



**ASIAN SECURITIES ANALYSTS
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EDITORIAL

Welcome to the second issue of the ASAF Electronic Journal.

The first publication of this journal was by all accounts well received.

The purpose of this publication is to bring to members of the individual analysts' societies within ASAF quality articles relating to the investment industry in general and to Asia in particular.

This second issue incorporates a variety of articles discussing:

- The potential savings that are being made through the use of technology in the securities industries of Asia.
- A study of whether stock prices overreact using stocks sourced from the New Zealand and Australian share markets.
- An article discussing the financial reporting practices of 'new economy' stocks.

At the back of the journal is a brochure which provides detail and an application form for the upcoming ASAF Conference, which will be held in Hong Kong from 3-5 December 2001. The theme of the conference is “Asia-The Third Financial Zone”.

We are always looking out for articles for future newsletters and journals, so if you have any material which you would like published, then please let us know – you can reach the editors at rbunker@netvigator.com or deepak.gupta@amphenderson.co.nz.

Also, if you know of anyone with work they would like published, please encourage them to submit it. As you will see in this issue, we give full accreditation and links to the authors’ websites, emails etc. Do please try and find articles – preferably ones which are of general interest to the investment business, or to Asia, rather than country-specific work.

Similarly, if you have any complaints, suggestions, criticisms, or anything that we can do to improve future Journals, then we would like to hear them. Of course, if you have nice things to say about the Journal, we would like to hear them as well.

Enjoy!

Bob Bunker – HK Securities Institute

Deepak Gupta – NZ Society of Investment Analysts (joint Editors)

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By Steve McClintock, Partner, Price Waterhouse Coopers, Sydney, AUSTRALIA

A review of a survey carried out by the Securities Institute of Australia that looks at concerns around the financial reporting practices of 'new economy' companies. This article was sourced from JASSA (The Journal of the Securities Institute of Australia), Autumn Edition 2001, pages 33-34. We also acknowledge Darren Davis, who is Acting Manager, Membership and Public Affairs, Securities Institute of Australia in the preparation of this article.

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A NEW FRONTIER?

BondsInAsia CEO, Albert Cobetto, offers his insight into the potential savings that technology offers to institutional clients and also highlights where profitable/cost saving technology initiatives are emerging in the securities industries of Asia.

"If it ain't broke, don't fix it," says the old adage. So why create a new electronic system for trading fixed income securities in Asia, when there seems to be not much wrong with the existing one? Plenty of reasons, says Albert Cobetto, CEO of BondsInAsia, a joint venture between BNP Paribas, Citigroup, Deutsche Bank and HSBC, which is in the process of launching an online trading platform for bonds in the region.

"The Asian bond market as it stands at the moment lacks both transparency and liquidity. Furthermore the markets are very fragmented, with the investor base, major players and regulatory environment different in each market," says Cobetto. Through a system such as BondsInAsia not only will the process of price discovery on the part of investors become more transparent, but trade execution and back office administration on the part of banks will become more efficient, he explains. "It doesn't change the relationship between broker dealers/ investment banks with their clients or with each other in terms of dealing, it just adds a different, more efficient way of doing things."

Market Needs

BondsInAsia is not the only multi-dealer system to be launched in the region, but it is unique in that it aims to support franchises in each local market throughout Asia, through which local institutions will participate in ownership and governance of the multi-dealer hub in their particular market. By providing infrastructure, security and operational services for the trading platform, BondsInAsia intends to reduce a franchisee's costs of ownership, enabling it to service the needs of its market and pass on reduced transaction costs to its clients.

The reason why the franchise model was chosen, says Cobetto, was that it was the most effective way to engage the key providers to liquidity in each market. "We were looking at a number of Asian markets, each with its own market conventions, liquidity characteristics and regional players. We had to find a model that didn't shut anyone out, but delivered the most appropriate solution for the players in each market." For example in Singapore the group of institutions interested in the system (comprising local banks such as DBS) is slightly different from that in Hong Kong (local players such as Hang Seng and Dao Heng).

Tech Savvy

From the technology side, continues Cobetto, it was crucial to have a modular system that was flexible and broad based enough to handle the market dynamics in each country - and which could accommodate new products or asset classes as the market develops. The partner banks studied the markets in terms of how they are structured and

then looked around the world at some of the systems that were being developed, and trends in electronic trading. What emerged was a synthesis of many different systems from a technical point of view. "We selected hardware and technology that is robust, reliable, scalable and secure," says chief technology officer, Leo Melville. "And while most of the technology is not new, the way we have put it together is."

So as not to out-price and out-tech the smaller players in the region, BondsInAsia has striven to make the system as accessible as possible. "The system puts banks in a situation where they are able to do everything from administration through to trades, via the browser on their desktop - so it is feasible for banks with less sophistication who still want to have some electronic communication on their system," says Melville. "The smaller players tend to rely more wholly on interbank type trading as distinct to having a large client distribution network, so they really need fast pricing methods and will be looking for real-time pricing features." Nonetheless, he adds, most banks in the region are already very sophisticated in terms of their technology, so it simply comes down to having the flexibility to allow them to integrate into the BondsInAsia system.

Aware of the psychological stumbling block that can still exist with respect to the shift from traditional systems to new technology, BondsInAsia has tried to make the system as intuitive as possible for the end-user. "The fact that we use browser-based technology means there is no complicated deployment on site - it is just a matter of accessing a Microsoft or Netscape browser and clicking onto the site. And in terms of transacting trades we've tried to make the presentation and all the various steps that one would actually follow to execute a trade as simple as possible."

A strong feature of the system is that it supports straight through processing, says Melville. "We have put considerable emphasis on developing this by including features such as real-time pricing, the ability to discern trades that are digitally signed so the dealer knows who he has dealt with, and the ability to interface into the back office system. This is a system where, for once, institutions can go from the deal capture at the client interface, right through."

This is quite different from the situation in the past when banks were quite happy getting something out of the dealer system into the back office system, he says.

Security is another area in which potential users of technology can be wary. Can institutions and investors rest assured that their trades through the BondsInAsia system are completely secure? "We use 128-bit PKI encryption which provides us with the strongest possible solution, and is more than adequate for financial transactions. On a second level, a key issue is that users have to have relationships with the banks to be able to get in and see their prices and be able to interact. They also have to have credit lines in place. You can't come in from the street, for example, and get information from the system," says Cobetto.

Positive Response

The feedback from the industry has so far been extremely positive, says Cobetto. "We started in December 2000/January 2001 after we got full regulatory approval to begin operations in Hong Kong and Singapore. Since then it's been a three step process: the business model, the technology, and - now –the commitment. If people are interested we have them sign a non-disclosure agreement in which we reveal important information about the markets and the business model." Approximately 80 per cent of the top 10 dealers in each of the markets have signed an agreement and are seriously looking at joining the franchises, he says. "It's very positive, and the process will continue. In the meantime there's a lot of work to be done."

BondsInAsia is just starting to test the system, a process which it anticipates will take six to 10 weeks. It will then roll out the Hong Kong, Singapore and G3 franchises. Once those franchises are up and running it will start looking at other countries in the region. "We're really looking at a two or three plan minimum," says Cobetto.

