This study examines the role of analyst briefings in the Australian share market, an area that has come under increased regulatory scrutiny. We identify the population of disclosed analyst briefings between 1999 and 2008, and analyse intraday ASX pricing data around the analyst briefing and contemporaneous earnings announcement events. Using abnormal trading activity as a proxy for information disclosure and a unique measure of informed trading, we make a number of interesting findings. Overall, we find that closed briefings allow earlier price discovery than open briefings and without creating any evidence of profitable informed trading. The case for additional regulation is not supported.1

This research provides evidence on the role of analyst briefings in Australia, using the rich and highly granular data available on Australian Securities Exchange (ASX) trading activity. We provide empirical evidence to inform policy makers currently considering changes to the continuous disclosure (CD) policy in Australia.

CD policy was introduced in Australia on 5 September 1994 to support ASX listing rule 3.1. CD requires that corporations continuously disclose ensuring that ‘the market is fully informed at all times so investors can make informed investment decisions’. In November 1999, ASIC issued Consultation Paper 5: Heard it on the grapevine, which served as a set of guidelines for company disclosure in Australia. Soon after this, ASIC provided the first evidence that the regulator and the courts would begin to enforce the full range of penalties and remedies (Coffey 2007). More recently, in November 2008, Senator Nick Sherry, then Minister for Superannuation and Corporate Law, issued a press release announcing a review by the Corporations and Markets Advisory Committee (CAMAC) into a range of market practices relevant to the integrity and transparency of the Australian share market. Senator Sherry requested that CAMAC:

> examine the role that analysts’ briefings play in Australia’s financial market, including whether their role is a positive one that leads to greater market efficiency; and

> advise whether changes may be required to Australia’s regulatory framework; and, if so, what form they should take.

The advisory committee’s position following the release of this report in June 2009 (CAMAC 2009) was that it did not see a need for further legislative intervention, although this conclusion was not supported by rigorous empirical evidence.

It is well accepted that changes to financial market regulation can impose costs on affected firms and can sometimes involve unintended consequences. Accordingly, systematic study of the costs and benefits of regulation is advocated as a precursor to regulatory change.2 The research conducted for this paper aims to provide empirical evidence on the role of analyst briefings in the Australian CD regime to verify CAMAC’s finding.3

If there were valuable private information released at analyst briefings we would expect to see:

> price responses at the briefing date;
greater trading volume after the briefing date (although
prices could adjust without significant trading
occurring); and
evidence suggestive of active traders (informed
analysts) making profitable trades.

Sample and data selection
First, we identified the population of disclosed analyst
briefings between 1990 and 2008 via an electronic
keyword search of ASX company announcements. This
search was conducted by Sirca Limited, which also
provided all other data for this research. This period was
chosen to allow an investigation of almost five years
prior to the introduction of CD (on 5 September 1994),
as well as periods before and after the ASIC draft policy
document on analyst briefings (issued November 1999).
The process required identifying half-year and preliminary
full-year earnings announcements made on ASX. These
dates (and companies) were used as anchor points for
subsequent multiple keyword searches to identify open or
closed analyst briefings prior to the release of the results.
A very small number of observations (less than 10) were
returned prior to the release of the ASIC paper in 1999. As
a result of the lack of observations, the intended before
and after CD analysis was not achievable.

Using this initial sample, the announcements were
then read and categorised as either open, closed or
unidentified. An open briefing is one that is open to the
public, whereas a closed briefing is made to a selected
group of analysts. Some briefings have audiences that do
not fully satisfy being fully open or fully closed, and these
are classified as unidentified.4 The final sample consisted
of 73 open, 61 closed and 84 unidentified observations.
While results were produced for all three samples, as
well as for a combined group of all observations, in the
sections that follow we provide a detailed discussion of
the open and closed groups.

Empirical methods
In order to examine the impact of open and closed analyst
briefings on market microstructure characteristics, this
study investigates a range of metrics including returns,
volatility, volumes and a unique measure for informed
trading. Our focus is on whether these data indicate any
release of valuable information at the briefing date and
the public announcement date when there has been a
prior briefing.

