

Abstract

This thesis explores spillover dynamics between cocoa futures and currency pairs. Intercontinental Exchange U.S. and Intercontinental Exchange Europe cocoa futures contracts are both included in the analysis. United States dollar, British pound, and Swiss franc are selected as global currencies, and Ghanaian cedi is chosen as the currency of Ghana, a cocoa-dependent country. The empirical analysis covers a period from July 2007 to May 2024. Univariate GARCH modeling confirms that cocoa futures contracts have been experiencing unprecedented volatility in 2024. VAR-DCC-GARCH model is used to explore conditional correlations between the assets. The correlation between cocoa contracts is very strong, with occasional episodes of temporary decline. Conditional correlations between cocoa futures and currency pairs are weak and vary over time. Bivariate VAR-BEKK-GARCH models are applied to explore the presence of spillovers in mean, shocks, and volatility across assets. Additionally, the models are estimated for four subsample periods. The degree of spillover differs in full sample and subsample analysis and varies across individual periods. Notably, spillovers between cocoa futures and the currency pairs are the most widespread during the most volatile period covering the Great Financial Crisis and the European Sovereign Debt Crisis, confirming that spillover between the asset classes increases substantially in periods of financial stress.

JEL Classification F12, F21, F23, H25, H71, H87

Keywords volatility, spillover, cocoa futures, currency pairs

Title Volatility spillovers between Cocoa Futures markets and selected currency pairs