Changing Times

Since the concept of BondsInAsia was first mooted in June 2000, both the economy and attitudes towards technology have shifted. Is the concept of trading fixed income securities online still viable in this new environment?

"Yes, market conditions have changed, but then market conditions are constantly changing," says Cobetto. "Domestic markets have grown in the past three years and they will continue to develop. The dollar sector and G3 market may slow down a bit, but now with interest rates coming off there could be more financing in those too. I think as the market matures people will be simply be looking at way to be more efficient and do things more cost effectively. And BondsInAsia has the scope to provide for that."

So does online trading through systems such as BondsInAsia represent the end of traditional trading in Asia? "No it doesn't," says Cobetto emphatically. "What we are doing is changing traditional trading a bit and making certain aspects more efficient. If properly utilised it will simply make the sales and fixed income divisions of institutions more efficient so their people can focus on the more complicated products and streamline their administrative processes - hopefully making the whole process more efficient."

THE HUMAN TOUCH

Straight through processing (STP) is gaining popularity among securities firms as more and more investors look to online trading. We take a look at the crucial factors in successful implementation.

If you could do it all over again, what would you do differently? For many securities firms which have implemented “straight-through-processing” (STP) brokerage systems, the answer is: spending more time with users to understand how their work processes would be changed.

While that sounds almost too familiar to many implementers of information technology (IT) projects, it all goes back to the same principle - users are human, who tend to stick to their old ways of doing things. They have a natural tendency to resist changes even though they are supposedly beneficial.

The concept of STP in the brokerage industry has been around for a couple of years. While it comes in various degrees, such as a narrower definition that covers orders processing only (compared to a broader one that includes also payment settlement) its ultimate goal is to make financial instrument transactions paperless and more efficient.

Online Benefits

STP allows investors to trade financial instruments such as equities using the Internet, by sending order instructions directly to the stock exchange’s order-matching system without going through brokers via telephone instructions.

Full implementation of STP also allows investors to settle their transactions online, eliminating cheque-writing and reconciliation.

While investors save transaction time and enjoy better control over the execution of their orders, brokerages also reap tremendous cost-savings and efficiency gains through the elimination of human intervention in the trading and settlement process.

But STP implementation is much more complex than a change in computer systems. It involves major alterations in how the brokerage does its business - from order processing to payment settlement, from customer service to risk management, to name a few.

A typical STP project involves the selection of software vendor, feasibility study of system requirements, implementation, user acceptance test, data migration, parallel run with incumbent system, full launch and project review. One of the first questions that must be addressed before starting the project, however, is deciding whether to upgrade the in-house proprietary system or adopt a package system from a third party vendor.

Many brokerages – international and local - have chosen to use package solutions due to cost advantage and compatibility requirements with other trading platforms.

The local branches of international brokerages tend to enlist the service of vendors with strong local presence, as they tend to give better technical support and are more experienced in customising their products to local requirements.

Process Re-engineering

One key to successful implementation is budgeting sufficient time for pre –implementation familiarisation and training, project managers said.

“The whole project is a training process,” said Hugo Cheng, KGI Securities associate director for electronic brokerage service. “It’s a process re-engineering project, the key is how you can improve upon the work flow and understand the difficulties faced by users. People like to stick to their old working methods, you have to negotiate and co-operate with them.”

The Hong Kong branch’s nine-month project was completed in April 1999, on time and within budget, he added.

“It’s a good idea to budget time to analyse existing workflows and visualise how they could change in an exception processing environment. In many situations, workflows that were built around inflexible mainframe systems are carried forward to the new operating platform simply because the users have viewed the process as a system replacement rather than a more comprehensive change,” said Colin Nass, Merrill Lynch director of operations in Hong Kong.

Users must have a detailed understanding of the new system before finalising their requirements –this will minimise scope creep and cut down on the number of changes at later stages of the project, he added. Hypothetical discussions are not sufficient, showing users actual screen layouts - even prototype designs- early on in the project can save costly redesign work later.”

The Hong Kong branch of the American brokerage completed its rollout of a STP system linking its front and back offices early this month.

Integrating Software

Another major challenge for brokerages is the integration of the software package designed by outside parties to their existing systems.

KGI’s Mr Cheng said the different business environment between Hong Kong and Europe, where its software vendor is based, has given rise to some integration issues. He cited the example that some external parties with whom the brokerage work on transaction settlement - mainly smaller banks – have not automated certain fund transfer operations due to the cost involved. But in Europe, these operations have already been widely automated.

The difference has required some adjustments to the STP system to cater to the need for

some manual operations with external parties, he said.

For Japanese brokerage Daiwa Securities SMBC's Hong Kong office, the integration issue relates to its parent company. The STP system it implemented replaced the IBM mainframe system originally from its parent, which the Hong Kong branch had used for 10 years since 1988. The new system has given the local branch independence in system management, according to project manager Shinichi Oyama.

“Before we installed the new system, Tokyo managed [our system], so when we needed to change the system, we had to ask Tokyo in writing and get approval,” he said. This meant it took time to respond to our request, as Tokyo needed to prioritise requests from all the offices handled by them.”

But because the new system replaced the branch's entire trading system, he said it faced lots of unexpected technical issues in the integration process.

“Everything was a challenge for us,” he said, adding that the system is now interfacing with the parent company's system, some international settlement systems and its other internal operating systems.

The STP system at Daiwa's local branch went live in August last year, after a minor delay due to management issues involving both Daiwa and its third party software house supplier. Daiwa and the project software vendor overcame the problems and are now working together on the solution. As STP implementation is an ongoing process, project managers said a post-implementation structure should be put in place to ensure smooth system upgrades in the future. Merrill Lynch's local branch has set up a user steering committee to facilitate the ongoing enhancement of the system, Mr Nass said.

OPTIMISING GLOBAL COLLATERAL MANAGEMENT

By employing the right IT strategy, it is possible for companies to use positions they control to transform the back office from an overhead to a profit centre contributing to revenues.

Jessie Pak reports

Firms have ample opportunities to earn revenue from security balances, but are not taking advantage of them. This is because firms lack the confidence to use their positions as collateral as freely as they might. Good collateral management is becoming an increasingly important aspect of the overall move towards the better use of capital and cost reduction in the back office. The drivers are nothing new: shortening settlement times; constantly squeezed margins, and clients' demands for higher standards of service in trading, conducted across increasingly diverse markets and instruments.

A major contributor in turning the back office into a profit centre is the maximised use of collateral to earn revenue from external parties. In bear markets in particular, firms need to squeeze the last cent of income out of their capital. By looking into the reasons for the failure to fully collateralise, a number of factors are seen to be at work.

Taking the trading operation as a whole, from the front to the back office, many firms are still dealing with a number of detached or semi-detached systems. Many of these systems have their own position data, each of which gives a partial view of the firm's actual positions. For example, the equity dealing desk only needs to know the equity positions, for trading purposes, and similarly, those dealing in equity derivatives need only know their positions, etc. However, a true picture of the firm's overall positions is arrived at by combining these sources of data. So opportunities to maximise the use of the true equity positions may be lost, or costs may even be incurred from borrowing externally, when this is unwarranted.

