Assessment of impact of strong earthquakes to the global economy by example of Thoku event

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We examine the economic consequences of strong earthquakes by example of M9 Tahoku one that occurred on March 11, 2011 close to the northeast shore of Japanese coast Honshu. This earthquake became the strongest in the whole history of the seismological observations in this part of the planet. The generated tsunami killed more than 15,700 people, damaged 332,395 buildings and 2,126 roads. The total economic loss in Japan was estimated at $309 billion. The catastrophe in Japan also impacted global economy. To estimate its impact, we used regional and global stock indexes, production indexes, stock prices of the main Japanese, European and US companies, import and export dynamics, as well as the data provided by the customs of Japan. We also demonstrated that the catastrophe substantially affected the markets and on the short run in some indicators it even exceeded the effect of the global financial crisis of 2008. The last strong earthquake occurred in Nepal (25.04.2015, M7.8) and Chile (16.09.2015, M8.3), both actualized the research of cost assessments of the overall economic impact of seismic hazard. We concluded that it is necessary to treat strong earthquakes as one very important factor that affects the world economy depending on their location.

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