One difficulty in event studies such as this is identifying
the counterfactual (or benchmark) — of no information
release in this case — against which to compare the data.
We use as the benchmark the corresponding data for
the firm concerned from a 10-week average finishing two
weeks prior to the event, and we examine differences from
that average to identify abnormal events.

Event windows
Each event window is an 11-day period, comprising trading
days only. This study analyses two windows, based
around two event dates (T = 0). The first is the date of
the analyst briefing, the second is the periodic earnings
announcement. On average, the time period between the
analyst briefing date and the earnings announcement date
is 49, 50 and 51 days for the open, closed and unidentified
samples, respectively. Each window contains five trading
days before the event date and five trading days after
the event date (T - 5, 0, T + 5). As the study uses intraday
information, intervals of one hour are adopted to create
six intervals in each trading day and a total of 66 intervals
in each event window. Each of the metrics is calculated
using a sample that includes both on- and off-market
trades, with the exception of the informed trading metric
(because this requires details of the trade initiator which
are not available with off-market trades).

For each event window, we compare event intervals with
a benchmark control period, using the firm as its own
control. The control period is a 10-week period from -12 to
-2 weeks prior to the event period interval. All of the 66
hourly intervals in the event period have a control period
which relates to the same one-hour period on the same
day of the week. This approach allows us to control for
both day-of-the-week and time-of-day characteristics.

Return metrics
The volume-weighted average price (VWAP) is calculated for
each of the 66 hourly intervals of the event period. VWAPs
are also calculated over 10 corresponding periods in the
control period. The return for each period is then calculated
as Ln[VWAP(n)/VWAP(n-1)]. The abnormal return for
each period is calculated by subtracting the control period
average return for the corresponding interval.

Volume and volatility metrics
The volume metrics adopted are the total volume of
trading in shares, the total dollar value of the shares
traded, the total number of trades and the average
trade size. The volatility metric used is the interval range
VWAP, which is the maximum price in an interval less
the minimum price in that interval, scaled by the VWAP
of that interval. Abnormal measures are calculated by
subtracting the control from the event window interval.

Informed trading measure
This measure, which has not been used in prior research,
uses the highly granular data from ASX that allow trades
to be identified as either buyer or seller initiated. It
compares the trade initiation price with a scaled reference
price (which adjusts for changes in the market index) at
the end of a holding period (defined later) to determine
whether the trade made a profit or a loss. The calculation
is as follows:

\[
\text{Informed Trading} = \sum_{i=1}^{n} \frac{(BP_i + SP_i)}{(BP_i + SP_i + BL_i + SL_i)}
\]
where:

\( \text{BP}_i \) = value of buyer-initiated trades that made a profit;
\( \text{SP}_i \) = value of seller-initiated trades that made a profit;
\( \text{BL}_i \) = value of buyer-initiated trades that made a loss; and
\( \text{SL}_i \) = value of seller-initiated trades that made a loss.

Effectively, the formula uses the trade initiator profit to total trade ratio as a proxy for informed trading, based on the assumption that informed traders are likely to gain from having additional information.

To control for general market movements, the reference price (that is, the price on the last day of the assumed holding period that is used to determine if the trade resulted in a profit or a loss) is corrected for changes in the market index using the Australian All Ordinaries Index.

**Empirical results**

Due to space restrictions, we report detailed results for the set of open and closed briefings only, and all results are reported graphically.

**Abnormal returns**

The VWAP return calculations around the analyst briefing event date for the sample of closed briefings provide no real evidence of abnormal returns, with the cumulative abnormal returns (CARs) fluctuating in sign over time and generally being insignificant. For open briefings there is also little evidence to suggest that the CARs are significantly different from zero. Due to space restrictions, these results are not reported graphically.

Examining the second event window centered on the earnings announcement, the CARs are shown in Figures 1 and 2, where the bars represent \( t \)-statistics (measured against the right-hand axis) and where values around two or above indicate that the CAR is statistically significantly different from zero (at a 5 per cent level). The patterns in Figures 1 and 2 are markedly different, although there are few statistically significant individual CARs. The generally positive CARs for the closed sample, in contrast with the generally negative CARs for the open sample, suggests that valuable information is released in the earnings announcement subsequent to a closed briefing.