One of the constant pressures on the back office is the continuing trend towards shortened settlement times. As a result of this, firms have less time to recall stock out on loan or repo to cover sales or their own shortfalls. Not all firms have faith in the efficiency of their systems to recall stock quickly enough in trading environments with short settlement times such as T+3 or T+2.

A third factor contributing to this lack of confidence in fully collateralising is insufficient reconciliations of positions carried out by some firms. Never a glamorous part of the operation it is, however, vital that positions are confirmed frequently. Weekly position reconciliations do not offer enough risk reduction in today's faster, more complex trading environments.

A drawback to the development of efficient collateral management is the requirement for information traditionally held in the back office to be pushed through to the middle or front office. Development has, therefore, been a victim of the divide in front office/back office systems. Good collateral management is one of the most compelling reasons why

this dichotomy of systems can no longer be sustained in modern trading operations.

The most pragmatic solution to the question of how to fully integrate all of a firm's systems is described by the now familiar term, straight through processing (STP). At its most basic, this means systems that require a minimum of human intervention to complete the whole trading cycle. This can only be achieved by ensuring that information flows seamlessly across systems, which, once achieved for position keeping components, is the first step towards good collateral management. Before considering how IT advances can be used to reach a high level of STP, it is important to analyse what is being sought when the term STP is used.

There are two forms of STP: external and internal. External STP is the provision of systems that enable different players in the trading cycle to communicate without human intervention. This is a communications issue – providing messaging protocols or standards that all players can use. This is used, for example, by fund managers, brokers and custodians.

However, the main factor in providing good collateral management is the achievement of high levels of STP between the components of a firm's own trading and settlement system, i.e. the provision of internal STP. The consolidation of data on a firm's own positions is the raw material for good collateral management. The tools for doing this are currently available. The first prerequisite for such a system is that it must be real-time. Position data must be current; it is not possible to run an efficient repo or lending operation with historic data. For some years now most systems architects have worked on the assumption that real-time processing is the way forward, but even now there can be practical problems with the adoption of real-time systems.

One of the great advantages of systems that use batch processing is that performance-draining, heavy processing workloads are postponed to times when most users do not need the system. For real-time systems the processing platform must be more efficient to deal with heavy periods of system activity occurring during a normal trading day. Degraded system performance in shortened settlement times becomes a serious risk, rather than a mere nuisance. It has only been in the last few years that the best of the real-time systems, typically working on a client/server platform, have attained the performance peaks required by the larger operations.

For the majority of transactions that settle and clear without a hitch, the solution to the question of how to provide internal STP lies in using a middleware product to act as a central interface and message router for the various functional applications that make up the overall system. To take advantage of middleware, these functional applications need an open architecture. The result of employing this strategy is that real-time, consolidated positions can be reported.

The risks from inaccurate position keeping resulting from human error are minimised in a system with internal STP, principally by the elimination of multiple keying-in of data. However, risk still exists from the minority of trades that fail normal processing – the

exception. There may be nothing fundamentally wrong with the trade, the exception may simply be caused by incomplete static data on the firm's system, or it may be held as an exception for control purposes. While the processing remains incomplete, the true positions will not be shown.

The need is for an automated approach to exception identification and an easy-to-use exception investigation and resolution tool. Applications are available that use so-called "push" technology to automatically alert users to exceptions as they occur, that provide real-time exception reporting to relevant users. It is ineffective to rely on users to initiate this process by running reports or performing enquiries. Investigation and resolution targets, with escalation procedures if these are not met, should be added to further reduce the risks from human omissions or errors.

The most sophisticated of these applications provide investigation and resolution functionality within the exception reporting application itself, thus speeding up resolution, as users do not need to switch between the exception reporting application and the application on which the exception originated. Another desirable feature of such applications is the ability of the user to define what are the consequences of flagging a transaction as an exception. For example, if certain categories of trade must be flagged as exceptions until verified, it may be appropriate to hold the settlement instructions until verified, as a precaution. However, as it is assumed that the trade details are correct, and that it will process fully once verified, updates to risk limits and positions should be processed immediately to reflect the true position. This flexibility can be provided in a straightforward way that designated users can control by use of rules-based logic.

If this type of real-time exception handling application is added to the model of real-time, open applications connected via middleware, then a trading and settlement operation is a long way down the road to providing a wholly integrated system capable of providing current and comprehensive position data.

Providing total confidence in the accuracy of the firm's reported positions involves automating the task of position reconciliation and position exception reporting and resolution. This can be achieved using the same tools – middleware linking internal and external systems and an exception reporting and handling application to speed up the process of exception resolution. Indeed, some firms already have these components in place, or have plans in hand to do so.

However, what has been considered so far is collateral management within a single back office operation. Globalisation of trading and of the market players, coupled with large-scale consolidation of the investment banking and brokerage sectors, has been the trend for a number of years now and shows no sign of abating. The reasons for providing an accurate, consolidated view of positions for a local settlement operation hold as true for an entire global settlement operation. Securities are often traded on more than one market, and those markets may be serviced by different regional settlement operations and so may directly or indirectly need to use the services of several of a firm's entities.

The firm's clients are becoming more sophisticated and international in their trading outlook and requirements. There is a growing need, therefore, for regional centres to pool data, for the client, counterparty, instrument and position, etc.

The issue of whether systems supporting global trading firms should be centralised or distributed has no single and easy answer. For some types of data, such as counterparty, client and instrument

static data, there are strong arguments for centralising storage - costs and security should be more controllable in a centralised model, and risks from multiple keying-in of data across different trading entities can be eliminated. This can then be made available to regional centres using publish and subscribe communications technology. If rigorous efforts are made to ensure that this consistent data is accurate when first entered to the firm's systems, a major source of exceptions is effectively eliminated across the global operations.

Real-time position data, however, is directly derived from trading activities and hence the transaction processing of the system supporting the trading entities. Given current processing power, the speed of processing required precludes centralising transaction processing on such a scale, so pointing to the conclusion that with position keeping, it is more efficient for regional data

repositories to feed a central data store for position consolidation across trading entities. Again, this is a function that the best of today's middleware products can perform.

Although current processing power tends to point to a distributed model for transactional data, it may not be long before newer architecture for real-time transaction processing systems emerges that enables a more centralised model. The sheer scale of the operations of today's global players is already spurring the leading edge systems architects to design for vastly increased volumes, which will provide greater choice for many operations when considering the centralised or distributed models.

The examination so far into how to achieve good regional and global collateral management has concentrated on ways of providing position data that repo and stock lending desks can rely on, and have confidence in, to maximise the use of the positions that they control. Aside from freeing up firms to maximise the use of collateral, the most likely growth in the use of positions to provide liquidity in the UK and European trading markets is the adoption of some form of US- or Japanese-style margin trading. This could enable firms to make use of some of the currently under-used positions of private clients. However, if similar regulations to those of the US and Japan are adopted for margin trading, this would place further demands on firms' systems.

