Estimating Profit, Price, and Productivity Changes in Water Industry Using Bennet-Bowley Indicator

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Abstract

The assessment of profit, productivity, and price change over time is valuable for regulators and companies when setting tariffs. This paper innovates by comparing profit, price, and productivity changes for English and Welsh water services between water and sewerage companies (WaSCs) and water-only companies (WoCs) over the period of 2001–2009. The Bennet-Bowley indicator (BBI) was used to estimate productivity change over time at industry and company levels. The findings of this study show that the imposition of price cap regulation increased companies' profits, primarily due to a positive price effect. Moreover, the tightened price review in 1999 had a small, positive impact on the productivity of companies. In contrast, the introduction of new price limits in 2004 did not have a positive impact on companies' productivity: WaSC and WoC performance improved only in 2004 and 2005. Finally, WaSCs showed higher levels of performance than WoCs. This study provides essential information to policy makers and water company managers so that they can improve decision making aimed at enhancing water industry performance..