Four Essays on Green-Competitiveness

by

Ms Shanyin CHEN
PhD Student
Department of Logistics and Maritime Studies
The Hong Kong Polytechnic University

Abstract:
The frequency and severity of natural disasters have been rising considerably in recent years, probably caused by the degradation of the ecosystems. The environmental issue has become an increasingly pressing crisis that calls for broad and collective actions from all institutions and individuals. The private sector has a key role to play in this endeavor, given that it is responsible for a large portion of the global negative environmental impacts and that it is the largest and most powerful global institution in terms of employment, financial power, and technological innovation capabilities. However, a majority of firms are not proactive to adopt environmental management (EM) practices due to the potential conflicts between these initiatives and their economic objectives. Resolving such conflicts, whenever possible, can serve as a powerful value proposition in motivating firms to explore the win-win opportunities that benefit both the natural environment and themselves. Such win-win opportunities are referred to as Green-Competitiveness (GC) in this project. This project endeavors to explore the generative mechanisms and contexts of GC that enable firms to gain competitive advantages from their EM practices. It seeks systematically to assess the link between Green and competitiveness, examine the strengths and weaknesses of relevant management theories in explaining the relationship, and propose prescriptive and actionable recommendations to practitioners.

This project adopts a mixed-method design using both qualitative and quantitative approaches to tackle the interesting yet difficult problem regarding GC. With the view to proposing a framework and practical recommendations through synthesized findings, it is comprised of four independent but logically connected essays:

• The first essay is a systematic literature review using bibliometric analysis and content analysis methods. It covers journal articles in English language published from 1987 to 2017 that examined the links between EM and business performance (referred to as “research front”) as well as their cited references (referred to as “intellectual base”). Included as Chapter II in the dissertation (“Chapter II Essay 1 – Green-Competitiveness: A Systematic Review”), the essay sets the scene and provides the historical and contextual background of this field for subsequent studies;

• Essay 2 is a meta-analysis (“Chapter III Essay 2 – Green-Competitiveness: A Meta-Analysis”) on the quantitative empirical studies identified in the first essay. It aims to assess the direction and strengths of the links between EM, environmental performance (EP), and GC, as well as to unravel the methodological factors causing mixed results in the empirical findings;

• Essay 3 (“Chapter IV Essay 3 – Green-Competitiveness: The Link in Between”) uses longitudinal qualitative and quantitative industry data from 2007 to 2016 to examine the synthesized findings from Essay 2. The samples include MSCI World firms from 23 countries. EM data are to be retrieved from their environmental sustainability reports and/or annual reports, self-reported objective EP data from Thomson Reuters Datastream and third-party rating EP data from KLD index, while financial data from Compustat. These data are to be standardized for comparability within and across sectors before Generalized Method of Moments is used for data analysis.

• After that, the fourth essay (“Chapter V Essay 4 – Green-Competitiveness: An Application in the Logistics Sector”) uses multiple in-depth case studies to investigate the challenges and potential application of competitiveness-driven EM initiatives by firms in practices. The sample cases include two third-party logistics service providers (LSPs) headquartered in the United States and China respectively. Semi-structured interviews and observations from field trips are to be used for data collection, and QSR NVivo will be used for content analysis. The case study method is chosen here to gain a deeper understanding and develop richer insights into the phenomena and potential of GC, and complement the generalizable findings from big datasets in previous essays. LSPs are chosen for two reasons: first, they play a key role in international trades and are at the frontline of influencing environmental impacts in their far-reaching activities across the globe; second, the logistics sector sits in the interface between manufacturing and services reflecting some of the characteristics shared by both, so the findings from such a study have the potential to offer implications that are applicable, to a certain extent, to both the manufacturing and service sectors.

Bio:
Helen Shanyin Chen is a PhD candidate in the Department of Logistics and Maritime Studies under the supervision of Prof. Edwin Cheng and Prof. Mike Lai. Her research interests include Green-Competitiveness, sustainable supply chain management, humanitarian logistics, and service supply chains.

Please email to winnie.wy.tang@polyu.edu.hk for enquiries.