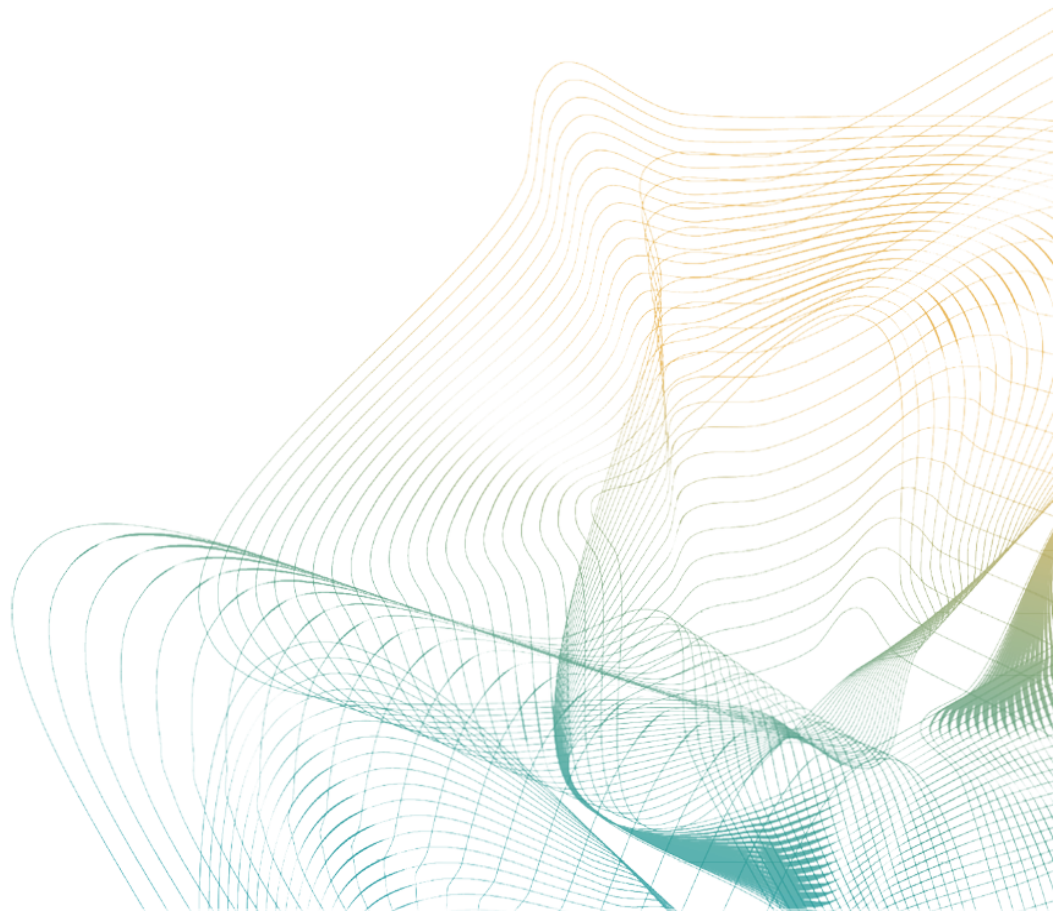


OIC-COMCEC Central Banks Forum

OIC Economic Outlook Working Group

OIC Vulnerability Indices



OIC Vulnerability Indices

Two vulnerability indices, the Macro Financial Vulnerability Index (MFVI) and Financial Stress Index (FSI), have been developed to allow measurement of levels of vulnerability across OIC countries. The aim is to present the overall state of vulnerability as a single measure by reflecting various dimensions of risks.

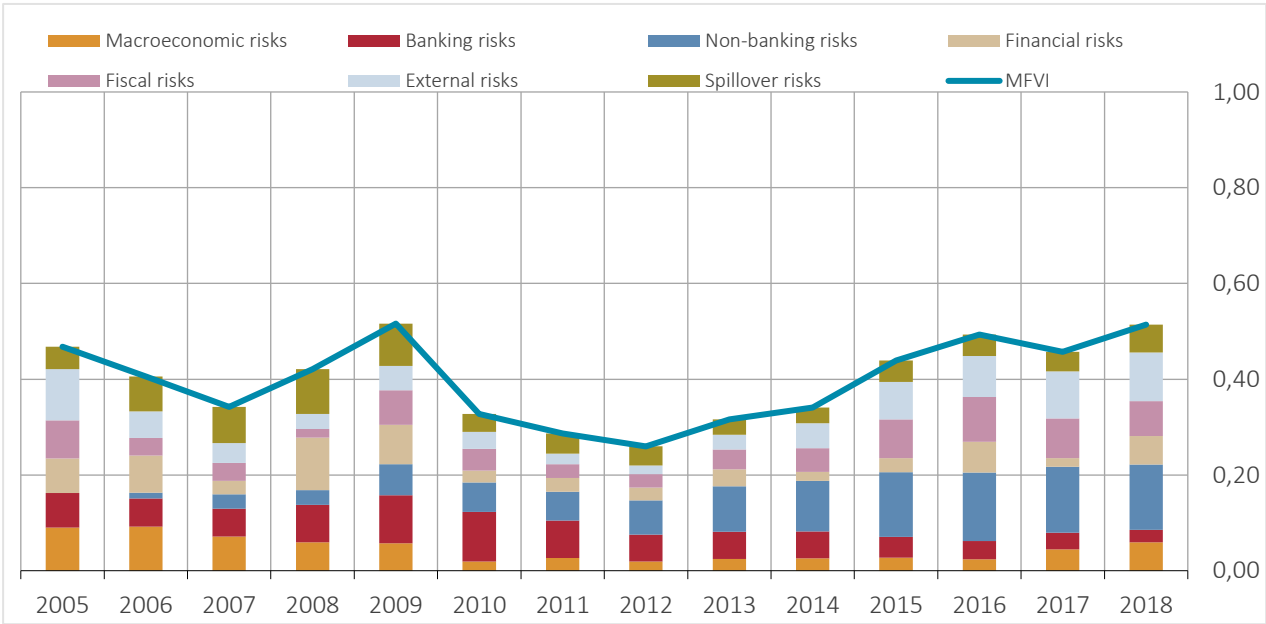
1. Macro Financial Vulnerability Index

MFVI is built to capture the macroeconomic vulnerability across OIC countries comprehensively. Sub-indices are developed as the weighted averages of the normalized series, where the weights are obtained by using GDP measured based on purchasing power parity (PPP).

The MFVI is constructed by using a standard three-step approach following the literature on reducing multidimensional data into one summary index:

- Normalization of variables through the min-max procedure,
- Aggregation of normalized variables into the sub-indices representing a particular functional dimension,
- Aggregation of the sub-indices into the final index.

Macro Financial Vulnerability Index



2. OIC Financial Stress Index

The OIC Financial Stress Index (OIC-FSI) is built to capture the financial vulnerability across OIC countries. Stock market, exchange rate and money market volatilities are used, which means three main markets are covered in the index.

The dataset is comprised of monthly data between January 2005 and May 2019. As with the MFVI, a min-max approach is used to standardize and GDP-PPP is used to weight the data. To compose the Financial Stress Index, Principal Component Analysis is applied. It is observed that there are volatility swings in the financial markets.

OIC Financial Stress Index

