STOCK MARKET INDICES AS INDICATORS OF INERTIA OF THE GLOBAL FINANCIAL SYSTEM

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Recent global cascade of recessions and financial crises have revealed lack of adequate factors for assessing the degree of globalization in general as well as strength and stability of financial and economic ties between different countries. We address this issue in terms of inertia of economic and financial interconnections between countries and apply it for the analysis of stability of those interconnections in crises.

The method of time-shift asymmetric correlations (Aityan et al., 2010) suits well for assessing the inertia of global economic and financial ties. This method is based on differences of trading time in different markets around the world that can be used for determination of "leading" versus "following" markets on the global scale.

In our analysis, we have identified the "leader-follower" pairs of markets and noticed that some pairs of markets flipped the roles during the recession and crisis time while some pairs of markets have kept their "leader" and "follower" roles. We called this phenomenon a "flip-flop" effect. For example, time-shift correlation analysis of Japanese versus US stock markets showed that Japanese stock market has kept its "follower" role against the US stock market during the recent recession. On the other hand, some Asia-Pacific markets like Hong Kong and Singapore which were normally in the "follower" role versus the US market, switched their roles during the recent recession and became the leading markets. As the recession eased up, the roles switched back to the normal "follower" role. This effect suggests that these stock markets showed higher flexibility to adjust to rapidly changing economic and financial reality during the recession time than a "heavy" or more inertial American stock market.

We tried to identify the primary factors responsible for the observed flip-flop effect. Our analysis included GDP/GNI (total and per capita), trade volume of goods and services and net FDI flows between the appropriate pairs of countries. We also believe that differences in structure of economies may affect their flexibility to adjust to rapidly changing environment.

References.

1. Aityan, S.K., A.K.Ivanov-Schitz, and S.S Izotov, 2010. Time-shift asymmetric correlation analysis of global stock markets, Int. Fin. Markets, Inst. and Money, 20, 590-605.