Daelemans, Bram; Daniels, Joseph P.; Nourzad, Farrokh

Free trade agreements and volatility of stock returns and exchange rates: evidence from NAFTA. (English) Zbl 1412.91092

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Summary: This paper uses GARCH models and daily data to investigate the effect of the Canada – U.S. Free Trade Agreement (CUSFTA) and NAFTA on the volatility of, and the relationship between stock market returns and changes in bilateral exchange rates of the member countries. Empirical results indicate that the CUSFTA had a stabilizing effect on the Canadian and U.S. equity markets while increasing the volatility of the CAD/USD exchange rate. NAFTA further reduced the two stock markets' volatility, however unlike CUSFTA, NAFTA also reduced the volatility of the CAD/USD exchange rate. Additional results indicate that during NAFTA, the Mexican stock market is more volatile than the other stock and bilateral exchange markets. Moreover, the exchange rate of the Mexican peso against both the U.S. and Canadian dollars has been more volatile than the Canadian dollar/US dollar exchange rate. Evidence also suggests that all three stock markets are positively correlated with each other with the U.S. market being much less correlated with the Canadian and Mexican stock markets than the latter two markets are correlated with each other. Evidence found in this paper suggests a negative relationship between the stock and bilateral currency markets that is statistically significant except for the U.S. equity market when paired with an exchange rate that involves the Mexican peso.

MSC:

91B60 Trade models
91B64 Macroeconomic theory (monetary models, models of taxation)
62P20 Applications of statistics to economics

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free trade agreement; NAFTA; volatility

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