

Contents lists available at [ScienceDirect](#)

Research in International Business and Finance

journal homepage: www.elsevier.com/locate/ribaf

Intraday analysis of macroeconomic news surprises and asymmetries in mini-futures markets

Dimitrios I. Vortelinos^{a,*}, Athanasios Koulakiotis^b, Athanasios Tsagkanos^c^a Lincoln International Business School, University of Lincoln, UK^b Department of International and European Studies, University of Macedonia, Greece^c Department of Business Administration, University of Patras, Greece

ARTICLE INFO

Article history:

Received 3 October 2015

Received in revised form 19 May 2016

Accepted 8 July 2016

Available online 11 July 2016

JEL classification:

G12

G14

Keywords:

News releases

Asymmetries

Mini-futures markets

Intraday

ABSTRACT

The present paper, firstly examines the significance of US macroeconomic announcements to the price and volume of three mini-futures markets via three statistical tests. Secondly, the impact of news releases on price and trading volume is studied in an intraday frequency. Thirdly, the significance and magnitude of the response of futures price and volume to the unanticipated surprise and surprise component of a macroeconomic statement is researched. Next, the asymmetric impact is studied upon the magnitude or direction of price and volume.

© 2016 Elsevier B.V. All rights reserved.

1. Introduction

Weakly efficient financial markets reflect all available public information. Mini futures trading cannot be considered as a source of irrational spot price fluctuations. In addition, the mini-futures contract aimed to small investors and enhances the price discovery function of the derivatives market. This suggests that the conditional density function of spot returns does not depend on mini expected futures trading (Illueca and Lafuente, 2008). Furthermore, news releases upon macroeconomic variables is the major source of public information. These news releases explain movements on asset returns (Tauchen and Pitts, 1983). Macroeconomic news releases affect various types of financial assets. Literature has already analyzed the news effect on the most popular ones.¹ Effects on stocks have been studied by Bernanke and Kuttner (2005), Steeley (2004) and Boyd et al. (2005); on bonds by Balduzzi et al. (2001) and Nowak et al. (2011); on exchange rates by Goodhart et al. (1993) and recently Omrane and Hafner (2015), Galati and Ho (2003) and Chen and Gau (2010); and, on commodities by Elder et al. (2012), among others. There are very few papers analyzing the effects of news releases on various financial markets. One of the most influential of those papers is Rosa (2011). He investigated the effects of Federal Reserve monetary policy on U.S.

* Corresponding author.

E-mail addresses: dvortelinos@lincoln.ac.uk (D.I. Vortelinos), akoulak@uom.gr (A. Koulakiotis), atsagkanos@upatras.gr (A. Tsagkanos).¹ Literature also analyzed the announcements' impact on more specialized futures markets. For example, Aggarwal et al. (2001) examined the responses of three popular futures interest-rate spreads to macroeconomic news.

asset prices. This relationship is very important as it is a key component for analyzing the monetary policy decisions. He used both, daily and intraday data in order to examine whether or not the results become weaker using daily data. Unlike Rosa (2011), we use only intraday data in our study. Using only intraday data, we address two problems, the endogeneity and the omitted variables bias ones.

Literature has not extensively analyzed the impact of macroeconomic announcements to commodities markets. Barnhart (1988) was from the first papers examining the connection between commodity futures prices and economic news. Christie-David et al. (2000), using intraday data, documented the responses of gold and silver future prices to monthly macroeconomic news releases. Gold was an important reserve asset and recently became an important part of the monetary regime in emerging markets (Taguchi, 2011). Silver appeared to be more stable over gold during 1999–2005 daily period, however we do not know whether this pattern holds for intraday trends as well as there is consistent with the view that the two futures markets, gold and silver prices tend to move together (Lucey and Tully, 2006). This means that these two metals offer the possibility for various portfolio strategies. Linn and Zhu (2004) examined the impact on natural gas futures price volatility of the Weekly American Gas Storage Survey report. Hess et al. (2008) is one of very few papers examining the impact of macroeconomic announcements on commodities futures. They investigated the daily price response of seventeen US macroeconomic announcements on the CRB and GSCI commodity futures indices. Roache and Rossi (2010) showed that commodities have been relatively insensitive to economic news over daily frequencies between 1997 and 2009 compared to other financial assets and major exchange rates. Batten et al. (2013) examined the dynamics of two precious metals, gold and silver, finding that there is a strong bivariate relationship between these two metals. The previous analyses tend to focus on the price of individual series. We extend the work of previous studies, not applying co-integration techniques but analyzing the impact of news announcements on the above two commodities. Recently, Afonso et al. (2012), Stein (2015) and Frijns et al. (2015) examined the impact of macro announcements on financial markets.

