Google Search Volume Index: A systematic Review

María José Ayala¹, Nicolás Gonzálvez-Gallego¹, Rocío Arteaga-Sánchez²

¹Department of Business Administration, Catholic University of Murcia, Spain,²Department of Business Administration and Marketing, University of Seville, Spain.

Abstract

Information is a crucial and key element when studying stock markets and the way it is analyzed can be determinant for measuring financial market movements. With Internet uptake, investors are exposed to a vast amount of information and hence, analyzing what they search can provide relevant data about potential investment actions and trading decisions. In other words, measuring what investors search yields information about how present and future assets prices change. Recently, the research community has focus on measuring investor attention through search queries on Google. In this manner, investor attention is considered as the frequency of a specific term searched, presented by Google Search Volume Index (GSVI).

This paper conducts a systematic review of the current literature about the use of GSVI as a proxy variable for investor attention and stock market movements explanations. Using Web of Sciences and Science Direct data bases, we analyze 51 academic studies published between 2010 and 2021. The articles are classified and synthetized based on the selection criteria for building GSVI: keyword of the search term, market region and frequency of the data sample. After that, we analyze the effect over the financial variable Return, Volatility and Trading volume for measuring the effect of GSVI over market movements. The main results can be summarized as follows: (1) GSVI is positively related with volatility and trading volume regardless the keyword, market region or frequency used for the sample. Hence, an increase on investor attention toward a specific financial term will lead to an increment on volatility and trading volume; (2) GSVI can improve forecasting models for stock market movements. To conclude, this paper consolidates for the first time the research literature about GSVI, being highly valuable for academic practitioners of the area.

Keywords: Google Trends, Investor attention, GSVI, stock market prediction.