

# UNBIASEDNESS AND COINTEGRATION TESTING: THE CASE OF AFET

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## ABSTRACT

*This paper studies the efficiency in the Agricultural Futures Exchange of Thailand or AFET by means of the unbiased expectation hypothesis of futures. With non-stationarity problem in financial time series leading to unreliable results, this paper applies Cointegration methodology to solve the problem and employs the unbiased expectation hypothesis as the model for the empirical test. Though futures and spot prices are cointegrated, the rejection of the parameters restriction test is found. The final result shows that the futures of Ribbed Smoked Sheet no.3 (RSS3) is the only unbiased predictor, while White Rice 5% (BWR5) and Tapioca Chip (TC) are not.*

## INTRODUCTION

Market Efficiency was first defined by Fama as when the prices of assets fully reflect all available information about the assets themselves, while investors employ this relevant information to form buying or selling decision without a chance of gaining abnormal profit, restated by Jones (2002).

If there is efficiency, futures should be an unbiased predictor. When unbiasedness exists, the economy, the market and relevant people would obtain benefits. He and Holt (2004) propose that efficient market lessens welfare losses for producers and consumers. This is because when the market is efficient, abnormal profit which leads to speculative opportunity disappears. Thus, when there is no speculation, production or consumption fluctuation caused by speculation should be lesser. Each trader is able to use the right hedging instrument to lock in the price risk.

More specifically, Moholwa and Phukubje (2006) have stated that if efficiency exists in the agricultural futures market, futures will be the most reliable forecaster of the future spot price. For the agents in food chain, the information contained in the futures price provides very important implications for resource allocation.

Wang (2003) confirms that efficient agricultural futures markets are important to governments

and producers. Governments can benefit from the efficient market by not having to impose any intervention on the market or introducing policies to stabilize the prices since these have been performed by the efficient futures market. Producers or marketers use futures as an unbiased predictor giving better opportunity to manage risk. The efficiency also eliminates the abnormal profit that can be surely guaranteed, so prices reflect the real equilibrium of supply and demand in that market.

As the existence of the market efficiency is beneficial for the economy, this research seeks to answer: The question Are the futures in AFET or The Agricultural Futures Exchange of Thailand unbiased?

## The Agricultural Futures Exchange of Thailand (AFET)

AFET is an independent juristic person established in 1999 under the provisions of the Act to run the exclusive agricultural futures exchange in Thailand regulated by the Agricultural Futures Trading Commission. The Exchange is aimed to be the marketplace of trading agricultural futures with established rules and regulations offering fairness to all buyers and sellers. AFET is the first, and only, agricultural futures market operating at the present time.