The information in UK company profit warnings

By Andrew Clare of the Bank's Monetary Instruments and Markets Division.

This article examines the information content of trading statements issued by UK companies between 1994 and 2000. These statements are released by companies quoted on the London Stock Exchange when they have information that is relevant to their share price. The article concludes that trading statements indicating that earnings will be lower than expected by the market—so-called 'profit warnings'—are particularly informative, as shown by the impact of trading statements on their associated stock prices. There is also preliminary evidence to suggest that the incidence of profit warnings may be a useful leading indicator of UK economic activity.

Introduction

A wide range of indicators of UK economic activity is available. One relatively new indicator is a time series of 'profit warnings' issued by UK companies. These profit warnings are trading statements that have been reported in the press identifying an adverse outlook for a firm's future earnings and profitability. Bank staff recorded 88 UK company profit warnings in 2000 Q4, compared with 57 in 1999 Q4.(1) Of the 88 warnings, 26% were issued by IT companies. We were able to identify clear reasons for 76 of the 88 statements: 21% related to weakening domestic demand, 21% to 'industry-specific' causes, while 26% related to 'firm-specific' events. The remainder gave more idiosyncratic reasons.

This article summarises work undertaken at the Bank aimed at establishing: whether these statements contain genuine information; which types of statement are most informative; and whether the incidence of the statements can tell us anything about the state of the UK economy.

It appears that statements reporting an adverse outlook for the future prospects of the firm ('profit warnings') do contain market-relevant information, causing financial agents to revise expectations about future profitability dramatically. Statements reporting a positive outlook for future profits tend to have a much smaller (though still significant) impact upon prices—implying that the information content of these statements is lower. There is also some weak and preliminary evidence that the incidence of negative trading statements issued by FTSE 350 companies may be a leading indicator of UK economic activity.

The data and preliminary analysis

The analysis draws on two related databases. The first consists of all trading statements made by UK listed companies between January 1994 and December 1998. The second database consists of all those trading statements given the journalistic label of 'profit warning', spanning the period from July 1997 to January 2000.

Directors of companies listed on the London Stock Exchange (LSE) are required to issue trading statements when there has been a change in the financial condition of their company or in the performance of its business that is likely to be relevant to the company's share price, ie that is not reflected in the current share price.

More formally, the requirement for the issuance of a trading statement according to Financial Services Authority (FSA) rules is as follows:

'Where to the knowledge of a company's directors there is such a change in the company's financial condition or in the performance of its business or in the company's expectation of its performance that knowledge of the change is likely to lead to substantial movement in the price of its listed securities, the company must notify the Company Announcements Office without delay all

(1) Bank staff also recorded a total of 50 warnings in January 2001, the highest monthly total in the Bank's data set.

relevant information concerning the change.' (FSA, (2001)).

The Extel trading statement database

Extel Financial Services provided a database of trading statements in hard copy format. The data consist of all statements made by UK listed companies between January 1994 and December 1998. Due to the vast number of such statements and because of the difficulties of working with hard copy, the analysis discussed here concentrated on those statements made by firms within the FTSE 350 index at the time that their statement was issued. The historical composition of the FTSE 350 index (which is not readily available) was constructed using the 'Constituent Additions & Withdrawals' lists for the FTSE 100 and FTSE 250 indices, available from FTSE International. One benefit of concentrating on these firms is that higher-quality data are available for them, for example their share price is less likely to be affected by thin trading. Each trading statement was categorised into one of three groups—positive, negative and neutral—according to the news embodied in the statement. An example of each category of announcement is given below.

Neutral:

BCI Plc, 7 December 1995.
'Group's overall 1995 profits before exceptional items and tax are anticipated to be in line with market expectations.'

