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Fixed capital stock depreciation in developing countries: Some evidence from firm level data

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Notes

1. Easterly and Rebelo ([1993](#)) use the depreciation rate of 7 per cent uniformly for all countries and all periods, as compared to 0.04 in Nehru and Dhareshwar ([1993](#)). Penn World Table 5.6 uses 15 per cent for machinery, 24 per cent for transport equipment, and 3.5 per cent for constructions including both residential and non-residential structures.
2. The aggregate capital stock data sets currently available for economic research are constructed by using the perpetual inventory method and the standard assumptions about the capital depreciation rates.
3. In the presence of inefficiency, as argued in Pritchett ([1997](#)), the accounting cost incurred by firms is higher than the replacement cost of the capital stock, which is defined as the cost of replacing the capital stock at current prices. The accounting cost is given by the replacement cost plus the cost of inefficiency.
4. As Leontief ([1955](#)) argued, the depreciation rate is not the same for all types of capital. Also even for the same type of capital, the depreciation rate may vary over time. In this sense that the depreciation rate is not constant, the accounting cost of capital is higher than the replacement cost. The accounting cost of capital is the replacement cost plus the cost of inefficiency. The replacement cost is the cost of replacing the capital stock at current prices. The accounting cost is given by the replacement cost plus the cost of inefficiency. The replacement cost is the cost of replacing the capital stock at current prices. The accounting cost is given by the replacement cost plus the cost of inefficiency.
5. Net book value is the value of fixed assets less accumulated depreciation. It is approximately equal to the replacement cost of capital.
6. The capital depreciation rates are determined by the physical depreciation of capital. The physical depreciation rates are determined by the physical depreciation of capital. The physical depreciation rates are determined by the physical depreciation of capital.



vary in response to various factors such as corporate tax policies, and reallocation of physical capital assets across firms and sectors.

7. Such factors may include the corruption surcharge in corporate procurement of assets, which may differ across firms.

8. However, if firm-specific investment goods deflators are used for each individual firm, such deflators, which are calculated from the replacement values for the firm's fixed assets and investment, could be heavily biased due to measurement errors and reporting errors.

9. Using the equipment level data from aerospace industry auctions, Ramey and Shapiro ([2001](#)) show that capital is sector-specific, and reallocation of sector-specific capital, combined with thinness of asset resale markets, results in substantial decline in market value.

10. Undermaintenance on public capital in particular is commonly observed for many developing countries (World Bank, [1994](#)).

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