Dutch Disease in Mongolia: Empirical Evidence

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This paper reviews the experience of Mongolia with natural resource booms. The core question is how the "windfall" or boom of the natural resource production in the economy has influenced the manufacturing. Thus, the main hypothesis examined is that of the "Dutch Disease", the argument that a resource boom will cause a contraction of the manufacturing sector within Corden and Neary (1982) framework.

The statistical outline of Mongolian experience with natural resources is supportive of the prediction that the resource sector "crowds out" the manufacturing sector. The contribution of the mineral resource sector to the total value added showed sharp and persistent increase following the resource boom periods of 1990s and recent 2010s. In contrast, the manufacturing sector stayed stagnant.

The formal cointegration and related VECM analysis also support the argument that manufacturing decline is systematically and predictably related to mineral resource booms, both in short and long-run. The Johansen cointegration test indicates a long-run tradeoff between the two sectors. One percent increase in physical resource production is followed by more than double the percent contraction in the manufacturing. The variance decompositions derived from the VECM suggest that a large percentage as 47% of manufacturing output variance is attributable to developments in the domestic resource production in Mongolia. Moreover, the impulse response functions show a significant long-term adverse effect on manufacturing arising from resource boom and resource price rise. Overall, the paper successfully presented the evidence in support of the Dutch Disease in Mongolia.

The results may be improved or may become more convincing by running log Likelihood test of restrictions on estimated cointegrating vectors. Also, further study includes theoretical improvements of the Dutch Disease argument.