Stay at Home: Flight-to-Safety and Home Bias in U.S. ETFs During COVID-19 Pandemic

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Background
Since the beginning of 2020, the COVID-19 pandemic has turned into the most challenging and urgent task for almost all governments and communities across the world. The severity and high level of contagiousness of this disease have disrupted the supply chain and workforce of the world and resulted in an unprecedented impact on financial markets (Sharif, Aloui, & Varvaro, 2020). While the adverse effect of the COVID-19 crisis has not been homogeneous across the countries, it has influenced the variance of the US and Europe’s stock markets more than the 2008 financial crisis. Moreover, recent pandemic plummeted foreign investment by almost 50% across the globe for the first half of 2020, the largest decline on record, according to the Wall Street Journal.

In this study, we employ a novel approach to investigate investors’ reactions to the pandemic by examining new money flows into U.S. ETFs with exposure to the U.S., Europe, and Asia. In other words, we employ the money approach to examine whether U.S. investors adjust the distribution of assets in their portfolio in response to COVID-19 outbreak in a given geographic location. To this end, we set to find out the joint distribution and linkage between assets with different geographic exposure. A good understanding of the linkage between the assets with different geographic exposure is a key element in portfolio management. This joint distribution, however, may not remain constant over time. As a result, investors would require information about the conditional joint distribution of assets to maintain dynamic portfolio rebalancing strategies.

Objectives
In this study, we employ a novel approach to investigate investors’ reactions to the pandemic by examining new money flows into U.S. ETFs with exposure to the U.S., Europe, and Asia. In other words, we employ the money approach to examine whether U.S. investors adjust the distribution of assets in their portfolio in response to COVID-19 outbreak in a given geographic location. To this end, we set to find out the joint distribution and linkage between assets with different geographic exposure. A good understanding of the linkage between the assets with different geographic exposure is a key element in portfolio management. This joint distribution, however, may not remain constant over time. As a result, investors would require information about the conditional joint distribution of assets to maintain dynamic portfolio rebalancing strategies.

Probability of Panic Regime Vs. Covid-19 Cases

Analysis of U.S. ETF flows also capture periods of normal regime with low volatility and panic regime with high volatility. However, the direction of U.S. ETF flows is opposite to the Asian and European ETF flows. That is, US ETFs exhibit counter-cyclical characteristics and have a negative flow during the normal regime and a positive flow during the panic regime. This is consistent with the “flight home effect” in which, following a shock, investors tend to rebalance their portfolio away from the international market to their domestic market where they have less information asymmetry. We further investigate this issue in the multivariate section.

Univariate Markov Switching Model of each Region

Parameter estimates for univariate Markov switching models. This table reports the parameter estimates of the univariate 2-state Markov switching models for the daily flow of ETFs with exposure to Asia, Europe, and U.S. The model choice(MSIAH Vs. MSIH) is based on the lowest AIC and BIC score from Table 2. The general MSIAH model is specified as $\gamma_t = \gamma_{1,t} + \gamma_{2,t} S_{t}$. Where $\gamma_{1,t}$ refers to a vector of individual regime effects, $\gamma_{2,t}$ represents the conditional mean in each state (1 and 2), and $\gamma_{3,t}$ shows the conditional volatility of each state. $S_{t}$ denotes the first-order autoregressive term and $\epsilon_{t}$ shows the residuals. The MSIAH model is 2-state Markov model where $S_{t}$ is a Bernoulli random variable with parameter $\rho$. Duration shows the respective duration of being in one regime during the period of the sample. The sample period is from January 2020 to October 2020. The parentheses contain the standard errors. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

Summary and Conclusion
We examine the relations between dollar flows of U.S. traded ETFs with exposure to the U.S., Europe, Asia, and the rest of the world during the COVID-19 crisis utilizing a Markov Switching Model (MSVAR). We find convincing evidence that investors use ETFs to gain exposure to foreign markets. This study differs from the new stream of research on the effects of COVID-19 on financial markets and investors’ reactions in two major ways. First, we follow the money by actual dollars of fund flows, whereas previous studies use returns. Second, we investigate the existence of two distinct regimes during this pandemic: (1) a “normal” regime where all ETFs receive positive flows and (2) a “panic” regime which emerges when the number of infected people surges across the globe and investors shift their funds from non-U.S. ETFs to U.S.-exposed ETFs. This portfolio rebalancing away from international funds toward U.S. ETFs, is consistent with the flight-to-safety effect and suggests “home bias” investors in this adverse economic shock. Furthermore, we find evidence of rapid portfolio adjustments of U.S. investors in response to the COVID-19 outbreak in a given geographic location.

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