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Author(s)	篠原, 直登
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Description	Supervisor:橋本 敬, 知識報科学研究科, 修士

# On dissemination mechanism for CSR (Corporate Social Responsibility): An Analysis with Agent Simulation

Naoto Shinohara (0750021)

School of School of Knowledge Science,  
Japan Advanced Institute of Science and Technology

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CSR(Corporate Social Responsibility)is conceptualize that Corporation have the activity to pursue economic efficiency and sociality in the business, involving the recognition as the agent in economy and society. CSR is desirable in terms of accomplish sustainability. So we need to study dissemination mechanism for CSR.

In this study, we analyze dissemination mechanism for CSR. We have definition about CSR as Corporation provide the quasi public goods together with private goods. We modeling the CSR as quasi-public goods provision game,and analyze with Agent Simulation.

We introduce two type agent layer model, one is Corporation the other is Consumer as Stakeholder ,and spatial structure.Corporation have input ratio for quasi-public goods ,per produce unit goods . its means that Corporation have a chance to determine price cut or input quasi-public goods. price cut and input quasi public goods have relation such as trade off.So, to determine the input ratio means determine the level of price cut and input quasi-public goods.Thus,Corporation strategy equal determine the input ratio.

On the other hand, Consumer have a value , weight income or contribution to quasi-public goods, and this two value have a relation of

trade off. Thus, Consumer have weight of ratio which value he have. Consumer have high weight of ratio means value contribution to quasi-public goods, while, Consumer have low weight of ratio means value income. When Corporation produce products, Corporation announce the input ratio for quasi-public goods. Consumer evaluate the products using own weight of ratio. The only difference of products is ratio of input which Corporation have. Consumer evaluate Corporation products in the way that near input ratio Corporation gets high score, and select product.

Good performance Corporation imitated by other Corporation. performance means selected number by consumer. Consumer have two type imitate direction, one is become lower weight of ratio, the other is become higher weight of ratio.

In this model, we define CSR as Corporation have higher inputs ratio, and we define dissemination mechanism CSR as many Corporation have higher input ratio for quasi-public goods.

To become many Corporation have higher input ratio, Consumer must have high weight of ratio. Namely, to disseminate CSR, we need to study how to disseminate higher weight of ratio in the Consumer side.

To answer this problem, we propose three model. The three types of model is as below;

model 1. consumer's weight of ratio for quasi public goods can change based on consumer's income model 2. consumer's weight of ratio for quasi public goods can change, and the direction of change is determined by spatially local criteria model 3. consumer's weight of ratio for quasi public goods can change, and the direction of change is determined by both spatially local and global criteria

By the result of computer simulation experiments, we find; (1) for the dissemination of CSR which means that many of corporations adopt high-level inputs, the direction of changes of consumer's weight of ratio need to be determined based on both spatially local and global criteria; (2) in model 3, if initial setting of consumer's weight of ratio for environment is above the threshold, then CSR can disseminate; (3) in model 2, we find varieties of consumer's weight of ratio as seen in our society and formation of "clusters" broaden in the entire space.

From those results, we conclude that many of consumers have high-level

of weight of ratio for dissemination of CSR. To spread of high-level weight of ratio among consumers, it is important that positive feedback mechanism between corporation's and consumer's input for quasi public goods. To work this feedback, in the evaluation of own weight of ratio, consumer use local and global criteria criteria.

Additionally, the result of the model that direction of change is determined by spatially local criteria, match actually case. In this model, to disseminate of CSR, we need to introduce global criteria. In actually case, we propose intensify the social global criteria.