Positive:

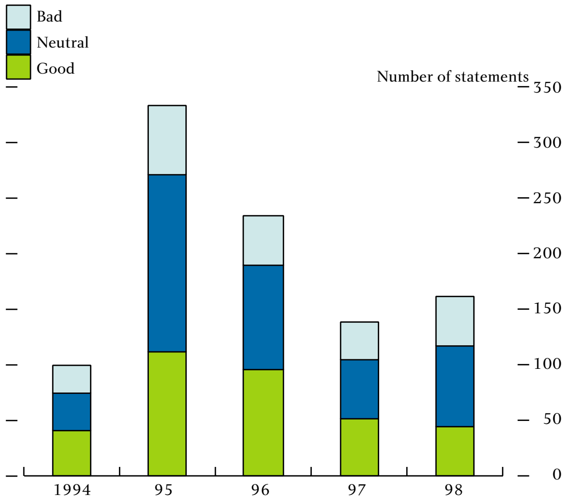
W.H. Smith Plc, 19 October 1994.
'Since August, trading has improved—helped by new products, aggressive price promotions and cooler weather. Prospects for Christmas are encouraging with the Christmas range better than for many years and stronger than ever value offers.'

Negative:

Lonrho Plc, 17 March 1997.
'...results for its continuing businesses for 6 months to 31–3–97 have been adversely affected. This has been due to the strength of sterling, poor precious metal prices, lower profits at Ashanti (for quarter ended 31–12–96 plus group's lower interest at 33.3%) and moderate results in the group's African trading businesses. Pre-tax profits of continuing businesses will depend upon exchange rates at 3–13–97, but could be around one third down on the previous year'.

Chart 1 shows the total number of statements issued each year, over the five-year sample period. The increase in statements after 1994 may have been precipitated by the issue of a London Stock Exchange (LSE) committee publication,[1] which was designed to give listed companies guidance on the dissemination of price-sensitive information (PSI) following a high-profile insider dealing court case in 1993. The document was published at the same time as the 1994 Criminal Justice Act, which strengthened existing law relating to PSI.

Chart 1
Positive, negative and neutral trading statements



Both the LSE guidelines and the Act require firms to release information that, if made public, would be likely to have a 'significant impact' on the ordinary shares or other securities issued by the firm. However, it is clearly very difficult to discern whether a piece of PSI will have a 'significant impact' or not. Furthermore, neither the Act nor the guidelines quantify 'significant impact'. So the net result of these two publications was to encourage companies to reveal more information than they had previously been inclined to release, ie they chose the low-risk option of releasing information, even where there was only a very small possibility that it would be interpreted as being 'significant'.

The table overleaf shows the proportion of positive and negative statements by sector over the five-year period. The first row for each sector refers to the number of negative statements made by firms in that sector as a proportion of the total number of such statements made. The second row presents the analogous statistic for positive statements. The table shows that, in general, the proportions are fairly stable over time, perhaps not surprisingly over such a short sample period. In 1998

(1) *Guidance on the dissemination of price-sensitive information*, London Stock Exchange (1994).

approximately 36% of all negative statements were issued by the manufacturing sector, with the majority of the remainder being issued by the service sector. The table also shows that the proportion of positive statements from the manufacturing sector declines over the period.

Positive and negative trading statements by stock market sector

Per cent

		1994	1995	1996	1997	1998
Manufacturing	–	40.0	44.2	33.3	39.0	36.4
	+	32.1	49.6	34.6	22.8	17.4
Services	–	56.0	41.6	52.9	56.1	61.4
	+	64.2	47.1	61.8	70.2	73.9
Others	–	4.0	14.3	13.7	4.9	2.3
	+	3.8	3.4	3.6	7.0	8.7

Note: The table presents the number of negative trading statements (first row) and positive trading statements (second row) as a percentage of the total number of such trading statements issued each year.

The profit warnings database

The second database comprises only negative trading statements. More specifically, negative trading statements that have been labelled as 'profit warnings' by the press. These profit warnings all relate to firms within the FTSE 350 at the time of their statement;[1] the database was constructed at the Bank of England by using the key-word search facility in Reuters Business Briefing every month. The data set analysed here spans the period from July 1997 to January 2000, and comprises 574 statements.[2] It is richer in detail than the data gleaned from the database described above. It includes full information relating to the reason for the statement, thus indicating the extent to which, for example, profit warnings related to the strength of sterling have had a larger impact than those related to more firm-specific events. Four key concerns are identified within these trading statements: (i) the level of sterling; (ii) levels of aggregate demand; (iii) the impact of the Asian/Russian crisis; and (iv) firm-specific factors. These data give an interesting new insight into the nature of UK business conditions over the sample period.

