U.S. fiscal sustainability and the government expenditure–revenue nexus: a new approach based on quantile cointegration

Pei-Fen Chen¹* (陳珮芬) and Chien-Chiang Lee²
¹Department of International Business Studies, National Chi Nan University
²Department of Finance, National Sun Yat-sen University

Abstract

This paper aims to reinvestigate the issue of U.S. fiscal sustainability by using the quantile cointegration approach proposed by Xiao (2009). Our empirical evidence indicates a time-varying cointegrating relationship between government expenditures and revenues. In addition, this paper examines the long-run causality relationship between expenditures and revenues by using the vector error correction model (VECM) with time-varying coefficients. Findings from the long-run Granger causality analyses support the spend-and-tax hypothesis.

Keywords: fiscal sustainability, quantile regression, granger causality, time-varying cointegration