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Effect of Financing Practices on Sustainability of Water and Sanitation Companies in Kenya

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Abstract

Sustainability of water and sanitation services is categorized as a global problem. Water and sanitation is number six of the worlds' seventeen sustainable development goals and an enabler to the achievement of all the other SDGs. Watsan sustainability involves improved access, acceptable water quality against growing demand. Access to watsan is a primary challenge globally due to its multifaceted use. Africa has the lowest freshwater resources (9%), while America has the highest (45%) at the global level. Asia follows (28%) and Europe (15.5%) in that order (Mugagga, 2016). Water scarcity exacerbated by climate change and increased demand will cost an estimated 6% of the GPD by 2050 due to impacts on agriculture, health and employment. Kenya with an estimated population of 53 million people has been classified as a water scarce country. Approximately 53% of the Kenyan population lack access to safe water while 77% have no access to improved sanitation thus making watsan access a national problem. Government spending on water development has significantly reduced from approximately Kshs46b in 2021 to Kshs.45b in 2022. The achievement of sustainability in the watsan, financing of up to 5 times the present level is needed. WASCOs continue registering high water loss annually resting at Kshs.11.2b in 2022. These statistics makes sustainability of water and sanitation in Kenya a national problem. Empirical studies shows that effective financial management practices contributes to firm sustainability. This study examined the influence of financing practices on sustainability of WASCO in Kenya guided by the pecking order theory. A positivism research philosophy was adopted with a descriptive research design. A sample of 46 companies was purposely selected from the 91 licensed WASCOs in Kenya. A likert scaled questionnaire was used to collect primary data. Secondary data was obtained from the annual impact reports by WASREB. Reliability was assessed using the Cronbach's alpha coefficient while validity was assessed through Kaiser-Meyer-Olkin test and Bartlett's Chi-Square test of Sphericity. Diagnostic tests included; normality, outliers, autocorrelation, multicollinearity and Gaussian distribution using Q-Q plot, box plot, Durbin-Watson d statistics, Tolerance & VIF statistics and Pearson's correlation coefficient respectively. A bivariate linear model was employed for inferential analysis. Results show the model explained approximately 45.1% of WASCO sustainability. ANOVA show F-statistics of 36.080

with a p-value of 0.000 indicating existence of a statistically significant influence of financing practices on sustainability of WASCO. Beta coefficients results for financing practices show $\beta=27.834$ and p-value of 0.000 which was significant. The study recommends the strategic deployment of financing practices as they strongly influence the sustainability of water and sanitation companies in Kenya.

Keywords: Sustainability, Tariff, Government Financing, Debt