Chart 2 gives a quarterly breakdown of these statements by industrial sector. The total number of profit warnings declined after peaking in the second half of 1998. Though both manufacturing and service sector profit warnings declined since then, those related to the manufacturing sector fell the most. There were proportionately more service sector related profit warnings at the start of 2000. Chart 3 shows the reasons given for the warnings. The gradual increase in Asia/Russia-related warnings[3] is evident. These decline and eventually disappear as the crises pass. There is also evidence of sterling's impact on the UK economy, with sterling-related warnings mainly confined to 1997 and 1998, following sterling's strengthening in 1996. The fact that these warnings disappeared despite sterling's continued strength suggests that firms had adapted to this shock by early 1999.

Chart 2
FTSE 350 profit warnings by industrial sector

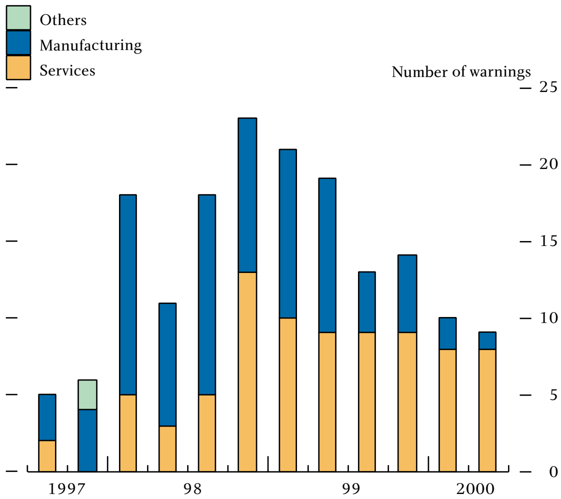
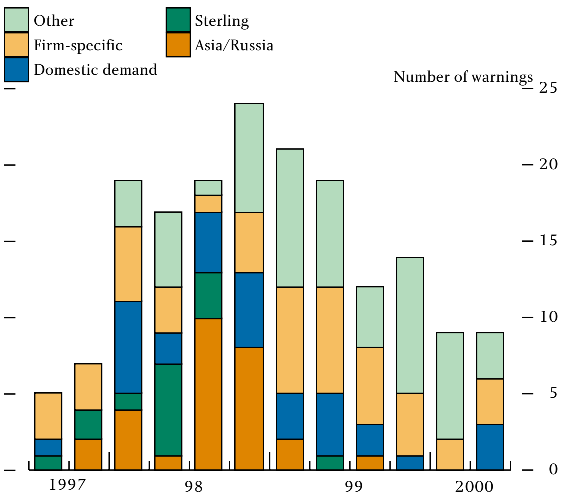


Chart 3
FTSE 350 profit warnings by reason



The impact of trading statements on share prices

To determine the information content of the statements in both data sets, share price data were collected for

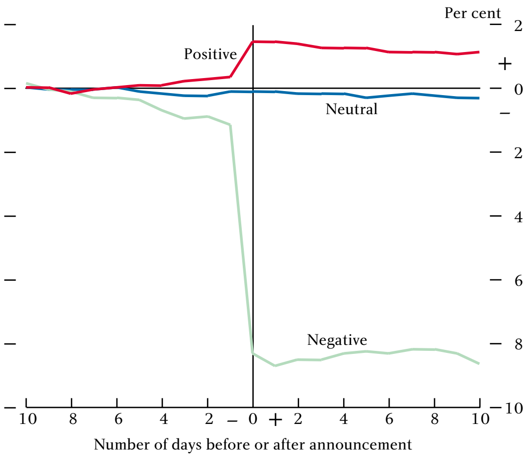
(1) The full Bank of England profit warnings database consists of all warnings from firms listed on the London Stock Exchange.
(2) The data set is updated every month by Bank staff as part of their regular monitoring of economic conditions in the UK economy. For an assessment of recent profit warnings activity, see the February 2001 *Inflation Report*, page 12.
(3) These are combined as, following the Russian crisis, firms began citing both regions in the same statement as a reason for their difficulties. Clearly the earlier statements in this category relate to the Asian crisis only.

each firm making a statement, and the behaviour of these share prices was monitored following the statement. The share price data are daily and span the period from 1994 to 2000. A conventional event study was undertaken, risk-adjusting the individual equity returns using a version of the market model.[1] To this end data were also collected on the FTSE 100 share index, to be used as a proxy for the market portfolio. This exercise is useful in determining the degree to which the trading statements contain additional information, and could help to establish a role for trading statements as a leading indicator of other key UK macroeconomic data.

