Co-movement dynamics between global sukuk and bond markets: New insights from a wavelet analysis

By: Bhuyan, MA; Bhuyan, Rubayat; Ahsan, M.; Rahman, MP; Rahman, Maya; Puspa, B.; Sait, B.; Buerhan, B.; Ghani, OM; Garuzaimi, MA

International Journal of Emerging Markets

Volume: 14 Issue: 4 Pages: 550-581 Special Issue: SI
DOI: 10.1108/IJEM-12-2017-0022
Published: Oct 14, 2018
Document Type: Article

Abstract

Purpose Market linkages (and price discovery) between financial assets and lead-lag relationships are topics of interest for financial economists, financial managers, and analysts. The lead-lag relationship analysis should consider both short and long-term investors. From a portfolio diversification perspective, the first-type investor is generally more interested in determining the co-movement of financial assets at higher frequencies, which are short-run fluctuations, while the latter concentrates on the relationship at lower frequencies, or long-run fluctuations. The paper aims to discuss these issues.

Design/Methodology/Approach For this study, a technique was employed known as the wavelet approach, which has recently been imported to finance from engineering sciences to study the co-movement dynamics between global sukuk and bond markets. Data cover the period from January 2010 to December 2015. Findings The results indicate that there is no unidirectional causality from developed market bond indices to Malaysia sukuk index, which is promising for fixed income investors of a developed market. In terms of the Dow Jones sukuk index, there is no unidirectional causality between the listed emerging markets and the sukuk index except Indonesia's sukuk market during the sample period.

Originality/value The evidence further explains that, which was produced by the application of a wavelet cross-correlation amongst the selected sukuk and bond indices, provides robust and useful information for international financial analysts as well as long and short-term investors.

Keywords

Sukuk, Islamic finance, Bond

Author Information

Reprint Address: Sait, B. (reprint author)

Addresses:

[1] Int Islamic Univ Malaysia, Kulliyyah Ecom & Management Sci, Kuala Lumpur, Malaysia
[2] Istanbul Sabahattin Zaim Univ, Dept Islamic Econ & Finance, Istanbul, Turkey

E-mail Address: b.berhanseti@gmail.com

Publisher

EMERALD GROUP PUBLISHING LTD, HOWARD HOUSE, WAGON LANE, BINGLEY BD16 1WA, WYKINGORE, ENGLAND

Journal Information

Impact Factor: Journal Citation Reports

Categories/Classification

Research Areas: Business & Economics
Web of Science Categories: Business; Economics; Management

See more data fields

Cited References: 84

Showing 30 of 84 View All in Cited References page

1. More international evidence on the historical properties of business cycles
By: A.Heam, B.; Witek, U

Times Cited: 41
2. The impact of crude oil price on Islamic stock indices of South East Asian countries: Evidence from MGARCH-DCC and wavelet approaches
   By: Abdullah, Ahmad Menir; Sadi, Buerhan; Masih, Masoom
   BORSA ISTANBUL REVIEW Volume: 16 Issue: 4 Pages: 219-232 Published: DEC 2016
   Times Cited: 23

3. Asymmetric volatility and conditional expected returns Evidence from emerging market sectors
   By: Al-Refaie, Hisham; Etta, Mohamed Abdelaat; Zeinun, Rami
   INTERNATIONAL JOURNAL OF EMERGING MARKETS Volume: 12 Issue: 2 Pages: 335-351 Published: 2017
   Times Cited: 4

4. Are Islamic bonds different from conventional bonds? International evidence from capital market tests
   By: Aloui, Nafis; Hassan, M. Kabir; Haque, Mohammad Aminul
   BORSA ISTANBUL REVIEW Volume: 13 Issue: 3 Pages: 22-29 Published: SEP 2018
   Times Cited: 42

5. Multivariate Co-movement between Islamic Stock and Bond Markets Among the GCC: A Wavelet-Based View
   By: Arouri, Chaker; Jammazi, Rania; BenHamida, Hela
   COMPUTATIONAL ECONOMICS Volume: 52 Issue: 2 Pages: 603-626 Published: AUG 2018
   Times Cited: 3

6. Investors' sentiment and US Islamic and conventional indexes nexus: A time-frequency analysis
   By: Aloui, Chaker; Hikim, Besma; Lau, Chi Keung Man; et al.
   FINANCE RESEARCH LETTERS Volume: 18 Pages: 54-59 Published: NOV 2016
   Times Cited: 10

7. Information transmission across stock indices and stock index futures: International evidence using wavelet framework
   By: Arouri, Chaker; Hikim, Besma; Lau, Chi Keung Man; et al.
   RESEARCH IN INTERNATIONAL BUSINESS AND FINANCE Volume: 44 Pages: 411-421 Published: APR 2018
   Times Cited: 2

8. INTERNATIONAL STOCK MARKET LINKAGES - EVIDENCE FROM THE PRE-OCTOBER AND POST-OCTOBER 1987 PERIOD
   By: ARSHANAPALLI, B. DOUKAS, J
   JOURNAL OF BANKING & FINANCE Volume: 17 Issue: 1 Pages: 193-208 Published: FEB 1993
   Times Cited: 207

9. Irreducibility and structural cointegrating relations: An application to the G7 long-term interest rates
   By: Banerji, MR; Caporale, GM; Hall, SG
   INTERNATIONAL JOURNAL OF FINANCE & ECONOMICS Volume: 6 Issue: 2 Pages: 127-138 Published: APR 2001
   Times Cited: 11

