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The Bullwhip Effect in Closed Loop Supply Chain: a Systematic Literature Review

BRAZ, A.C. ^{a,*}, DE MELLO, A.M. ^a, VASCONCELOS GOMES, L.A. ^a, NASCIMENTO, P.T.S. ^a

a School of Economics, Business Administration and Accounting at the University of São Paulo (FEA/USP)

** Corresponding author, acarlosbraz@hotmail.com**

Abstract

The bullwhip effect one of the most studied phenomenon in forward supply chains is also growing interest from the academia to be studied in closed loop supply chains. This paper aims to compare the bullwhip effect causes and factors in forward supply chains with those for closed loop supply chains. The methodology used was a systematic literature review of the papers that were published in academic journals and conferences about bullwhip effect in closed loop supply chains. We find that the factor: increasing product return rate to mitigate or decrease the bullwhip effect was quantitatively the most representative, since this factor is fundamentally inherent of the closed loop supply chains dynamics, we have proposed that implementing the closed loop supply chains instead of the forward supply chains can reduce or even eliminating the bullwhip effect.

Keywords: *closed loop supply chain, bullwhip effect*