Results: Extel trading statement database

Chart 4 plots the cumulative return for neutral statements (in excess of the return on the market index), where day 0 is the day of the announcement. The chart shows that the series is very close to the origin at all times. This indicates that these statements were indeed 'neutral' in their impact. The average response to positive statements is also shown. The test statistics (not presented here) indicate that the positive average response on day 0 of 1.0% is strongly significant (this test is equivalent to a test of the significance of average abnormal returns on this day, since the return is not cumulated). By day 9 cumulative returns of 0.63% exist, but these are not statistically significant.

Chart 4
Cumulative abnormal returns following UK trading statements



The response to negative statements is far stronger. The average abnormal return on the day of the announcement is -7.13% and is massively significant.

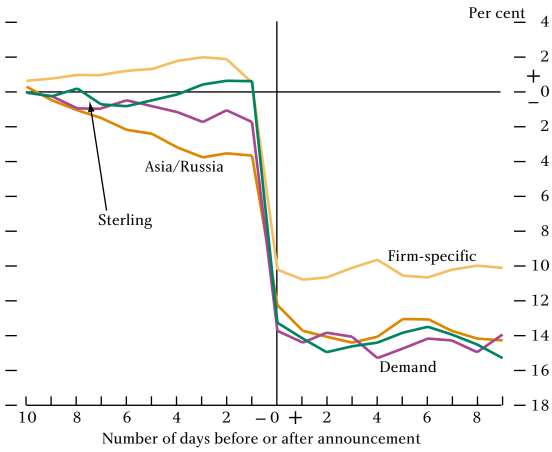
Given this large response on day 0 we should not be surprised to find that the cumulative abnormal returns are still significant between day 0 and day 9. The cumulative return over this period is highly significant at -8.01%.

The asymmetry between 'good' and 'bad' news is clear in Chart 4, and is a typical finding of studies of this kind. The most popular explanation of this type of asymmetric reaction was proposed originally in the field of psychology, where researchers found that people tended to 'overreact' to bad news and 'underreact' to good news.[2]

Results: profit warnings database

The analysis of stock price behaviour was repeated using the Bank's database of profit warnings around the time of the warning. The statements were split into four categories according to the reason for the statement: firm-specific factors, the strength of sterling, the Asian/Russian financial crisis and domestic demand. Chart 5 presents the cumulative abnormal returns following profit warnings relating to the four different statement types. The chart shows that for each of these categories, the cumulative abnormal return is more negative than for those negative trading statements shown in Chart 4.[3] This makes sense since these statements are likely to be the most extreme of the negative trading statements. On the day of the announcement, statements relating to domestic demand cause the largest average price fall of -13.68%, but over the full ten days sterling-related statements led to a

Chart 5
Cumulative abnormal returns following specific types of UK trading statements



(1) The standard event study methodology, which is common in the finance literature, was used. For more precise details of the methodology, see Chapter 4 of Campbell, Lo and MacKinlay (1997).
(2) See DeBondt and Thaler (1985) for an application of this theory to financial market data.
(3) Although they are drawn from different sample periods.

-15.27% fall, on average. The test statistics for the cumulative returns after the release of the statements show that for all four types of statement, the cumulative returns over the full ten-day window are all highly significant.

Does the incidence of profit warnings lead other economic variables?

The results outlined above indicate that quite substantial revisions to share prices occur when trading statements report an adverse outlook for the profitability of firms. Given that these warnings are about 'things to come', it may be that on average they lead other key economic variables. A formal statistical analysis of the relationship between the number of profit warnings and future economic activity would be rather ambitious with such a short sample period, so a simpler approach is used. A time series of the quarterly incidence of UK negative trading statements/profit warnings was constructed, using the quarterly incidence of the negative trading statements from the Extel database up until 1998 Q4 and the FTSE 350 profit warnings from 1999 Q1 to 2000 Q1.