In summary, an analysis of the CARs for each of the windows fails to provide conclusive results. One explanation for the insignificant abnormal returns may be the lack of partitioning between positive and negative earnings announcements. Despite this, the results are consistent with the findings of Fleming (2001), which suggested that abnormal share prices (returns) were not significantly different from zero on the day of an open briefing.\(^5\) Our results indicate that valuable information is revealed when earnings are announced subsequent to a closed briefing (Figure 1), whereas no such carryover exists in relation to open briefings (Figure 2). Accordingly, there may be opportunities for informed trading, an issue we take up with the informed trading metric employed in this study.

**Abnormal volumes**

Abnormal total volumes for the closed and open sample at the analyst briefing date for the sample of closed briefings provide no real evidence of abnormal returns, with the cumulative abnormal returns (CARs) fluctuating in sign over time and generally being insignificant. For open briefings there is also little evidence to suggest that the CARs are significantly different from zero. Due to space restrictions, these results are not reported graphically.

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**FIGURE 1: Closed sample, earnings announcement window**

![Graph showing CARs and t-statistics](image)

- T-stat (right scale)
- CAR (left scale)
Similarly, the results suggest a change in trading activity on the day of the earnings announcement for both open and closed samples, particularly in the first hour of trading on the event day (interval 0).\(^6\) As can be observed from Figure 5 for the closed sample, there is a spike in volume that is significant at the 5 per cent level during four of the six-hourly intervals on both the earnings announcement day and the subsequent day. With respect to the open briefings sample (Figure 6), there are significantly increased volumes throughout the event day (interval 0 to +5), as well as significant volumes in four of the six-hourly periods on the day after the event (intervals +7, +8, +10 and +11).

Combined, the abnormal volume statistics are indicative of information being released to the market on each of the event days. One can conclude from this that there may have been price sensitive information disclosed in open and closed briefings prior to the earnings announcement, as well as in the earnings announcement itself.

**Abnormal volatility**

The results for abnormal VWAP volatility for the analyst briefing window for the closed sample\(^7\) show that there is a significant increase in abnormal volatility in the first hour of trading of the event day (interval 0). Both closed and open briefings result in significant abnormal volatility on the day of the event, but that volatility continues to be abnormally elevated on the day after the briefing for the open group. The results for the closed sample correspond with earlier findings of abnormal volume on the event day. Similarly, the open briefing sample has elevated volumes on the event day and the subsequent day (see Figure 4), and these periods also have increased volatility.

The earnings announcement windows also indicate that there is evidence of abnormal volatility on the event day, in both open and closed briefing samples (see Figures 7 and 8). This result is expected, given that we have previously shown abnormal volumes on the earnings announcement.

**Informed trading**

The results thus far fail to address the government’s concerns that closed analyst briefings may be creating

These findings suggest price sensitive information is being released to the market in both open and closed analyst briefings conducted prior to earnings announcements.
opportunities for insider trading. Turning the focus to informed trading, this section examines whether the abnormal trading activity is related to abnormal profits for trade initiators. The test of significance used in this section determines whether the informed trading measure is significantly different from 0.5; this value represents the point at which half of the investors initiating trades are making abnormal profits, given an assumed expiry (exit date) for the strategy, specified as the reference price. At this reference price point, it is expected that a reversing trade will take place to close out the position. We calculate the informed trading metric for each of the 66 hourly intervals in the relevant window.

Figure 9 displays the results for two reference prices; namely, the price at the end of trading on the earnings announcement date (Inf Trading, Day 0) and the price at the end of trading 20 days after the earnings announcement (Inf Trading, Day 20). Beginning with the analysts’ briefing window for the closed group, the results in the top panel of Figure 9 suggest that there is no instance where trade initiators generate abnormal profits from the closed briefing sample using the last trade on earnings announcement day as the reference price. In fact, the reverse seems to be the case because there are 21 instances between 0 and +35 where the hourly informed trading metric is significantly negative. However, as the reference price is changed to the one prevailing 20 days after the earnings announcement to allow for (any) post-earnings announcement drift, the results are less striking, as shown in the lower panel. There is no systematic evidence of profits to informed trading. If accurate information pertaining to the subsequent earnings announcement is obtained by analysts in a closed analyst briefing, and if analysts trade on that information, one would expect that abnormal profits would increase relative to abnormal losses. However, the results do not support this expectation. This finding, that
informed traders are either unable or elect not to profit from any information advantage obtained in a closed briefing, should alleviate concerns that such briefings create opportunities for insider trading.

