

Pre-announcement effects, news effects, and volatility: Monetary policy and the stock market

Antulio N. Bomfim *

*Monetary and Financial Market Analysis, Division of Monetary Affairs, Federal Reserve Board,
Mail Stop 74, Washington, DC 20551, USA*

Received 1 December 1999; accepted 30 May 2001

Abstract

I examine pre-announcement and news effects on the stock market in the context of public disclosure of monetary policy decisions. The results suggest that the stock market tends to be relatively quiet – conditional volatility is abnormally low – on days preceding regularly scheduled policy announcements. Although this calming effect is routinely reported in anecdotal press accounts, it is statistically significant only over the past four to five years, a result that I attribute to changes in the Federal Reserve’s disclosure practices in early 1994. The paper also looks at how the actual interest rate decisions of policy makers affect stock market volatility. The element of surprise in such decisions tends to boost stock market volatility significantly in the short run, and positive surprises – higher-than-expected values of the target federal funds rate – tend to have a larger effect on volatility than negative surprises. The implications of the results for broader issues in the finance and economics literatures are also discussed. Published by Elsevier Science B.V.

JEL classification: G14; E44; C32

Keywords: Uncertainty; Information; Expectations; GARCH; Risk

1. Introduction

Anecdotal press accounts tend to confirm the common notion that daily fluctuations in stock prices are importantly affected by macroeconomic announcements,

* Tel.: +1-202-736-5619; fax: +1-202-452-2301.

E-mail address: abomfim@frb.gov (A.N. Bomfim).

such as changes in the stance of monetary policy. Yet, a consistent, statistically significant link between macroeconomic news and movements in stock prices has been surprisingly elusive, both for economic data releases in general and for changes in the monetary policy stance in particular.¹

This paper presents new statistical evidence that US stock prices do respond reliably to macroeconomic news conveyed by monetary policy decisions regarding the target federal funds rate, which is the main monetary policy instrument in the United States. Departing from most previous work on the relationship between monetary policy and the stock market – which has primarily focused on the impact of policy decisions on the *level* of stock returns – this paper also emphasizes the potential impact of unanticipated monetary policy on the *volatility* of stock returns.²

I look at the relationship between monetary policy and daily stock market volatility from two vantage points: days around regularly scheduled meetings of the Federal Open Market Committee (FOMC) – the main monetary policymaking body in the United States – and days of actual policy decisions involving the target level of the federal funds rate. Along the first dimension, I examine whether the existence of regularly scheduled policy meetings per se has a measurable effect on stock market volatility.³ Judging from reports in the popular press, the answer to this question would be yes, as evidenced, for instance, by numerous news stories associating days of relative calm in the markets with upcoming FOMC meetings.⁴ I find statistical support for such headlines, but only after taking into account the effects of changes in the monetary policy news arrival process over the years. In particular, such “pre-announcement” effects are present only over the past five years or so, a period when the majority of policy decisions have actually been taken at the FOMC’s regularly scheduled meetings.

Turning to the days of actual policy decisions – regardless of whether they were announced on regularly scheduled meeting days – I find some evidence that such decisions tend to boost volatility in the stock market. As suggested by theory, the effect of policy decisions is greatest if I exclude those decisions that were fully anticipated by market participants. The results also suggest that positive surprises – higher-than-

¹ Empirical analysis of the relationship between macroeconomic data and stock prices includes Berry and Howe (1994), Mitchell and Mulherin (1994), Ederington and Lee (1993), Cutler et al. (1989), Roll (1988), and many others. Recent papers that have focused on how asset prices in general respond to monetary policy actions – proxied by changes in the target federal funds rate – include Bomfim and Reinhart (2000), Kuttner (2000), Roley and Sellon (1998), Thornton (1998), and Reinhart and Simin (1997).

² Chen et al. (1999) also examined monetary policy effects on stock market volatility, but their focus was on the effect of discount rate decisions on stock market volatility. Previously, Castanias (1979) had also examined the relationship between discount rate decisions and the volatility of stock returns.

³ Since 1981, there have been eight regularly scheduled meetings of the FOMC per year, generally with six to eight weeks between meetings. Meeting dates for each year are announced to the public during the second half of the previous year.

⁴ For instance, in the morning of August 24, 1999 – a policy meeting day – a CNNfn news wire noted that trading in the stock market was “very quiet ... amid anticipation that the Federal Reserve would raise interest rates in the afternoon”.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلید کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات