The Journal of Development Studies ›
Volume 42, 2006 - Issue 5

Original Articles

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

Yisheng Bu

Pages 881-901 | Received 01 Dec 2004, Published online: 23 Aug 2006

Cite this article https://doi.org/10.1080/00220380600742183

Abstra

Previous … and
mismeas … g the firm
level dat … omic
depre … seven
deve … nay
deprecia … rates
usually … s the
economi … pital
appropri … roductivity
(TFP) gro

Acknowledgements

The author is indebted to George von Furstenberg and two anonymous referees for their review, very valuable comments and suggestions. The author is solely responsible for any remaining errors and omissions.

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 ... hich is defined ... capital given th ...

4. As Le ... the governm ... e capital. Also eve ... e sense that it yields ... aintenance expe ... ment.

5. Net b ... cost of fixed ass ... s an approxi ...

6. The c ... tion are de facto the ... e period under study. However, the capital depreciation rates, especially at the firm 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).