GLOBAL FINANCIAL NETWORKS WITH SOCIALLY RESPONSIBLE INVESTING

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Socially responsible investing (SRI), also known as sustainable, socially conscious, green or ethical investing, is any investment strategy which seeks to consider both financial return and social good. It combines investors' financial objectives with their concerns about social, environmental and ethical (SEE) issues (Social Investment Forum). This investment concept has gained much more visibilities among the investors around the world recently. Ethical or socially responsible investing advocates the practices such as sustainable development, the advancement of human rights, and consumer protection. Screening and shareholder advocacy are two main ways of applying SRI principles in the investment practice (see [1] [2]). Besides ethical reasons, a better than average performance of the SRI related stocks contributes to another reason why SRI has been more popular recently. Research estimates by financial consultancy Celent predict that the SRI market in the US will reach $3 trillion by 2011. The European SRI market grew from €1 trillion in 2005 to €1.6 trillion in 2007. Although the amount of research on SRI has been increasing significantly in the past decade, the majority of them are focused on either qualitative or empirical research. Quantitative study is missing.

Q. Qiang, K. Ke and Y. Hu (2013) proposed a framework of the modeling financial network with socially responsible investing, however focusing on single country modeling. This study is to develop a framework for the modeling, analysis, and computation of solutions to multitiered international financial network problems with socially responsible investment. In the international financial network, both the sources of financial funds as well as the intermediaries are bicriteria decision-makers ([3]). These decision-makers seek not only to maximize their net revenues but also minimize risk with the risk being penalized by a variable weight. Furthermore, the intermediaries are socially responsible companies, who want to maximize their social responsibility levels. I will make explicit the behavior of the various decision-makers, including the consumers at the demand markets for the financial products. I then will derive the optimality conditions, and demonstrate that the governing equilibrium conditions of the international financial network economy can be formulated as a finite-dimensional variational inequality problem ([4][5][6]). Qualitative properties of the equilibrium financial flow and price pattern will be provided. This research extends my earlier paper regarding the modeling of financial networks with socially responsible investing to incorporate globalization and exchange rate risk.

Ref.:

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