Tayanee Huabbangyang 2013: Returns and Open Interest Relation in Futures Exchanges. Master of Science (Agro-Industrial Technology Management), Major Field: Agro-Industrial Technology Management, Department of Agro-Industrial Technology. Thesis Advisor: Assistant Professor Tanachote Boonvorachote, D.B.A. 134 pages.

This research studies lead-lag and long term equilibrium relationship among four variables which are return, volume, volatility, and open interest. Vector Autoregressive (VAR) and Vector Error Correction Model (VECM) are applied to explore the variables effects on future contact. The results reveal that there is a relationship between four variables and the price change for both lead-lag and long term equilibrium of every contract studied in this research. From running VECM, the result shows that the system will reduce variance and become equilibrium in long term. In addition, from variance decomposition and impulse response function analysis, we founded that most variables have an influence on themselves more than 50% and trading volume also has an little influence on price volatility meaning that trading volume disturbs the price volatility in noise form and does not reflect any fundamental information of the future price. Because trading volume and open interest have a little influence on return for both developed futures exchanges and emerging futures exchanges show good effectiveness of both markets for price hedging. On the other hand, the relationship between trading volume and open interest is more than other variables, and this relationship is bi-directional. However, from variance decomposition analysis, we can see that trading volume has more influence on open interest. This means that open interest is leaded by trading volume. And the more liquidity futures contracts (stock exchange futures for example) will demonstrate influence of the trading volume, and open interest on price change more than rubber futures contracts.

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