The Local Government's Subsidy Game in Cultural Technology Industry Policies*

문화산업정책에서 나타나는 지방정부의 보조금 게임

Shin, Hee-Guon**

Recently, in Korea, including Busan, Gwangju, Daejeon, Bucheon and so on, local governments try to invigorate cultural technology industries with diverse policy tools as other local governments did in the developed countries. Cultural technology (CT) industries are becoming more important in "knowledge-based economies" - economies which are directly based on the production, distribution and use of knowledge and information.

1) In a 2006 survey (Ministry of Culture and Tourism, 2006a), astounding 33.7% of the principal CT businesses in Daejeon said they "need more financial support", 21.2% of those surveyed said they "need more facilities/equipment support" and another 21.2% said they "need more marketing support". They thought support for personnel recruitment (5.8%), technology consulting (3.8%), management consulting (2.9%), education/training academy (1.0%) and so forth respectively. So we can see that Local Government’s subsidy is very important as a CT industry policy tool.

* This work was supported by 2005 Overseas Research Grant of LG Yonam Foundation.
** I would like to thank Eric Rasmusen for the helpful suggestions provided on earlier drafts.
Knowledge or content, as embodied in human capital and in technology, has always been central to economic development. But only over the last decade has its relative importance been recognized in Korea, just as that importance is growing. As one of the representative industries in knowledge-based economies, CT industries also rest on the premise that understanding the linkages among the actors involved in innovation is the key to improving technology performance. The innovative performance of CT industries depends to a large extent on how these actors relate to each other as elements of a collective system of knowledge creation and usage as well as the technologies they use (Im, 2004). These actors are primarily private businesses, universities and public research institutes. The linkages can take the form of joint research, personnel exchanges, cross-patenting, purchase of equipment and a variety of other channels (Bilton & Leary, 2002). What is important is the web of interaction or the system, and many local governments want to induce this system by their policy tools.

II. Cultural Technology Industry

Cultural contents loaded on informational technology (IT) infrastructure are critical to cultural technology (CT) industries: movies, game, animation, character, broadcasting, music and so forth. CT industries have been characterized by the words, "environment-friendly", "knowledge-based" and "highly value-added". Also "one source, multi use" window effects and increasing returns to scale make CT industries more attractive. In 2005 year the total sales in Korean CT industries recorded 53,948 billion Won, and showed the annual growth rate of 7.8 % which is much greater than the GDP’s growth rate of 4.2 % (Ministry of Culture and Tourism, 2006b: 23). Especially the annual growth rate of game industry skyrocketed to 101.1 %. The annual growth rate of broadcasting industry was 11.1 % and that of movies industry was 9.0 %. So we can see that game, broadcasting and movies industries are growing much faster than the other CT industries in Korea. In 2005 year the total sales of the CT industries in Korea reached to 6.65 % of the GDP and 2.38 % of the GDP contribution ratio. Comparing with the fact that the average rate of CT industries’ contribution to the GDP is 6-7 % in the USA, Japan and so on, we can conclude that the potential growth rate of CT industries in Korea would be very high.

CT industry policies, however, are often criticized for the low outcome and intrinsic rent seeking behaviors. So it would be profitable to analyze the game between the local government and CT business on the subsidy to CT industries.