Obviously, there are existing models in the US and Japan for the kind of functionality required. Taking the US model, the main system requirement is for sophisticated stock accounting functions that enable complete segregation of the holdings into the portion that can be used by the firm, and that which must be retained in safe custody. It also places a large processing load on systems to calculate daily mark-to-market values of what may be hundreds of thousands of positions, then calculate and post the portion that

must be segregated for safe custody, and finally provide consolidated positions on what is available to the firm for lending or repoing. Presently, most US firms still employ overnight batch processing for such functions. This may not be ideal, but given the current performance levels of systems, this may have to remain the solution for now.

Having yesterday's positions for lending or repoing is better than the present situation, wherein these positions are barely used.

Whatever the future regulatory climate may bring to further open up the use of positions as collateral, implementation of the best-of-breed systems of today can help firms squeeze the last point of revenue from the positions they hold, and are able to use. The key, whether on a regional or global scale, is linking all components of the trading operation together to achieve true internal STP. At present, this means implementing applications with open architecture, enabling them to be fully integrated using efficient middleware. The remaining marginal uncertainties over the accuracy of positions due to exceptions can be minimised by employing the latest automated exception handling tools, to provide as accurate and current a view of the positions as possible. In today's quick and sophisticated market, firms must look to the margins to increase efficiency.

By employing the IT strategy described, a firm can make full use of the positions it controls to transform the back office from an overhead to a profit centre contributing to revenues

Do Investors Overreact Below The Equator?

*Richard B. Boebel
Clarke Carson*

The efficient market hypothesis (EMH) provides a central paradigm for modern portfolio theory. Its underlying principle is that all available information is incorporated into the share price at any given time. Academics stand by their belief that new information is unpredictable thus risk-adjusted profits are difficult if not impossible to obtain. Practitioners disagree, citing the 1987 crash as an example of share price movement not easily explained by new information. The most common test used to dispute the efficient market hypothesis is to find some market anomaly, an exception, to the unpredictability of securities returns.

Several anomalies have been researched and documented. The small firm effect found that small companies tend to outperform large companies over time. Zarowin (1990) showed that this anomaly explained significant abnormal profits found in some investment strategies. Reinganum (1983), along with other researchers, found a January effect in price data; stock returns, especially for small companies, are generally higher in January than in any other month. Another well-documented anomaly, mean reversion, indicates that stocks that previously underperformed (outperformed) some market average show a reversal effect and subsequently outperform (underperform) the market.

Mean reversion as an investment strategy has been around for a long time; it is commonly called contrarian investing, i.e., investing against the crowd. In the case of mean reversion, stocks that outperform the market do this because people are purchasing these stocks causing their price to increase, a simple supply and demand argument. Similarly, people selling stocks drive the price down and hence underperformance. As the mean reversion investment strategy involves selling what the majority is buying, and buying what the majority is selling, the strategy is really a form of contrarian investing.

Our study examines short-term mean reversion using stocks from the Australian

and New Zealand stock markets from January 1991 to November 1999. The study uses price and trading filters to eliminate problems associated with both low-priced stocks and thin trading in the Australian and New Zealand markets. We use a weekly return to identify the winner and losers, and then portfolios are examined over the following 12 weeks.

Literature Review

DeBondt and Thaler (1985) produced a new approach to discrediting the efficient market hypothesis (EMH) by finding mean reversion in stock returns, an overreaction effect. Overreaction refers to an investor giving too much weight to recent information. Psychologists call this the recency effect; investors overweight the most recent firm-specific information and hence stock prices overreact, either increasing or decreasing too much depending on the information.

DeBondt and Thaler used 57 years of monthly stock returns from the Centre for Research in Security Prices (CRSP) securities for New York Stock Exchange (NYSE) and American Stock Exchange (AMEX) stocks from January 1926 to December 1982 to investigate if overreaction occurs. An initial 24 months (months 1 to 24) of the data were used to calculate a beta for each stock's returns. Using this beta sixty monthly abnormal returns (months 25 to 84) were calculated and then aggregated for each stock. At this point these cumulative abnormal returns were ranked with the highest 35 returns assigned to a winner portfolio and, similarly, the bottom 35 returns assigned to a loser portfolio. Over the next five years (months 85 to 144), monthly abnormal returns for the two portfolios were calculated and aggregated. The entire process was repeated each year, i.e., 46 times, and the combined portfolio returns were calculated using a zero investment portfolio.¹

DeBondt and Thaler created a zero investment portfolio by short-selling a

¹ DeBondt and Thaler calculated excess returns two other ways: market adjusted excess returns, and market model residuals. They also formed their winner and loser portfolios two other ways: deciles and the top and bottom 50 stocks. Neither made significant differences to their results.

winning portfolio to fund purchasing a losing portfolio. As this investment costs nothing hence it should return nothing. However, DeBondt and Thaler found the losers, on average, outperformed the market by about 30% while winners underperformed the market by about 10%, a total return of around 40%. However, the loser portfolio's January monthly returns accounted for almost all of the gains, and thus a high percentage of the strategy's profits.

Since DeBondt and Thaler's seminal paper mean reversion has been investigated using different procedures, especially differing return lengths either pre or post-formation. Lehman (1990) examined portfolio profits from reversal strategies on daily CRSP data from 1962-1986. The strategies included forming winner and loser portfolios based on weekly periods. Although a profitable strategy, transaction costs could significantly lessen the profits. Cooper (1999) followed a similar procedure to Lehman, to examine different price and volume filter rules using weekly returns of the 300 largest CRSP stocks. He defined winners and losers by filters, e.g., stocks returns $>10\%$, etc., not relative returns. Then equal-weighted portfolios for each filter combination were formed, they exhibited mean reversion especially when held for periods longer than a week.

In contrast to papers supporting mean reversion a number also rejected it. Conrad and Kaul (1993) argued that DeBondt and Thaler's methods are suspect, due to their method of measuring a cumulated abnormal return which gave inflated profits for their strategies due to bid-ask bounce, which can be large, especially for low priced stocks. Additionally, Conrad and Kaul argued DeBondt and Thaler made a second mistake as their method of calculating excess returns relative to the market performance will create an upward (downward) bias in the subsequent returns of the losers (winners) if, relative to the typical firm, losers (winners) are low priced (high priced).

The most common problem in studying mean reversion is eliminating other time dependent effects, the most common of which is the size effect. The size effect finds that small (large) sized firms (measured by market capitalization) earn returns higher (lower)

than would be expected by their risk levels. As by definition a loser has decreased in price then many losers are or become small firms. Zarowin (1990) examined DeBondt and Thaler's findings while controlling for firm size by matching winners and losers on size, and found mean reversion confined to January only. To further complement, these findings Zarowin examined periods where losers (winners) are smaller than winners (losers). When winners were smaller they outperformed losers and vice versa.

Researchers in Australasia have also looked at mean reversion. Fung, Leung & Patterson (1999) examined six different Pacific-Basin markets and found mixed levels of mean reversion in them with Japan showing the highest profit. Guant (2000) tested the Australian market from 1975 to 1997 and found mean reversion there due mostly to small stocks, i.e., a small firm effect. Generally studies of non-US markets have found mixed results.

