



Munich Personal RePEc Archive

Gold, Stock Price, Interest Rate and Exchange Rate Dynamics: An MS VAR Approach

Kal, Süleyman Hilmi and Arslaner, Ferhat and Arslaner,
Nuran

Central Bank of the Republic of Turkey, Borsa Istanbul Research
Department, Central Bank of the Republic of Turkey

March 2013

Online at <https://mpra.ub.uni-muenchen.de/56406/>
MPRA Paper No. 56406, posted 28 Oct 2014 20:36 UTC

**INTERNATIONAL RESEARCH JOURNAL OF
FINANCE AND ECONOMICS**

ISSN: 1450-2887

Issue 107
March, 2013

Contents

Gold, Stock Price, Interest Rate and Exchange Rate Dynamics: An MS VAR Approach <i>Süleyman Hilmi Kal, Ferhat Arslaner and Nuran Arslaner</i>	8-16
Prediction the Relation between Audit Fee and Financial Variables by using of Artificial Neural Networks <i>Seyed Ali Vaez, Mohsen Rashidi Baghi, Mohsen Shiralizadeh and Saeed Farzadi</i>	17-27
Crowding Out Effect of Public Borrowing: The Case of Egypt <i>Mona Esam Fayed</i>	28-38
Measuring the Degree of Competition in the Arab Banking Systems <i>Ali Awdeh, Ahmad Salloum and Elie El Hokayem</i>	39-49
Oil and Stock Markets Interactions: Evidence from GCC Countries <i>Mohammed Abu Ali, Karim Mimouni and Moh'd Al-Azzam</i>	50-60
Threshold Effects of Sovereign Debt: Evidence from the Caribbean <i>Kevin Greenidge, Roland Craigwell, Chrystal Thomas and Lisa Drakes</i>	61-77
Strategic Management Perception in Public Services <i>Emel Bahar</i>	78-96
How Does Income Multiple of Mortgage Loan Influence Home Repossession in the UK? Evidence from a Macro-Level Data <i>Joseph A. Bamidele and Oladiran A Ayodele</i>	97-112
Major Problems Faced by Farmers in India during the New Agricultural Reforms <i>K. Vivekanandan, P.S. Ravichandran, R. Marimuthu, K. Arul P. Amalanathan, R. Mohanraj, S. Nagarajan, K. Ramesh Kumar A. Ponnusamy and T.N. Srinivasan</i>	113-119
Validation of Consumer Ethnocentrism Scale (CETSCALE): Structural Equation Modeling Approach <i>R. Renganathan, S. Balachandran and V. Vijay Anand</i>	120-129
The Relationship between Macroeconomic Variables and ISE 100 Index Returns during the Quantitative Easing Policies of USD Federal Reserve: Evidence from Turkey <i>Menevşe Özdemir and Serkan Yeşilyurt</i>	130-139
Asymmetry and Non-linearity in Monetary Policy of a Small-Open Economy: Evidence from Taylor Rule <i>Serkan Çiçek</i>	140-153

The Effect of Economic Freedom on Economic Growth: A Panel Data Analysis for 12 Islamic Countries <i>Salih Türedi</i>	154-162
Historical Overview of Financial Policies in Developing Countries <i>Giseok Nam</i>	163-168
The Roles of Organizational Leaders for Sustainable Business <i>Chalieo Vitoorapakorn, Ornpapha Chutikorntaweesin Thuchapon Yodthong and Nitcharat Sangthong</i>	169-177

Gold, Stock Price, Interest Rate and Exchange Rate Dynamics: An MS VAR Approach

Süleyman Hilmi Kal

*Phd, CUNY GC and SUNY Maritime College
546 67th Street #3 Brooklyn NY 11220 USA
E-mail: skal@gc.cuny.edu
Tel: +1-347 528 28812; Fax: +1-212 817-1514*

Ferhat Arslaner

*Phd, Chief Economist, Borsa Istanbul
Borsa Istanbul Research Department, Emirgan Istanbul 34467 Turkey
E-mail: ferhat.arslaner@imkb.gov.tr
Tel: +90-212-2982215; Fax: +90-212-2982189*

Nuran Arslaner

*Phd, Advisor to the President of Turkish Central Bank
Central Bank of the Republic of Turkey
Bankalar Cd. 13 Karakoy Istanbul 34420 Turkey
E-mail: nuran.arslaner@tcmb.gov.tr
Tel: +90-212-2518000; Fax: +90-212-2529367*

Abstract

Holding on gold as an asset has been considered a traditional safe haven for risk averse investors even though holding gold has no yield other than capital asset, especially during the volatile economic periods. Under the Breton Woods agreement the exchange rate is fixed by agreement and the price of gold has become volatile and steadily has been increasing against all of the major currencies. In this study, it is investigated that whether the relationship between gold, interest rates, exchange rates and stock market yields vary depending gold oil ratio. A two state time varying transition probability Markov switching (MS) process to the vector auto regression (VAR) estimation of macro financial variables. The switching between the states of the Markov process is linked to the volatility of gold and the macro financial variables to understand the transition dynamics between states. Results indicate that the interrelationships between the macro financial variables and gold prices are state dependent and volatilities of the variables have a statistically significant effect on the transitional dynamics of gold prices between the states.