Chart 6[(1)] plots the monthly time series of profit warnings alongside an index of the outlook for the profits of UK quoted companies from August 1998 to June 2000. This index is compiled by Merrill Lynch and is based on a survey of UK fund managers. It shows that the profit warnings series is a relatively good mirror image of the profits outlook series. Clearly it is possible that the respondents to the Merrill Lynch survey on profits outlook are being influenced by negative trading statements, but it is comforting nonetheless to find that the profit warnings series is negatively correlated with this forward-looking index of UK company profits.

Chart 6
Profit warnings and profits outlook twelve months ahead

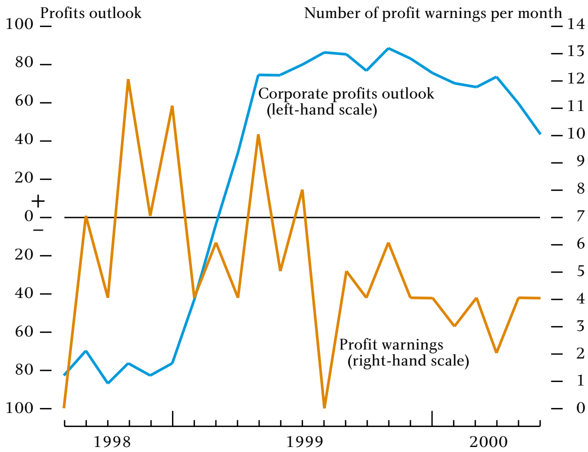


Chart 7 plots the incidence of these FTSE 350 statements against UK GDP growth. So what are the stylised facts with respect to the incidence of these statements over this longer sample period?[(2)] Chart 7 shows that between 1995 Q1 and 1996 Q2 there were between 15 and 20 FTSE 350 profit warnings per quarter; after this period profit warnings declined, until their numbers began to increase at the end of 1997. The number of warnings then grew again until the end of 1998; there were 23 FTSE 350 profit warnings in the last quarter of 1998, alongside the Russian debt crisis and the continuing strength of sterling. The number of profit warnings then fell to the end of the sample period.

Chart 7
GDP growth and UK profit warnings

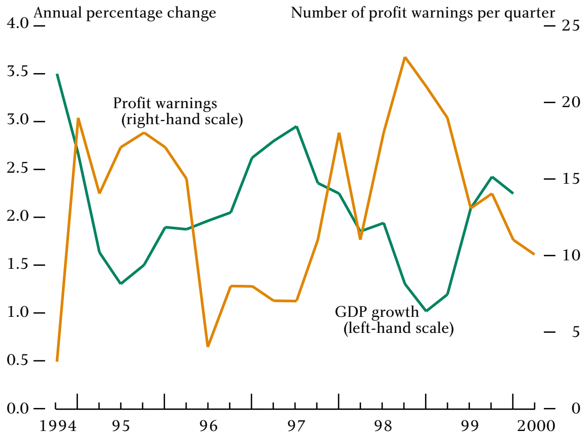


Chart 7 suggests that there might be a weak, inverse correlation between the incidence of profit warnings and the rate of growth of GDP, with profit warnings seemingly leading GDP growth. It should also be borne in mind that the profit warnings data are available without the lags associated with aggregate macroeconomic data.

Clearly further work is needed to establish whether the incidence of these warnings has leading-indicator properties or not and whether it adds to information that can be derived from other variables.

Conclusions

This article has investigated the extent to which trading statements issued by UK companies contain

(1) Charts 6 and 7 use data that have been updated since the completion of the event study.
(2) For more recent analysis of profit warnings trends, see the February 2001 *Inflation Report*, page 12.

important information about the firms themselves and about the UK economy. Standard event study techniques show that trading statements do represent genuine news to UK equity markets, more so for negative than for positive statements, and especially so for negative statements labelled 'profit warnings'. News about the future profitability of UK firms may also be related to the outlook for the UK economy more generally. But the evidence for this is so far only tentative.

References

Campbell, J Y, Lo, A W and MacKinlay, A C (1997), *The econometrics of financial markets*, Princeton University Press, Princeton, New Jersey.

DeBondt, W and Thaler, R (1985), 'Does the stock market overreact?', *Journal of Finance*, Vol. 40, pages 793–805.

London Stock Exchange (1994), *Guidance on the dissemination of price-sensitive information*, London.

Financial Services Authority (2001), *Listing rules*, London. Obtainable from the FSA, see www.fsa.gov.uk/ukla/7c_purchase.html