

# **The Bullwhip Effect in Supermarket Supply Chain: Development of a Research Framework and Future Directions**

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## **Abstract**

The conceptual paper is an attempt to investigate the root cause of bullwhip effect in a supermarket supply chain context. Extant literature is reviewed to understand the phenomenon, its effect in a supply chain and to identify demand management being a trigger of all that causes to happen it. After careful analysis of all the mathematical and simulation models and the related variables used in literature, this study has developed a conceptual overarching framework that will investigate the bullwhip effect in a supermarket context. It is proposed that a mailed survey method will be adopted to collect self-reported data from the supermarket, its upstream suppliers and downstream small retailers that ideally constitute a supply chain in this study. The data will be analysed using a series of statistical test for non-response bias, multicollinearity, unidimensionality, discriminant & convergent validity, and confirmatory factor analysis as a measure of data reliability and validity. Propositions will be tested using hierarchical regression using PASW statistics and path analysis using AMOS. The research will end up with suggesting bullwhip effect mitigation strategies to help the supermarket managers for effective and efficient operations.

***Key words:*** *Bullwhip effect, supermarket, demand management*