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The Bad, the boom and the bust: Profit warnings over the business cycle

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ABSTRACT

We examine the market reaction of profit warnings (PWs) over the business cycle in the U.S. during 1995–2012. The average PW is associated with a −13.38% abnormal return during the announcement day. This is substantially higher than the abnormal return of firms who announce a negative earnings surprise without previously warning about it. We also find that the PW stock market reactions are asymmetric during the business cycle. Negative stock market reactions are greater in magnitude during expansion periods than during contraction periods. Theory suggests that this is because bad news is not expected during good times, so when it is announced, investors have a greater update to their beliefs.

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1. Introduction

A firm's managers have more information about the expected profitability of the firm than investors. When that profitability falls short of analysts' expectations, managers can voluntarily choose to issue a profit warning (PW), typically about 3–4 weeks ahead of the formal earnings announcement. A PW differs from an earnings announcement in the sense that it occurs irregularly and unpredictably across firms and time. Kothari, Shu, and Wysocki (2009) argue that the large negative return generated from bad news that is unanticipated gives management an incentive to withhold bad news. PWs exhibit this negative reaction and the firm suffers a substantial decline in the stock price (Bulkley & Herrerias, 2005; Kasznik & Lev, 1995; Spohr, 2014; Tucker, 2007; Xu, 2008).

Mendenhall and Nichols (1988) and Chen and Mohan (1994) argue that when managers issue PWs they are striving to time the bad news release in order to minimize the negative market reaction. Previous research has also indicated that the interpretation of bad news is different over the business cycle (DeStefano, 2004). So some environments might be better than others for a voluntary disclosure. 3Com Corp issued a profit warning during the evening of December 4, 2000, near the top of a long bull market. When the market opened the next day, its price fell nearly 30 percent, an abnormal return of −32.5%. 3Com warned again nearly three months later. The market reaction in early March 2001 to this PW was a stock price decline of 21%, an abnormal return of −4.7%. While there are important differences between these two warnings themselves, the state of the market may have also been an important factor in the market reaction. The Dow Jones Industrial Average

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was still near its high during the first warning, which was at the end of the economic expansion period. The economy had just entered a recession during the second warning and the NASDAQ (where 3Com stock traded) was collapsing.

An asymmetric market response to bad news is predicted by several theoretical models. For example, the regime switching model of Veronesi (1999) explains the asymmetric impacts of bad news throughout the business cycle in terms of changing an investor's belief system. During good times, investors do not expect bad news. If bad news occurs during good times, investors are surprised and must drastically change their belief system (posterior). For scheduled disclosures, Conrad, Cornell, and Landsman (2002) examine the price response to bad and good earnings shocks. They find that the stock market response to negative earnings surprises increases as the relative level of the market rises. Our research builds on the study by Conrad et al. (2002) by examining the PW, a voluntary bad news disclosure, over the business cycle. We compare this impact to those firms that have negative earnings surprises, but choose not to warn shareholders.

The paper is organized as follows. In Section 2, we will motivate our study and discuss the literature. Section 3 contains our sample selection and research design. In Section 4, we discuss our empirical findings. An additional test and comments on the robustness of our results are covered in Section 5. Lastly, we conclude the paper in Section 6.

2. Related literature

Kasznik and Lev (1995) show that the market reaction to a profit warning is significantly more negative than for non-warning firms with bad earnings surprises. Tucker (2007) reports that firms with a large amount of bad news (not necessarily profit warnings) are worse off in the short-term for having warned than for being silent. A profit warning may take the form of a specific earnings revision forecast or may be more qualitative in nature. Church and Donker (2009) show that providing greater transparency in the profit warning disclosure dampens the negative market response. Spohr (2014) in their study of PWs in Finland, Sweden, Denmark and Iceland found the market response was larger for riskier firms. Jackson and Madura (2003) report that the announcement reaction is more severe for small firms, but there appears to be some anticipation of the warning for large firms. Lastly, the magnitude of the PW market reaction has attenuated after the implementation of the Regulation Fair Disclosure (Jackson & Madura, 2007), suggesting that more transparency leads to less surprise by the market.

Investors may interpret the signal provided by a PW differently over the business cycle. Barberis et al. (1998) describes investor sentiment as being overly optimistic at times and overly pessimistic at other times. Baker and Wurgler (2006, 2007) and Nofsinger (2012) have shown a link between investor sentiment and the business cycle. During an economic expansion, investors are predominately exposed to good news. Over an extended expansion, investors' extrapolation bias leads them to become optimistic and good news becomes the norm, thus it is expected. During this time, bad news is more of a surprise because it is out of the expected norm. On the other hand, during an economic contraction, investors predominately hear bad news. Investor sentiment changes and becomes more pessimistic. During these contraction times, bad news becomes the expected norm, and thus it is less of a surprise. Therefore, due to their sentiment, investors may react differently to bad news during economic expansion versus contraction periods.

The sentiment literature casts investors in different frames of mind and as having different expectations over the business cycle. Veronesi (1999) models different expectations in a regime switching model. While in 'good times,' the model predicts that stock prices will overreact to bad news. The bad news surprise forces investors to consider whether the regime has switched to 'bad times.' Conrad et al. (2002) empirically test the model with earnings surprises. They compare the stock price reaction between these scheduled announcements in high valuation stock markets (high P/E ratio) versus low valuation markets. They find that the negative reaction to poor earnings surprises is of higher magnitude during the high valuation market periods.

We examine the stock price reaction of voluntary earnings guidance warnings (PWs) by management over the business cycle.

3. Sample selection and research design

Our sample consists of U.S. firms listed on the New York Stock Exchange (NYSE), American Stock Exchange (AMEX), and NASDAQ from 1995 to 2012. Profit warning announcements were hand collected for the 1995 to 2012 period utilizing LexisNexis Academics by searching the *Wall Street Journal*, *New York Times*, *Washington Post*, *Financial Times*, and newswires from the financial markets. The keywords searched were "profit warning" and "earnings warning." We do not extend our sample period to before 1995, since profit warnings were infrequently acknowledged in newspapers before 1995. This identification process garnered a sample of 1,961 observations of U.S. firms issuing profit warnings. The stock price data, adjusted for dividends and splits, was compiled from the Center for Research in Securities Prices (CRSP). Financial data were obtained from COMPUSTAT files. The event date (t = 0) was the announcement date from the newspaper in LexisNexis. Financial Analyst's earnings forecast data were collected from the Institutional Brokers' Estimate System (IBES). The National Bureau of Economic Research (NBER) provided information with respect to business cycles.

Fig. 1 reports the quarterly frequency distribution of the 1,961 profit warnings during 1995–2012. Note that many of the warnings were issued during the time of the technology bubble and subsequent market deflation. This also coincides with the September 11, 2001 terror attacks and subsequent economic contraction.

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