The contradictory findings and the problems associated with previous research suggest possible methodologies must be formed carefully. Some adjustments are more obvious than others are. Due to the findings of Conrad and Kaul regarding the cumulative abnormal return approach, our study uses buy and hold returns. This decreases possible bid-ask bounce problems. An additional source of bid-ask bounce problems is low priced stocks. To counter this, we use only mid-priced and higher stocks in our study.

Data & Methodology

The data used in this study consist of listed stocks traded on the New Zealand Stock Exchange and Australian Stock Exchange from January 1991 to November 1999, as compiled by the New Zealand Stock Exchange (NZSE) and the Securities Industries Research Centre of Asia-Pacific (SIRCA) respectively. The New Zealand data were supplied by the University of Otago from its New Zealand Stock Exchange database, and included date, a stock's four letter code, last stock price as quoted that day, daily volume, adjustment multiplier and number of adjustments that took place on a given day. The Australian data were supplied by the SIRCA database and included dates, a stock's three letter code, last stock price as quoted that date, adjustment multiplier and number of

adjustments that took place on a given day.

As the data are prices there is the problem of stock distributions, such as stock splits and dividends, before returns can be calculated. The data have to be adjusted or prices will deviate significantly from their true value. When measuring returns not only price appreciation should be used, but also any distributions to the shareholders for a total return. Thus by adjusting this way for dividends, any dividends are assumed to be reinvested into the stock.

As DeBondt and Thaler (1985) and Lehmann (1990) both showed, mean reversion can be present in either the long-term or short-term. Both forms have two components that need considering: the pre-formation return period used to form portfolios and the post-formation return period used to calculate a portfolio return. These two periods ultimately determine the level of mean reversion present. We use daily prices to form a weekly return for the pre-formation period. One must choose a post-formation period that is sufficient to observe mean reversion. Mean reversion is generally not observed as quickly as the extreme deviations measured in the pre-formation period so the post-formation period length needs to be longer. We choose a 12-week period because the 12-week period is 12 times larger than the one-week pre-formation period and should be long enough to observe mean reversion. Secondly, a 12-week return means the entire strategy takes 13 weeks to perform, a quarter of a year, and thus can be performed four times a year, without overlap.

Once return lengths are decided then a method to filter stock returns to test for mean reversion is chosen. We use the relative ranking method because when identifying stocks by the absolute return method a cut off has to be specified, a return at which a stock's return identifies it as a winner and, similarly, a cut off to identify losers. When using the relative ranking method a winner is a stock that has performed much better than the market average over some recent period. Similarly, a loser is a stock that has performed considerably worse than the majority in some recent period. Although both

methods identifying winners and losers can vary, after this step the process is essentially identical. Winner and loser portfolios are formed, and portfolio returns calculated at the end of some pre-determined period, in our case 12 weeks. This process is repeated over the entire data period and by creating a zero investment portfolio, market efficiency is tested. By selling the winner portfolio to fund the purchase of the loser portfolio then the cash from the two portfolios cancel each other out, i.e., the investment has cost nothing so it should return nothing. However, before starting the strategy, adjustments and filters need to be used to eliminate possible problems.

Thin trading is one such problem encountered when studying mean reversion. If a stock does not trade for a period, how can one infer missing prices and returns? Although thin trading models have been developed and used in research, they are avoided here because they ultimately generate fictional prices. One aim of our research is to test a strategy that could be implemented by a portfolio manager using data readily available. Tables 3.1 and 3.2 are used to suggest an acceptable trading percentage cut off.

Table 3.1 New Zealand Stock Market: Thin Trading

YEAR	No. Stocks	> 63 days	50%	75%	90%	95%	99%
1991	121	68	47	29	18	16	9
1992	116	93	75	57	44	34	19
1993	130	115	97	77	62	51	19
1994	146	132	113	92	66	47	23
1995	141	128	110	78	57	37	21
1996	146	129	109	87	61	48	31
1997	140	127	115	88	67	54	31
1998	140	127	103	79	61	48	28
1999	139	128	115	91	68	60	45
Average	135.4	116.3	98.2	75.3	56	43.9	25.1

Tables 3.1 and 3.2 give the trading percentages of stocks in the New Zealand and Australian markets respectively. Obviously, the Australian market is larger than its New Zealand counterpart, with stocks that trade 95% of the time in Australia outnumbering all of the stocks in New Zealand, e.g., in 1995 256 Australian stocks traded 95% of the days they were listed while only 141 stocks were listed on the New Zealand exchange that year.

The small number of stocks that trade frequently also highlights the lack of size of the New Zealand Stock Exchange.

Table 3.2 Australian Stock Market: Thin Trading

YEAR	No. Stocks	> 63 days	50%	75%	90%	95%	99%
1991	1729	671	401	244	155	121	73
1992	1676	768	502	319	196	156	106
1993	1799	998	774	561	352	268	163
1994	1969	1259	1013	653	385	270	163
1995	2001	1197	877	541	331	256	149
1996	2187	1356	1122	801	541	406	224
1997	2500	1491	1219	840	549	376	171
1998	2654	1502	1136	720	461	361	220
1999	3211	1662	1368	968	659	513	315
Average	2191.8	1211.6	934.7	627.4	403.2	303	176

Each year stocks that are traded/listed for 63 days or less (a quarter of a year) are filtered out. Stocks that meet the first filter are filtered again into the percentage of days they trade: 50%, 75%, 90%, 95%, and 99%. We use the 95% level to identify stocks that are acceptable. This generates large enough numbers for good statistics; stocks that trade at this level average 98.7%, only about one day out of a hundred where they are not traded. Australian and New Zealand stocks that fulfil the two filters for year T are combined into an “Australasian” data set for year T+1. Thus, survivorship bias is avoided as stocks are chosen in year T irrespective of how they trade or perform in year T+1.

Table 3.3 Price statistics for Australasian data set

YEAR	N	MEAN (\$)	MEDIAN (\$)	ST DEV (\$)
1992	126	4.28	2.42	11.68
1993	184	4.00	2.27	9.46
1994	305	3.99	1.72	11.69
1995	285	3.45	1.60	9.34
1996	261	3.83	2.15	7.52
1997	401	3.61	1.79	8.41
1998	386	3.38	1.45	7.38
1999	333	4.52	2.24	9.26
Average	267.8	3.78	1.97	8.67

One more filter is performed using the results of Table 3.3 to eliminate low priced stocks. These statistics were measured at mid-year, the first Wednesday of July, and show that stock prices appear reasonably constant. The annual mean price hovers around \$3.50 with the annual median around \$2.00. As Conrad and Kaul (1993) showed, low-priced stocks can greatly overstate mean reversion; so any stocks with price less than \$2.00 at the start of a pre-formation period are not considered.

After performing these various filters we calculate buy and hold returns from Wednesday close to Wednesday close for the first Wednesday in January that both markets are opened. Wednesday prices are used, as these are subject less to holidays, while a buy and hold return is used given the findings of Conrad and Kaul. If a stock did not trade on one or both Wednesdays then no return can be calculated and the stock is not considered for selection. The stock returns are ranked into deciles to identify winners and losers, and ten portfolios are formed based on the deciles.

