

Productivity of production labor, non-production labor, and capital: An
international study

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Abstract

Productivity is defined as the amount of output produced with certain combinations of input resources (capital, labor, etc.). Recent studies have indicated the value of non-production labor (e.g., engineers, product designer, quality inspectors, and administrators) to a manufacturing plant's productivity. However, the effect of non-production labor compared to other input resources such as production labor and capital on factory productivity has not been fully investigated. Without understanding how individual input resources affect productivity, manufacturing firms can mismanage resource investment, which will ultimately hinder the growth of productivity. This study examines the relative effect of input resources on factory productivity across countries. We use data collected from 508 manufacturing plants in 16 countries to estimate and compare productivity of input resources between countries. Statistical results are presented and directions for future research are suggested.

Keyword : International management; Manufacturing strategy; Factory productivity; Non-production labor; International manufacturing