Effect of Changes in Terms of Trade on Economic Growth*

Changes in terms of trade are known to change real income and effect income, investment, savings, current account and economic growth, i.e. macroeconomy of a nation as a whole. Terms of trade in Korea from the 1970s until the early 1980s sharply fluctuated due to the volatile movements of import prices in the wake of the oil crisis with export prices steadily increasing. During this period, when terms of trade worsened, domestic business activities subdued; in short, changes in terms of trade were closely linked with business cycles. From the mid-1980s, however, as export prices, rather than import prices, played a more influential role in changes in terms of trade, linkage between terms of trade and business cycles became loosely knitted. Particularly from the mid-1990s, terms of trade continued to worsen as export prices fell steeply in line with the won's depreciation and Korea's major export items reaching global market saturation.

This study analyzes the effect of changes in terms of trade on economic growth. Unlike previous studies, it takes account that the extent of impact can vary depending on the factors of changes in terms of trade. For instance, if terms of trade worsen due to the price rises in imports, not just consumption and investment but also volume of exports will contract, bring forth GDP decline. However, in case terms of trade worsen, triggered by the price falls in exports, consumption and investment will dampen, but price competitiveness of Korea's export items will boost export volume, and subsequently GDP growth. This clearly sheds light on the fact

that relationship between terms of trade and business cycles in Korea has weakened since the mid-1980s with export prices declining.

This study divides the factors of changes in terms of trade into two: export and import prices; then it analyzes the respective effect on consumption, investment, exports and GDP through simulation tests. The result is the same as expected. When terms of trade worsen due to the decline of export prices, consumption and investment reduce while exports increase, resulting in the expansion of GDP. But when terms of trade worsen due to the rise of import prices, domestic consumption, export along with GDP decrease.

This study shows that the effect of worsening of terms of trade on GDP varies depending on the contributory factors, but that on investment, which is essential for the expansion of consumption and potential economic growth is negative in any case. Accordingly, it is desirable to improve terms of trade. To this end, Korea should strive to strengthen the competitiveness of its export items not by lowering export prices but by expanding investment in R&D and increasing the product quality. It should also exert its effort to open new export markets and diversify the export items so as to reduce export dependency of some of its major items, including DRAMs with high price volatility.

* The views expressed here are those of the author, and do not necessarily reflect those of the Bank of Korea.