The Dynamic Interrelationship between Industrial Indices of the Developed Countries ：Evidence from the Pre- and......

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ABSTRACT

The purpose of this paper is to examine the dynamic relationship among the United States, Japan, the UK and Germany stock markets at the industry level during the pre and post - the 2008 global financial crisis periods. We use Johansen cointegration test, Granger causality tests, impulse response analysis, and variance decomposition to analyze the dynamic interrelationship between industrial indices. The empirical results have indicated as follows: First of all, the four countries of the various types of shares neither cointegration relationship during the pre-crisis period but the cointegration relationship is found in six industrial indices during the post-financial crisis period. This indicates that the linkage among four stock markets at the industry level strengthens after the financial crisis. Secondly, Granger causality test finds that the short-term interaction between the four countries increases after the financial crisis. And the financial crisis has significantly enhanced the global stock market ‘ lead – lag ” causality relationship. In the post-financial crisis, the linkage relationship between the six cointegrated industrial indices raised. Finally, as for the result of the variance decomposition analysis, it is found that in most of all stocks, the United States owns the highest powerful abilities to assess the variation of the other countries; however, the other countries have limited abilities to assess the United States ’ s variation. In conclusion, the national industrial indices relations between countries have strengthened significantly by the financial crisis. So we recommend investors to assess the linkage among different markets at the industry level to construct the international portfolio and have to be more cautious for the best asset allocation.

Keywords : Financial Crisis, Dynamic Interrelationship，Industrial Indices

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