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Indirect Steel Trade in the Postwar Japanese Economy

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Abstract

Since the late 2010s, when the signs of a full-scale acceleration of global decarbonization policies began to emerge, steel production in Japan and Germany has declined almost linearly. While this decline is generally attributed to weak domestic demand, understanding changes in domestic demand within the steel industry, which primarily produces intermediate goods, requires identifying the sources of final demand. This study examines recent trends in steel production decline while measuring structural changes in Japan's direct steel trade and indirect trade through downstream products in the postwar economy.

In contemporary Japan, trends in domestic steel demand are heavily influenced by changes in indirect exports and imports, which are not readily observable in conventional statistics. Since the late 1980s, Japan's indirect exports of steel have exceeded its direct exports. Additionally, the effective import dependence of steel (the sum of direct and indirect imports) has consistently increased since the late 1970s. Until around 1990, this rise was driven by an expansion in direct imports, whereas since the late 1990s, indirect imports have played a more significant role. If the acceleration of decarbonization policies further facilitates the offshore production of downstream products such as automobiles and machinery, the contraction of indirect steel exports and the expansion of indirect imports may lead to a self-reinforcing cycle of deindustrialization, exacerbating the decline in domestic production. Without considering indirect trade, such production decline risks being misinterpreted as merely a consequence of weak domestic demand.

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