The response of asset prices to macroeconomic announcements is important in analyzing the effects of economic policy on the economy and financial markets. Literature has reached a consensus that equity prices strongly respond to policy actions.² Policy actions are the results of the macroeconomic news that are released and affect the stock markets. Policy makers believe that it is always a good idea to surprise the market with the macroeconomic rules and reactions that may produce a real economical phenomenon which impacts on the operation and efficiency of stock markets. The results of Laakkonen and Lanne (2008) paper suggest that in general bad news increases volatility more than good news. They find that the impact of news depends on the state of the economy, where bad news increases volatility more in good times than in bad times and there is no difference between the impact of volatility of good news in bad and good times.

The present paper, firstly examines the significance of macroeconomic announcements to either price or volume of energy, commodities and equity futures markets. This article complements the body of literature in several ways. Firstly, the economic value of trading volume, number of intraday transactions is analyzed for a large stock sample. The research is motivated by the announced of macroeconomic news to the volume and price returns. This examination is implemented by three tests, as analyzed by Elder et al. (2012).³ Secondly, the impact of 10 specific and different usual types of macroeconomic news releases on price and trading-volume returns of energy, commodities and equity futures markets is examined in an intraday frequency.⁴ Thirdly, the significance and magnitude of the response of energy, commodities and equity futures' price and volume series to the unanticipated surprise and surprise component of a macroeconomic statement is examined.⁵ Next, the asymmetric impact of announcement surprises in terms of magnitude and direction is studied upon price and volume returns.⁶ Finally, a comparison between the energy, commodities and equity futures market is also provided for all the above research questions.⁷

The rest of the paper is organized as follows. In Section 2 there is an analysis about the data used. In Section 3 there is an analysis of empirical findings, and in Section 4 some concluding remarks are offered.

² One example is the response of stock prices to Federal Reserve policy shocks in daily (Chulia et al., 2010) and intraday Rosa (2011) frequency.

³ The first tests the equality between the mean of 1-min price (or volume) series 10 min before each announcement time (either 8:20–8:30 or 9:50–10:00) and the mean of 1-min price (or volume) series 20 min after the announcement (either 8:30–8:50 or 10:00–10:20), within all trading days. The second tests the mean equality of the 1-min price (or volume) series over 10 min before the announcement (either 8:20–8:30 or 9:50–10:00) and 20 min after it (either 8:30–8:50 or 10:00–10:20). The Study value mentioned equals to mean (20 min after; i.e. either 8:30–8:50 or 10:00–10:20) – mean (10 min before; i.e. either 8:20–8:30 or 9:50–10:00) on announcements days only for either price or volume series; only the days with the corresponding announcement are used. The third tests equality of means between the 1-min price (or volume) series (either from 8:20 to 8:50, or from 9:50 to 10:20) and the 1-min price (or volume) series throughout the announcement days.

⁴ The regression analysis follows Elder et al. (2012).

⁵ This analysis was introduced by Kuttner (2001) and was empirically applied by Rosa (2011).

⁶ Asymmetric analysis is implemented as in Marshall et al. (2012). However, a parametric modelling for depicting asymmetries were also used in the literature. Laopodis (2010) examined via VAR models the asymmetric effects of monetary policy actions on the stock market.

⁷ This comparison complements the literature (in specific, Roache and Rossi, 2010) in terms of comparing with other financial assets as well as in terms of the frequency in which analysis takes place.

Download English Version:

<https://daneshyari.com/en/article/1002875>

Download Persian Version:

<https://daneshyari.com/article/1002875>

[Daneshyari.com](https://daneshyari.com)