Table 3.4 Stock numbers for Australasian data set

YEAR	JAN	APR	JUL	OCT
1992	71	69	70	69
1993	93	89	101	102
1994	150	150	139	133
1995	126	124	125	130
1996	144	140	137	137
1997	185	187	189	182
1998	176	178	165	157
1999	179	177	175	
Average	140.5	139.3	137.6	130

On the Thursday following the initial week return calculation, a 12-week return is calculated from Thursday closing price to Thursday closing price. Stocks that did not trade on the first Thursday could not be bought and thus are not considered in the portfolios. There is, of course, the scenario of stocks that did not trade on the last Thursday, thus could not be sold. These stocks are given a two-week period in which a trading price would be considered for the return measurement; this occurs less than 3% of the time.²

As an example of how the entire strategy works, 47 stocks in New Zealand and 270 stocks in Australia traded 95% of the time in 1994 for at least a quarter of the year (Tables 3.1 & 3.2). These 317 stocks form the Australasian data set that will be examined in 1995. On the first Wednesday of January 1995, that both markets are opened (the 4th of January) 126 of the 317 stocks had an adjusted stock price of greater than \$2.00. Although not shown here 121 of the 126 stocks have a weekly return measured from the close of the 4th January to the close of the 11th of January as five stocks had no price information on one or both Wednesdays, i.e., they did not trade. On Thursday 12 January, the 121 stocks are ranked into deciles and portfolios are formed. Using Thursday 12 January, closing prices 118 stocks are formed into decile portfolios, due to no trading on this day three stocks are dropped from their portfolios. For all stocks that could be sold

² Of this 3% that cannot be sold on the Thursday close due to lack of trading there are 73 cases in which the stock did not trade within the allowable two weeks. Of these, 72 are stocks that had ceased trading while the other did not trade for approximately three weeks around the required date.

after 12 weeks, in this case all 118, a 12-week return is measured, and then each of the ten portfolio returns is the average of the stock's 12-week return.

This 13-week process is repeated every 13 weeks, four times a year in the months of January, April, July and October for years 1992 until July 1999. This gives 31 observations to examine the investment strategy. By being careful never to use information that would not be available at any given time this strategy should be implementable by any reasonably knowledgeable portfolio manager.

Results

We produce three tables, each increasing in observation numbers, to examine one-week portfolio formation periods, and twelve-week portfolio periods testing for short-term mean reversion in the Australia, and New Zealand markets. Table 4.1 shows the pre and post-portfolio statistics for one observation, 4th quarter 1995.³ Table 4.2 shows the pre and post-portfolio statistics for four observations, namely the entire year of 1995. Table 4.3 shows the pre and post-portfolio statistics for the entire data period, 31 observations.

The return statistics for all the deciles are shown in Table 4.1. For both periods, each decile has an N number of stocks, mean return, standard deviation, a minimum and a maximum return. First note that not all deciles have an equal number of stocks, namely decile 6 has 3 less than the others and decile 7 has 3 more, that is due to a number of stocks in decile 7 having the same return, 0%. By comparing the number of observations in each decile, between the weekly and 12-week returns, the extent of stocks not completing a 12-week return can be seen. There are four such occurrences, one in decile five, two in decile seven, and one in decile eight. This was due to either a stock not being able to be purchased at the start of the 12-week period or not trading at the end.

³ We selected this period as being representative as it is the exact middle of the dataset with fifteen quarters coming before and fifteen afterwards.

Table 4.1 Pre and post-formation return statistics for October 1995

Decile	Weekly Return					12 Week return				
	N	Mean	St dev	Min	Max	N	Mean	St dev	Min	Max
1	13	-6.86%	2.61%	-12.20%	-4.64%	13	2.79%	14.08%	-17.21%	42.41%
2	13	-3.67%	0.55%	-4.56%	-2.92%	13	8.30%	13.71%	-19.26%	31.11%
3	13	-2.36%	0.32%	-2.86%	-1.93%	13	13.29%	13.98%	-3.29%	47.78%
4	13	-1.52%	0.25%	-1.92%	-1.11%	13	10.42%	7.77%	1.70%	26.42%
5	13	-0.74%	0.18%	-1.10%	-0.52%	12	13.86%	5.96%	-0.48%	20.30%
6	10	-0.31%	0.12%	-0.45%	-0.12%	10	5.84%	8.65%	-10.45%	16.47%
7	16	0.14%	0.18%	0.00%	0.48%	14	8.13%	12.15%	-21.44%	25.00%
8	13	0.78%	0.24%	0.48%	1.15%	12	6.76%	10.23%	-7.14%	32.53%
9	13	1.60%	0.19%	1.33%	1.90%	13	8.02%	7.01%	-3.48%	23.51%
10	13	3.29%	1.15%	1.98%	5.91%	13	7.77%	5.30%	0.18%	16.64%

The standard deviation for both pre and post returns show that the first decile's is considerably more volatile, which is also shown by the range, i.e., minimum to maximum. The post-formation returns show no sign of mean reversion. In fact, instead of decile one achieving the highest return, it easily achieves the lowest. The only reason decile one's return is positive is due to the one high stock return of 42.41%.

The highest return belongs to decile five, whose stocks surprisingly have one of the lowest maximums at 20.30%. In fact, over all deciles for the 12-week return, decile five is impressive in that it generates the highest return from the second lowest standard deviation. Conversely, decile one, which mean reversion suggests should generate the highest returns, shows the lowest return but the highest risk.

Taking Table 4.1 one-step further, Table 4.2 shows the average portfolio return statistics for all four quarters in 1995. In Table 4.1, the statistics are measured over individual portfolios and stocks; in Table 4.2, they are measured over the averages for the four quarters. Thus in Table 4.2 N measures the average number of stocks in each decile over the four observations. By summing the respective columns, there were, on average, 125 stocks with a weekly return of which 122 had subsequent 12-week returns.

In Table 4.1, the standard deviations show that the first decile was considerably more volatile. In Table 4.2, the standard deviations show that decile one's portfolio

returns is not significantly more volatile, as compared to the other deciles. What the standard deviations also show is that like Table 4.1, the lowest variation is observed in the middle deciles and this increases as one moves away from the middle deciles. This is due to the middle deciles having a much smaller range of returns as opposed to the extreme deciles.

