

The Power of Accounting: Capitalization of Cloud Computing for Utilities

Abstract:

This study investigates the real effects of accounting among utilities. Approval from a state public service commission to capitalize costs and include them in the rate base allows utilities to earn a rate of return on those costs. Following changes in U.S. GAAP related to the accounting for cloud computing costs, some utilities received approval from their state public service commission to include cloud computing costs in their rate base while other utilities made no such request. Using a difference-in-difference design, we find utilities with approval to include cloud computing costs in their rate base increase their investment in cloud computing, generate greater revenue per kilowatt hour from their customers, receive fewer and lower regulatory penalties, and have less frequent power outages for customers. Increased investment in cloud computing and greater operational benefits are magnified in states with more experienced public service commissioners while these changes are less costly to customers. Our results provide evidence of the impact of accounting on both investment decisions as well as operational outcomes.