the research and the proposed course of action.

We can extend the current research in two directions. For theoretical analysis, we would study the implications of corporate social responsibility in an increasingly platform based economy. The platform economy model, developed by the PI and a team member, is utilized in their forthcoming paper in the Bulletin of Economic Research.

On empirical testing, the team members can continue to collect more relevant data to test the implications of the models.

7. Layman's Summary

Corporate Social Responsibility, CSR is considered a type of corporate self-regulation practice by private business. In other words, CSRs are actions voluntarily taken by private firms that go beyond compliance with regulatory requirements in areas that can benefit consumers, employees, or the general public, such as environment, safety, quality, or labor regulations.

CSR practice has been becoming more widespread worldwide in recent years. According to a report by the Governance and Accountability Institute published in 2017, the percentage of companies in the S&P 500 Index, which publishes a "Sustainability Report" that includes environmental, social, and governance (ESG) performance and achievements, increased from roughly 20% in 2013 to 85% in 2017.

CSR adopted by firms may be a strategic behavior to enhance profitability eventually. Firms anticipate benefits from corporate social responsibility, which may include gaining a large market share, corporate reputation and attracting high quality employees.

In this project, we have examined and analyzed the various effects of CSR on firm's output and profit in the short run when the number of firms in the industry is more or less fixed, as well as in the long run with free entry or exit. We also studied the overall impacts of CSR actions on a society's income distribution and welfare in both the short run and the long run.

We have studied the case where a foreign firm exports to a domestic market and competes with a domestic firm with a quality ladder in which the foreign product has a higher quality. It is found that the relationship between the foreign firm's profit and the degree of its CSR behavior follows an inverted U-shape regardless of the domestic firms CSR initiative. Thus, the foreign firm will conduct some positive level of CSR in equilibrium.

Furthermore, we consider an emerging economy with a dual production structure and examine the income distribution and welfare effect of supporting the urban informal sector. The analysis is extended to the scenario that skilled labor is interested in migrating to the informal sector. The policy implications of CSR applicable to both formal and informal business can be deduced in the models accordingly.

Part C: Research Output

8. Peer-Reviewed Journal Publication(s) Arising <u>Directly</u> 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	s of Publica	tions		Title and Journal /	Submitte			
Year of Publication	Year of Acceptance (For paper accepted but not yet published)	Under Review	Under Preparatio n (optional)	Author(s) (denote the correspond-ing author with an asterisk*)	publishing details specified)	d 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)	
2018				Mong Shan Ee*, Chi-Chur Chao, Leonard F.S. Wang, Eden S.H. Yu	"Environmental corporate social responsibility, firm dynamics & wage inequality", International Review of Economics and Finance, Vol. 56 Jul 2018 pp.63-74	31 Mar 2018	No	Yes	No
2019				Lie Li, Xingtang Wang, Baomin Dong and Eden S.H.Yu	"Corporate Social Responsibility, Vertical Product Differentiation &International Competition", Review of International Economics, Special Issue (June 2019)	No	Yes	Yes	No
2022	2021			Eden S.H. Yu and Chi-Chur Chao	"Informal Stall Business" International Review of Economics and Finance	No	Yes	Yes	No

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)
Nov 2019 RMIT University, Melbourne, Australia	"Corporate social responsibility, wage inequality and social welfare"	Workshop on Chinese Economy and Finance	No	No	Yes	No

10. Whether Research Experience And New Knowledge Has Been Transferred / Has Contributed To Teaching And Learning

The research outputs with new knowledge have been transferred to the academic community	7
via workshop presentation and 3 journal publications.	

These outputs have contributed to the teaching and learning by the investigators in their materials for classroom lecturing and discussions.

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
N/A			

12. Other Impact

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

The PI collaborated with Chao Chi-Chur of Deakin University in Melbourne, Australia and now a chair professor at Feng Chia University in Taiwan, EE Mong Shan of Deakin University in Melbourne, Australia, and Li Jie of Jinan University in Guangzhou.

13. Statistics on Research Outputs

	Peer-reviewed Journal Publications	Conference Papers	Scholarly Books, Monographs and Chapters	Patents Awarded	Other Rese Output (please spe	s
No. of outputs arising directly from this research project	3	1	1	0	Type Working paper	No. 2

14. 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
Nil	