

**DANIEL MOKATSANYANE**

North West University , South Africa

## **RISK MANAGEMENT OF WATER DERIVATIVES: A NEW COMMODITY IN THE MARKET**

### **Abstract:**

This paper is a concise introduction of the risk management on water derivatives market. Water, a new commodity in the market, is one of the most important commodity on earth. As important to life and planet as crops, metals and energy none of them matters without water. This paper presents a brief overview of water as a tradable commodity via a new first of its kind futures contract on the Nasdaq Veles California Water Index (NQH20) derivative instrument, The Generalised Autoregressive Conditional Heteroscedasticity (GARCH) statistical model will be used to measure the water price volatility of the instrument and its performance since it's been traded. describe the main products and illustrate their usage in risk management and also discuss key challenges with modeling and valuation of water as a traded commodity and finally discuss how water derivatives may be taken as an alternative asset investment class.

### **Keywords:**

water derivatives, commodity market, Nasdaq Veles California Water Index (NQH20, water price, risk management.

**JEL Classification:** C22, Q02, Q25