

The Effect On Precious Mine Markets On Terrorism News: Borsa İstanbul A.Ş. An Application On Precious Mining Market

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Extensive Summary

Terror affects both the individuals and economies negatively. How the economies get effected by the terror may depend on the development level of countries. Developed countries' economies feel the effect of terror less compared to developing countries'. The effect of terror can direct, indirect, short lasting or long lasting.

Borsa İstanbul Precious Metals and Diamond Markets aided that sector in corporate governance, international integration, competition in the international market and being part of the global pricing system. In this study, metal prices and how they are affected by the terrorist attacks was examined. In the second part, the literature review regarding this relation was shared. Third part of the study examines the structure of the market and the relation between terror related news and precious metals were analyzed in the fourth part.

Big data system was used for the analysis. A variable was created to measure the effect of terror through big data methodology. The number of terror related news in the global press, the emotional metric of such news and prices of precious metal market will be examined to reveal the effect of terror on the precious metal market. to reveal the effect of terror on the precious metal market, Granger Causality test was used. Through Granger Causality test, the assumption of one-way causality from density of terror related news to precious metal market was tested.

One of the variables to measure the effect of terror is Vision of Humanity Global Terrorism Index. Instead of this index, a variable was created through analyzing the number and content of terror related news and the big data methodology was used for that purpose based on the study by Atik vd. (2016). the big data methodology is used extensively in the fields such as marketing or finance even though it is pretty new method. In the previous studies, mostly quantitative data was chosen thus limitations appeared in terms of different factors' effect and fields. Thanks to the big data

methodology, qualitative data and unstructured data can be transformed to quantitative data and therefore analysis becomes possible based on such data.

to reveal the effect of terror on the precious metal market, daily both Turkish and non-Turkish terror related news titles were analyzed between the dates 01.06.2016 – 27.05.2016 through the big data methodology. The total number of news about terror is 441.296. 115.588 of them are in Turkish and 325.708 of them is in non-Turkish(except English). GDELT 2.0 program was used to collect the terror related news.

GDELT analyzed the content of all news and labeled them for easy decision-making process. In labeling process, the actors in the event, coordination, category, content, time, the tone of the news, values, address information is saved. In this study, the number of terror labeled news and the emotional tone of the news was used among the variable selected by GDELT.

To reveal the effect of terror on the precious metal market, firstly variables should be analyzed for stationarity. Stationarity means the data is not random. if the variables are not stationary, the model will have trend and fake regression problem appears. Stationarity shows variance and mean are stable in time; the covariance of two lagged time series data is based on lag but not on time.

Terror and terror related events increase uncertainty. Uncertainty effects the economy negatively. Increased uncertainty results in increased volatility in the market and increased volatility rises risk