Keywords: Gold Price, Gold Oil Ratio, Stock Price, Interest Rates, Exchange Rates, Time Series Analysis, Markov Switching Regimes

JEL Classification Codes: C22, E44, G12

INTERNATIONAL RESEARCH JOURNAL OF FINANCE AND ECONOMICS

<http://www.internationalresearchjournaloffinanceandeconomics.com>

Editor-in-Chief

Narayan C. Pradhan, Reserve Bank of India

Co-Editors

Ratna Sinha, City College

George Thomas, St John's College

Rajendra Patil, University of Mumbai

Editorial Board

Zeljko Bogetic, The World Bank

Jwyang Jiawen Yang, The George Washington University

Christos Giannikos, Columbia University

Zhihong Shi, State University of New York

Jan Dutta, Rutgers University

Hector Lozada, Seton Hall University

Leo V. Ryan, DePaul University

Constantinos Vorlow, University of Durham

Felix Ayadi, Texas Southern University

Robert Van Ness, University of Mississippi

Athanasios Koulakiotis, University of the Aegean

Richard J. Hunter, Seton Hall University

Abdul Jalil, Wuhan University

Wen-jen Hsieh, National Cheng Kung University

M. Carmen Guisan, University of Santiago de Compostela

H. Young Baek, Nova Southeastern University

Ebere Oriaku, Elizabeth City State University

Neven Borak, Securities Market Agency

Maria Elena Garcia-Ruiz, University of Cantabria

Ghadir Mahdavi, Kyoto University

Emanuele Bajo, University of Bologna

Publication Ethics and Publication Malpractice Statement

Duties of Editors

Confidentiality—Editors of the journal must treat received manuscripts for review as confidential documents. Editors and any editorial staff must not disclose any information about submitted manuscripts to anyone other than the corresponding author, reviewers, other editorial advisers, and the publisher.

Equal Treatment—Editors of the journal must evaluate manuscripts for their intellectual content and their contribution to specific disciplines, without regard to gender, race, sexual orientation, religious belief, ethnic origin, citizenship, or political philosophy of the authors.

Disclosure and Conflicts of Interest—Editors of the journal and any editorial staff must not use materials disclosed in a submitted manuscript (published or unpublished) for their own research without the author's written authorization.

Integrity of Blind Reviews—Editors of the journal should ensure the integrity of the blind review process. As such, editors should not reveal either the identity of authors of manuscripts to the reviewers, or the identity of reviewers to authors.

Publication Decisions—Editors of the journal are responsible for deciding which of the manuscripts submitted to the journal should be reviewed or published. However, editors may consult other editors or reviewers in making such decisions.

Cooperative involvement in investigations—Editors of the journal should conduct a proper and fair investigation when an ethical complaint (concerning a submitted or published manuscript) is reported. Such process may include contacting the author(s) of the manuscript and the institution, giving due process of the respective complaint. If the complaint has merits, a proper action should be taken (publication correction, retraction, etc.). Besides, every reported action of unethical publishing behavior should be investigated even if it is discovered years after publication.

Duties of Reviewers

Confidentiality—Reviewers must consider all received manuscripts for review as confidential documents. Received manuscripts must not be seen by or discussed with others, except as authorized by the journal editors or authorized editorial staff.

Objectivity—Reviewers should conduct their reviews objectively. Criticism of the author's personality or the topic is unprofessional and inappropriate. Reviewers should explain their recommendations clearly and explicitly and provide rational support and justification. Editors Recommendations could be one of the following:

- Accept the publication of the manuscript after compliance with the reviewers' recommendations.
- Consider the publication of the manuscript after minor changes recommended by its reviewers.
- Consider the publication of the manuscript after major changes recommended by its reviewers.
- Reject the publication of the manuscript based on the reviewers' recommendations

Fast-Track Reviews—Reviewers are requested to complete their reviews within a timeframe of 30 days. Reviewers also are free to decline reviews at their discretion. For instance, if the current work load and/or other commitments make it impossible for reviewers to complete fair reviews in a short timeframe (e.g., few days for fast-track review), reviewers should refuse such invitations for review and promptly inform the editor of the journal.

