

## Compilation and Analysis of Korean SME's Input-Output Table

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This study aims to compile applicable Korean SME's IO and to perform analysis based on its input-output structure for 2010 and 2012. In the procedure of these SME's IO, some major considerations are industry classifications, compilation process and statistical data base.

Industry classifications of this research is primarily based on classification system of the Bank of Korea, but focused on industries where dividing large enterprises and SMEs has implication. Aggregating basic 384 sectors, we handled 70 industries(two primary industries, 39 manufacturing, 4 SOC sectors, and 25 service sectors) and distinguished large enterprises and SMEs.

Our research team made data base for the two point of time based on Economy census, Survey on Sales and Buying of SMEs for 2010 and Industrial statistics such as Mining & Manufacturing survey, Service Industry Survey, Census on Establishments and so on for 2012 because economy census was not conducted by STATISTICS KOREA.

Compilation of SMEs IO is basically composed of six steps. First, we build a product-by-industry table by using the data base. Second, we adjust input side by compiling commodity-output table of SMEs after reorganizing the data base from establishment to firm level. Third, we adjust output side by using product-by-industry table. Fourth, we adjust final demand part by using export and import share of SMEs data in Korean trade statistics. Fifth, we make transactions table that depicts input-output structure of large enterprises and SMEs by balancing each sector. Lastly, we make import transactions table by applying import coefficients of national IO table by the Bank of Korea. Also, we showed that analysis using input coefficients of SMEs IO table is economically meaningful by testing HS conditions.

After these Korean SME's IO, our research team carry out analysis for the economic impact for indirect export of SME and public supply system oriented to SME. First, a lot of SMEs have contributions to Korea exports indirectly as providers of intermediary good to large company. However, theirs contribution is not apparent on the official trade data. This study shows the SME's indirect contribution in terms of value-added and labor. The contribution of SMEs is greater than the surface from trade data. Second, Korean government have managed on the public supply system to support SMEs by making any public institutions and offices purchase good of SME. Using 2010 and 2012 Korean SME's IO, the policy of public supply is analyzed. According to the results, the public supply policy has have an important role to vitalize and grow up SMEs.