

The quest for economic diversification: A study of the connectedness of oil shocks, green bonds, sukuks and conventional bonds

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Summary

A well-functioning economy is imperative for a healthy society. However, changes in oil prices affect the economy and financial markets through a complex dynamic process. The impact of oil price shocks is even more pronounced on economies with oil as a major source of revenue. The United Arab Emirates (UAE) is one such country and its leadership, cognizant of the importance of economic diversification, has put in place both long-term and short-term plans for exploring alternative sources of financing and revenue for economic development and growth. Sovereign bond is one of the main sources of long-term financing for any economy and in recent years we have seen new additions to the traditional sovereign bond universe. In particular, the transition toward ethical financing alternatives have led to the development of a parallel market with a focus on sustainable financing solutions.

In the wake of the foregoing and the significance of alternative financing sources for UAE, the purpose of this study to analyses the impact of oil uncertainty on three major financing sources: sukuks, green bonds and conventional bonds. The impact of oil shocks on these assets may vary depending on the source of oil shock and therefore it is important to quantify various types of oil shocks. Towards this end, we will employ novel methods for decomposing oil price uncertainty to demand, supply and risk shocks. To quantify the dependence of oil shock and bonds, we will employ a network connectedness approach. One of the unique advantages of this approach is that it allows us to quantify the overall connectedness of three oil shocks and three categories of bonds at a system level as well as pairwise bilateral connectedness among them.

Our results have multipronged implications for investors, policy makers and future research.

First, the changes in risk and demand shocks of oil are a substantial driver to bond market swings, on the other hand supply shocks have little effect. Furthermore, we document relative decoupling of green bonds from oil price shocks. We notice that the markets are more integrated during periods of turmoil. The significance of this project is multifold. Changes in oil prices affects the UAE economy and financial market and our proposed work directly answers this important timely question. It will also contribute toward the development of the local UAE capital market as well as contribute to enhancing its international significance as a key player in sukuk and green bonds market. In particular, the relative decoupling of green bonds and oil price shocks is an important finding for future policy directions focused on diversification of UAE's economy.