10. The structure of interdependence in international stock markets
    By: Besler, DA; Yang, J
    JOURNAL OF INTERNATIONAL MONEY AND FINANCE Volume: 22 Issue: 2 Pages: 261-287 Published: APR 2003
    Times Cited: 165

11. Financial integration between sukuk and bond indices of emerging markets: Insights from wavelet coherence and multivariate GARCH analysis
    By: Bhuyan, Rubajot Ahsan; Rahman, Maya Puspa; Sadi, Buerhan; et al.
    BORSA ISTANBUL REVIEW Volume: 14 Issue: 3 Pages: 218-230 Published: SEP 2018
    Times Cited: 3

12. Title: [not available]
    By: B miejscowości, C.
    Introductory econometrics for finance Published: 2008
    Publisher: Cambridge University Press, New York
    Times Cited: 336

13. Diversification, original sin, and international bond portfolios
    By: Buzatu, M.; Warnock, F.
    INT FINANCE & DEVELOPMENT Volume: 45 Published: 2003
    Publisher: Board of Governors of the Federal Reserve System, Washington, DC
    URL: http://www.federalreserve.gov/pubs/ifdp/
    Times Cited: 6

14. Portfolio Diversification Benefits at Different Investment Horizons During the Arab Uprisings: Turkish Perspectives Based on MGARCH-DCC and Wavelet Approaches
    By: Buzatu, Abdul Aziz; Dewandaru, Ginanjar; Zainal, Mohd-Psial; et al.
    EMERGING MARKETS FINANCE AND TRADE Volume: 54 Issue: 14 Pages: 3272-3283 Published: 2018
    Times Cited: 4

15. On measuring synchronization of bulls and bears: The case of East Asia
    By: Candelon, Bertrand; Phiplu; Jan, Stefan; Steffans, Stefan
    Times Cited: 87

16. Asymmetric dynamics in the correlations of global equity and bond returns
    By: Cappelleti, L.; Engle, R.F.; Sheppard, K.
    Times Cited: 581

17. Do Islamic Bond (Sukuk) Prices Reflect Financial and Policy Uncertainty? A Quantile Regression Approach
    By: Carles Reboreda, Juan; Naifar, Nader
    EMERGING MARKETS FINANCE AND TRADE Volume: 53 Issue: 7 Pages: 1585-1596 Published: 2017
    Times Cited: 8
18. A further analysis of the lead-lag relationship between the cash market and stock index futures market  
   By: Chan, K.  
   Review of Financial Studies Volume: 5 Pages: 123-152 Published: 1992  
   Times Cited: 36

19. International evidence on the stock market and aggregate economic activity  
   By: Ove:T, Ng, L. K.  
   Times Cited: 94

20. DECOMPOSING EUROPEAN BOND AND EQUITY VOLATILITY  
   By: Christiansen, Charlotte  
   INTERNATIONAL JOURNAL OF FINANCE & ECONOMICS Volume: 15 Issue: 2 Pages: 105-122 Published: APR 2010  
   Times Cited: 10

21. Dynamic linkages between international bond markets  
   By: Cetin, Cetin  
   JOURNAL OF MULTINATIONAL FINANCIAL MANAGEMENT Volume: 17 Issue: 4 Pages: 280-303 Published: OCT 2007  
   Times Cited: 8

22. The integration and efficiency of international bond markets  
   By: Clare, A.G; Maras, M; Thomas, S.H.  
   Times Cited: 19

23. European stock market comovement dynamics during some major financial market turmoils in the period 1997 to 2010—a comparative DCC-GARCH and wavelet correlation analysis  
   By: Dajman, Sihin; Fedtie, Mejra; Kaviker, Alenka  
   APPLIED ECONOMICS LETTERS Volume: 18 Issue: 13 Pages: 1249-1256 Published: 2012  
   Times Cited: 31

24. Title: [not available]  
   By: DEGENNARO R  
   FINANCIAL REV Volume: 23 Pages: 577 Published: 1994  
   Times Cited: 13

25. Co-movement and resiliency of Islamic equity market: evidence from GCC Islamic equity index based on wavelet analysis  
   By: Dewandaru, G; El-Ansary, A; Mash, A.M.A.; et al.  
   Working Paper No. 56880 Published: 2013  
   Publisher: MPRA, Kuala Lumpur  
   URL: http://mpra.ub.uni-muenchen.de/56880  
   [Show additional data]  
   Times Cited: 2

   By: Engle, R; Granger, C.W.  
   ECONOMETRICA Volume: 55 Issue: 2 Pages: 251-276 Published: MAR 1987  
   Times Cited: 10,621

27. INTERNATIONAL TRANSMISSION OF STOCK-MARKET MOVEMENTS  
   By: Eun, C.S; Shim, S  
   JOURNAL OF FINANCIAL AND QUANTITATIVE ANALYSIS Volume: 24 Issue: 2 Pages: 241-256 Published: JUN 1989  
   Times Cited: 448

28. Information and volatility linkages in the stock, bond, and money markets  
   By: Fleming, J; Kirby, C; Ostdiek, B  
   JOURNAL OF FINANCIAL ECONOMICS Volume: 48 Issue: 1 Pages: 111-137 Published: JUL 1998  
   Times Cited: 167

   By: Flores, C.; Vougas, D. V.  
   Times Cited: 7

30. Superexogeneity and the dynamic linkages among international equity markets  
   By: Francis, B.B; Leachman, L.L  
   JOURNAL OF INTERNATIONAL MONEY AND FINANCE Volume: 17 Issue: 3 Pages: 475-492 Published: JUN 1998  
   Times Cited: 33

Showing 30 of 84  View All in Cited References page