In general, the open briefing sample provides similar results (the data are not included here for space reasons) to the informed trading measure (for exit at the announcement date), with 15 instances where this measure is significantly negative in the 35 hours after the briefing date. However, with the extended holding period (up to 20 days after the announcement date), there are two instances where informed trading is significantly positive (and four where it is significantly negative).

Overall, as with the closed sample, there is little evidence to suggest that informed trading increases as a result of open analyst briefings.

Our analysis of informed trading around the earnings announcement date again uses two reference prices, one being the last trade price 10 days after the announcement (Inf Trading, Day 10) and the other being the last trade price 20 days after the announcement (Inf Trading, Day 20). In Figure 10, the results from the closed sample are inconsistent with the presence of informed trading, with the abnormal trading figure oscillating around the expected 0.5 level (both panels of Figure 10) and there is no clear trend of informed trading before or after the
event day. Again, we conclude that there is no evidence suggesting that abnormal profits are being produced by trade initiators over this period.

The open briefing sample produces some evidence of informed trading, but this is confined to the period prior to the release of the earnings announcement (Figure 11). As indicated in Figure 11, there are some instances in panel A (two cases) and panel B (three cases) where the informed trading measure is significantly positive in the pre-announcement window. In summary, while there is some evidence that informed trading takes place prior to an earnings announcement that follows an open briefing, there is no similar evidence for closed briefings. This suggests that closed briefings are a mechanism by which markets are informed of upcoming earnings announcements, but that this is achieved

FIGURE 9: Closed sample, analyst briefing window

FIGURE 10: Closed sample, earnings announcement window
without informed traders profiting at the expense of uninformed traders.

**Conclusions**
The purpose of this paper is to verify the findings of CAMAC’s *Aspects of market integrity* report and to provide empirical evidence that will assist in CD policy deliberations. Using abnormal trading as a proxy for information disclosure, and a unique measure of informed trading, we document a number of interesting empirical findings. First, our results indicate that open and closed analyst briefings held prior to an earnings announcement result in the disclosure of new information. Further, the results show that in the case of closed briefings, the information disclosed is pertinent to the subsequent earnings announcement, a finding not present for open briefings. Second, despite this relationship, there is no evidence of abnormal profits being realised by informed traders following closed briefings. Thus there appear to be no substantial information asymmetries between informed and uninformed traders.

Overall, our results suggest that the analyst briefing process used by Australian companies adds to the timely provision of information to the market. Our paper also supports CAMAC’s comments that the practice by which listed companies provide closed or private briefings from time to time to analysts, institutional investors and others, provides ‘a useful and probably necessary supplement to their formal disclosures’.
Notes
1. The authors acknowledge the helpful advice and suggestions of an anonymous referee and the Managing Editor, Kevin Davis.
2. See, for example, the report of the Regulation Taskforce, Banks (2006).
3. For a detailed coverage of related Australian and US research literature see Corones (2009).
4. Details of the classification systems adopted are contained in Corones (2009).
5. We also use OLS regression to explore whether there is a significant relationship between abnormal returns on the day of briefings and abnormal returns on the day of the subsequent earnings announcement. We use the briefing day abnormal returns as the dependent variable and the earnings announcement day abnormal returns as the explanatory variable. We add up the six-hourly intervals for each day to obtain daily returns. The regression is carried out for both open and closed briefings. The results show that the coefficient for the closed briefing sample earnings announcement is 0.1582, which is significant at the 5 per cent level. We interpret this result to indicate that only part of the subsequently released earnings news is priced on the day of the closed briefing, perhaps suggesting that there are opportunities for the analysts at these closed briefings to gain from an information advantage. For the open briefings a coefficient of 0.1784 is estimated, however, this is not significantly different from zero due to the larger standard error of that sample.
6. Our data do not allow us to identify the exact hour in which a briefing occurs.
7. Graphs are omitted for space reasons, but are available on request.

References
Australian Securities and Investments Commission (ASIC) 1999, Consultation Paper 5, Heard it on the grapevine, November.

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