Qualifications—Reviewers who believe that they are not qualified to review a received manuscript should inform the journal editors promptly and decline the review process.

Disclosure—Information or ideas obtained through blind reviews must be kept confidential and must not be used by reviewers for personal benefits.

Conflict of Interest —Reviewers should refuse the review of manuscripts in which they have conflicts of interest emerging from competitive, collaborative, or other relationships and connections with any of the authors, companies, or institutions connected to the manuscripts.

Substantial Similarity—Reviewers should inform editors about significant resemblances or overlap between received manuscripts and any other published manuscripts that reviewers are aware of.

Proper and Accurate Citation —Reviewers should identify relevant published work that has not been cited by the authors. Statements that include observation, derivation, or argument (currently or previously reported) should be accompanied by a relevant and accurate citation.

Contribution to Editorial Decisions—Reviewers assist editors in making editorial publication decisions, and also assist authors in improving their submitted manuscripts, through the editorial communications with authors. Therefore, reviewers should always provide explicit and constructive feedback to assist authors in improving their work.

Duties of Authors

Originality—Authors submitting manuscript to the journal should ensure that this submission is original work and is neither currently under consideration for publication elsewhere, nor has been published as a copyrighted material before. If authors have used the ideas, and/or words of others researchers, they should acknowledge that through proper quotes or citations.

Plagiarism—Plagiarism appears into various types, such as claiming the authorship of work by others, copying and paraphrasing major parts of others research (without attribution), and using the results of research conducted by other researchers. However, any type of plagiarism is unacceptable and is considered unethical publishing behavior. Such manuscripts will be rejected.

Authorship of Manuscripts—Authorship of a manuscript should be limited to authors who have made significant contributions and the names of authors should be ranked by efforts. The corresponding author must ensure that all listed coauthors have seen and approved the final version of the manuscript (as it appeared in the proofreading copy) and agreed to its publication in the journal. Authors can permit others to replicate their work.

Multiple or Concurrent Publication— Authors should not publish manuscripts describing essentially the same research in more than one journal. Submitting the same manuscript to more than one journal concurrently constitutes unethical publishing behavior and is unacceptable. This action leads to the rejection of the submitted manuscripts.

Acknowledgement of the Work of Others—Authors should always properly and accurately acknowledge the work of others. Authors should cite publications that have significant contribution to their submitted manuscripts. Unacknowledged work of others contributing to manuscripts is unethical behavior and is unacceptable. Such manuscripts will be rejected.

Reported objectives, discussions, data, statistical analysis, and results should be accurate. Fraudulent or knowingly inaccurate results constitute unethical behavior and are unacceptable. Such manuscripts will be rejected.

Data Access and Retention— Authors may be asked to provide the raw data in connection with manuscripts for editorial review, and should be prepared to provide public access to such data if possible. However, such authors should be prepared to retain data for a reasonable time after publication.

Hazards and Human or Animal Subjects— If a research study involves chemicals, procedures or equipment that have any unusual hazards inherent in their use, the author(s) must clearly identify these in the submitted manuscript. Authors should also inform participating human subjects about the purpose of the study.

Conflicts of Interest— In their manuscript(s), authors should disclose any financial or other substantive conflict of interest that might influence the results or interpretation of their manuscript.

Copyright of Accepted Manuscripts—Authors of accepted manuscripts for publication in the journal agree that the copyright will be transferred to journal and all authors should sign copyright forms. However, those authors have the right to use of their published manuscripts fairly, such as teaching and nonprofit purposes.

Substantial errors in published Manuscripts—When authors discover substantial errors or inaccuracy in their own published manuscripts, it is the authors' responsibility to promptly inform the journal editors or publisher, and cooperate with them to correct their manuscripts.

Acknowledgement of Indirect Contributors and Financial Supporters—Authors should acknowledge individuals whose contributions are indirect or marginal (e.g., colleagues or supervisors who have reviewed drafts of the work or provided proofreading assistance, and heads of research institutes, centers and labs should be named in an acknowledgement section at the end of the manuscript, immediately preceding the List of References). In addition, all sources of financial support for the research project should be disclosed.

Disclaimer

Neither the editors nor the Editorial Board are responsible for authors' expressed opinions, views, and the contents of the published manuscripts in the journal. The originality, proofreading of manuscripts and errors are the sole responsibility of the individual authors.

All manuscripts submitted for review and publication in the journal go under double-blind reviews for authenticity, ethical issues, and useful contributions. Decisions of the reviewers are the only tool for publication in the journal and will be final.