Table 4.2 Pre and post-formation return statistics for 1995

Decile	Weekly Return					12 Week return				
	N	Mean	St dev	Min	Max	N	Mean	St dev	Min	Max
1	12.3	-6.07%	2.51%	-9.03%	-3.07%	12.0	5.89%	6.56%	-0.23%	14.93%
2	12.3	-2.75%	2.21%	-5.22%	-0.08%	12.0	3.75%	3.45%	-0.08%	8.30%
3	12.8	-1.56%	1.99%	-3.80%	0.87%	12.8	6.73%	4.86%	2.29%	13.29%
4	12.8	-0.68%	1.64%	-2.35%	1.42%	12.5	3.85%	5.34%	-2.66%	10.42%
5	12.3	0.16%	1.44%	-1.04%	2.14%	11.8	4.82%	6.05%	1.40%	13.86%
6	11.3	0.84%	1.70%	-0.40%	3.25%	11.3	4.61%	3.88%	-0.35%	8.93%
7	14.0	1.42%	1.79%	0.13%	3.93%	13.3	4.74%	5.51%	-3.49%	8.13%
8	12.3	2.31%	2.04%	0.78%	5.20%	11.5	2.04%	6.34%	-4.47%	8.15%
9	12.8	3.58%	2.42%	1.60%	6.94%	12.8	4.07%	4.69%	-1.61%	8.02%
10	12.3	7.18%	3.80%	3.29%	11.72%	12.3	-1.35%	7.50%	-10.57%	7.77%

The post-formation returns show a small indication of mean reversion. In contrast to Table 4.1, decile one achieves one of the highest average returns, 5.89%, whereas, decile 10 exhibits a comparatively low average return, -1.35%. Thus, a zero-weighted portfolio return of 7.24% is possible, which is comparable to DeBondt and Thaler's (1985) average of 8% per year over five years.

The final table, Table 4.3, is the most important. It takes Table 4.2 one-step further and averages the returns over all quarters, 31. It shows a minimum weekly return of -10.06% (decile 1) up to a maximum of 11.72% (decile 10) – giving a range of over 21.5%.

Table 4.3 Pre and post-formation return statistics for 1992 to 1999

Decile	Weekly Return					12 Week return				
	N	Mean	St dev	Min	Max	N	Mean	St dev	Min	Max
1	13.1	-5.90%	2.02%	-10.06%	-1.64%	12.7	1.96%	8.60%	-20.34%	26.19%
2	13.7	-3.03%	1.67%	-7.18%	0.10%	13.4	2.22%	6.66%	-11.86%	17.88%
3	13.7	-1.92%	1.46%	-5.66%	0.87%	13.4	2.14%	6.81%	-10.46%	19.67%
4	13.3	-1.08%	1.29%	-4.52%	1.42%	13.1	3.12%	7.18%	-11.33%	17.88%
5	13.9	-0.33%	1.17%	-3.38%	2.14%	13.5	2.25%	7.31%	-11.01%	16.71%
6	13.9	0.34%	1.15%	-2.33%	3.25%	13.7	3.63%	7.13%	-8.74%	23.01%
7	13.8	1.03%	1.17%	-1.11%	3.93%	13.5	2.19%	7.36%	-10.20%	22.94%
8	13.6	1.89%	1.28%	-0.48%	5.20%	13.2	1.87%	7.80%	-13.87%	16.43%
9	13.9	3.23%	1.50%	0.09%	6.94%	13.6	2.04%	8.72%	-13.74%	29.30%
10	13.3	7.14%	2.07%	3.15%	11.72%	13.0	1.51%	9.94%	-12.60%	32.74%

Using Table 4.3 observation numbers can be compared to see the extent of stocks not completing the twelve-week return. By summing the average stock numbers in each decile, column N, a typical strategy will have about 136 stocks of which approximately 133 end up completing a 12-week return. Thus 3 of 136 stocks cannot be either bought or sold and thus do not have a post-formation period return.

In the 12-week return this table also shows that 1995 must have been a good year for stock investing. In Table 4.2 eight of the ten deciles, and in Table 4.1 nine of the ten deciles, average over 3.5% versus just the decile 6 in Table 4.3 averaging over 3.5% for the entire data period.

The right hand side of Table 4.3 shows the post-formation returns and one important feature is obvious; DeBondt and Thaler's (1985) mean reversion hypothesis does not hold. If it did one would expect the highest average twelve-week return to be in decile 1, decreasing through the deciles to the lowest average twelve-week return for decile 10. Instead, there is a peak for the middle decile that decreases somewhat either side to two of the lowest mean returns in the two extreme deciles.

Therefore, as Table 4.4 shows, constructing a zero investment portfolio using the extreme deciles generates an insignificant return of 0.45% quarterly, hardly reaching the values shown by Lehman (1990), Cooper (1999), or even the smaller return of DeBondt

and Thaler (1985). This return is 5% better than that recorded for the October 1995 strategy, but nearly 7% less than the return over the entire 1995 year.

Table 4.4 Zero investment portfolio profits

Strategy	Loser ret (Decile1)	Winner ret (Decile 10)	Difference	Ranking
October 1995	2.79%	7.77%	-4.98%	9
All 1995	5.89%	-1.35%	7.24%	2
Overall	1.96%	1.51%	0.45%	8

Although not shown here, this strategy is positive for slightly more than half the time, sixteen of the thirty-one quarters, again not reaching the 100% positive record produced by Lehman (1990). Market efficiency suggests that the strategy is random guesswork and should be positive half the time. Thus the strategy should be positive 15.5 times and the observed frequency of sixteen is as close as one can get.

In summary, our results show that there is no mean reversion present in the Australasian data set. In fact, the numbers more closely reflect market efficiency as opposed to market inefficiency. Quite possibly any observable mean reversion in Australia and New Zealand is attributable to other factors such as bid-ask bounce and the size effect.

conclusion

This paper has examined the mean reversion, specifically its presence in the Australian and New Zealand stock markets. Previous research has centred on the United States and has been varied in its methods, time frames, and consequently, its results. From these various methods, we choose to use the relative ranking method on one-week buy and hold returns to test for short-term mean reversion. This ranking method allowed us to place winners and losers as the highest and lowest decile portfolios in subsequent 12-week return periods.

This 13-week process was repeated 31 times from 1992 to 1999. Using these, observations zero investment portfolios were calculated by selling short the winner portfolio to fund purchasing the loser portfolio. This strategy on average returned

only .45% per quarter or 1.8% per year and was positive for only 16 of the 31 quarters. This is not close to either the findings of DeBondt and Thaler (1985) 40% over five years, or Lehman (1990), 1.79% weekly,

As there is no obvious mean reversion present, the next step is to question why. Previous research has centred on the larger markets, usually the United States and has found varying levels of mean reversion depending on the time frame examined. Generally, the presence of mean reversion was judged to indicate some form of market inefficiency, perhaps caused by behavioural biases.

So one argument is that the absence of mean reversion in Australasia is due to the characteristics of the Australian and New Zealand markets. Perhaps they are more efficient than those of larger countries due to the lack of behavioural bias in market participants. Another argument is that the findings of mean reversion in the US market is spurious and a product of data mining and microstructure regularities.

However, quite possibly mean reversion could be present in New Zealand and Australia on a more long-term basis. Mean reversion could be present in the subsequent month, or it could be present over five years as shown by DeBondt and Thaler (1985). Both are valid scenarios that need to be researched further. Future research could employ the ideas of Cooper (1998) who explored many combinations including volume to examine short-term mean reversion.

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New economy, new worries

High-flying stocks are suffering credibility problems

A recent Securities Institute survey of analysts highlighted their concerns about financial reporting practices. A major issue, reports STEVE McCLINTOCK, is the accounting information released by so-called “new economy” stocks.

