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

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Abstract

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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 during creating new capital may well exceed the economic cost, which is defined as, by Pritchett, the minimum cost of creating the same amount of capital given the optimal (or undistorted) market prices of investment goods.
4. As Leonard ([1985](#)) points out, there is no systematic financial account in the government budget. Also even if the government budget is balanced, it yields a net investment expenditure. Net investment expenditure is the cost of fixed capital formation less depreciation. It is an approximation to the net investment expenditure. The net investment expenditure are defined as the net investment expenditure over the period under study. The net investment expenditure level, should



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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