RISK AND ETHICAL GOVERNANCE OF NANO-CONVERGENCE TECHNOLOGY: AN INITIAL COMPARISON OF THE TECHNOLOGICAL IMPACT ASSESSMENT BETWEEN SOUTH KOREA AND TAIWAN

Kuei-Tien Chou^{*} & Hwa-Meei Liou^{**}

ABSTRACT

Nano-technology is increasingly applied to many diverse spheres. However, there are growing concerns over the ecological, health, labour, social and ethical implications of such technology. In recent years, these concerns have resulted in key players on the international stage increasingly investing in research and assessments into technology related risks. This paper compares Korea and Taiwan for their risk and ethical governance frameworks. It finds that South Korea has developed comparatively comprehensive economic, social, ecological, health and ethical assessments. In contrast, Taiwan has neglected to deal with the ethical and social uncertainty risks which nano-technology engenders. It points out the lacks of regulation for assessing the social implications and of public participation, among others.

KEYWORDS: nano-technology, convergence technology, social impact assessment, KISTEP, Basic Law of Science and Technology, EHS, technological democracy

^{*}Graduate Institute of National Development, National Taiwan University. The author can be reached at ktchou@ntu.edu.tw.

^{**} Graduate Institute of Technology Management, National Taiwan University of Science and Technology. The author can be reached at liouhm@mail.ntust.edu.tw.