A Securities Institute survey late last year of almost 200 stockbrokers and fund managers revealed a number of concerns that should be addressed by preparers of financial information for “new economy” stocks, standard-setters and regulators. Understandably, some respondents did not believe that a new economy existed and questioned whether so-called new economy stocks were simply start-up companies hitting the market in large numbers in a short period. Common perceptions of new economy stocks were:

- start-up vehicles with no financial history and directors or management with no track record;
- loss-making businesses with high “cash burn” rates with projections for exponential revenue and profit growth;
- significant value assigned to intellectual property (often in unproved or immature markets).

Eighty-six per cent of analysts had concerns about the financial reporting practices of these stocks, particularly relating to cost capitalisation, revenue recognition, cash burn rates, optimistic projections/valuation of intellectual property and accounting treatment of acquisitions. It was no surprise that on 10 January 2001, ASIC announced that it had asked 53 new economy stocks to clarify their financial reporting and disclosure. ASIC said typical areas of concern included “the accounting for acquisition of businesses, the reporting and amortisation of intangibles, the accuracy of quarterly cash flow statements and the recognition of revenue”.

IF IT’S A DEBIT IT MUST BE AN ASSET

High on the list of concerns about new economy stocks was cost capitalisation: 73% of analysts expressed dissatisfaction with capitalisation policies adopted, with most demanding information on:

- what has been capitalized
- why it has been capitalised, and
- how it will be expensed to the profit and loss account.

Accounting standards and guidance are weak in this area. The only specific reference to the capitalisation of costs was in AAS 9 *Expenditure Carried Forward to Subsequent Accounting Periods*, which was withdrawn in October 1996, in part as a result of the issue of the much-maligned Statement of Accounting Concepts 4 *Definition and Recognition of the Elements of Financial Statements*. For costs to be capitalised, they must meet a SAC 4 definition of an “asset” that has three essential characteristics:

- there must be future economic benefits;
- the entity must have control over the future economic benefits such that it is able to enjoy the benefits and deny or regulate the access of others to the benefits; and

- the transaction or other event giving rise to the entity's control over the future economic benefits must have occurred. SAC 4 states that an asset should be recognised in the statement of financial position only when it is probable that the future economic benefits will eventuate and the asset possesses a cost or other value that can be measured reliably. To be fair, the issue of cost capitalisation is a vexed one. The Urgent Issues Group has recently issued guidance on website development costs which reinforces the concepts embodied in SAC 4. Guidance on other areas of cost capitalisation would clearly be welcome. An example is the dispute between ASIC and OneTel which was settled in April 2000 with OneTel writing-off expenditure of \$110million which had been recorded as an asset in its balance sheet at 31 December 1999. Steve McClintock SIA (Aff) is a partner in PricewaterhouseCoopers financial advisory services. He is the Securities Institute's representative on the Urgent Issues Group and is a member of the Institute's company reporting subcommittee.

The Securities Institute survey highlighted analysts' views on a number of reporting issues as well as the concerns about new economy stocks described by Steve McClintock. Matters discussed included:

- Ranking of financial reporting issues
- Goodwill
- Identifiable intangibles
- Research and development
- New economy stocks
- Financial instruments

RANKING OF FINANCIAL REPORTING ISSUES The top six issues of concern to analysts were:

- Harmonisation of Australian accounting standards to international standards
- Capitalisation of costs in new economy stocks
- Disclosure and classification of abnormal items
- Amortisation of identifiable intangibles
- Valuation of intellectual property
- Reporting treatment and valuation of employee/director shares and options.

While analysts were not asked to nominate with which set of accounting standards (international, UK or US GAAP) Australian standards should be harmonised, the US is clearly assuming greater importance in world markets and it is therefore important that Australian standards move towards an alignment with the US.

GOODWILL An interesting result was that 82% of respondents believe Australian companies use the goodwill standard to inappropriately adjust reported profits (eg, avoiding the amortisation of acquisition goodwill by attributing excessive value to identifiable intangibles such as brand names and mastheads, or amortising goodwill over periods which are too long). Of these, 79% said that these practices impair the value of reported profits.

IDENTIFIABLE INTANGIBLES The survey found that most analysts believe that current accounting for identifiable intangibles impairs the value of reported profits. Most also consider that identifiable intangibles should be amortised and propose that either 20 years or the useful life of the asset are the most appropriate amortisation periods.

There were, however, a variety of views on this issue.

RESEARCH AND DEVELOPMENT About half of the survey respondents thought the reporting treatment of research and development expenditure was inadequate. Importantly, 75% of analysts thought that AASB 1101, which allows the deferral of recoverable R&D costs to future years, was inappropriate.

FINANCIAL INSTRUMENTS Fifty-six per cent of survey respondents thought that accounting for all financial instruments should be performed on a mark-to-market basis. This issue will gain particular significance as moves continue towards an international standard for financial instruments. What's bad about financial reports OneTel did not accept that the treatment it applied breached the Corporations Law but ASIC's view was unequivocal: "Companies should record as expenses advertising, staff and other costs associated with acquiring customers and the costs of establishing anew business when they are incurred." In the light of this disagreement, it is not surprising that the survey found that guidance on the capitalisation of advertising costs and the appropriate accounting treatment for mobile handset subsidies would be useful, as would guidance on how these costs should be expensed.

WHAT'S IT WORTH? New economy stocks often start life with intellectual property being "sold" into a listed vehicle or one that is subsequently listed. Consideration for the sale is often shares in the vehicle concerned. In such circumstances, AASB 1015 *Acquisition of Assets* dictates that the acquired asset must be recorded at cost to the company. Cost is defined as the purchase consideration (the fair value as at the acquisition date of assets given, equity instruments issued or liabilities undertaken by the acquiring entity) plus any incidental costs directly attributable to the acquisition. The issue, of course, is what is the fair value of the intellectual property being acquired. Classic valuation techniques would suggest that the value of an asset is the present value (discounted using an appropriate risk-adjusted rate) of the future net cash flows to be derived from the asset. In the case of unproven or immature intellectual property, particularly where significant or exponential revenue and profit growth is forecast, significant valuation issues arise. Analysts, while appreciating the inherent uncertainties involved in any such valuations, comment that the valuations are often shown to have been optimistic.

OTHER KEY INFORMATION Analysts also strongly support initiatives by the ASX requiring disclosure of quarterly cash flow information included in Appendix 4C of the Listing Rules, with 85% believing that cash burn rates (cash flow information) for new economy stocks should be disclosed on a regular basis. Similar support exists for disclosure of revenue and break-even points. The challenge for new economy stocks is to improve the credibility of their reported financial information. Responding to feedback from analysts on financial reporting will assist in that process.

ASAF 2001 Conference, Hong Kong

The Hong Kong Securities Institute is proud to announce the ASAF 2001 Conference to be held this December is well in shape. The Conference programme is comprehensive and the speaker list is strong. Day One starts with an overview of securities and investment markets from regulators and officials in the SAR and China. Then, in conjunction with the Hong Kong Investment Funds Association, we move on to a detailed coverage of the emerging fund management industry in China. Day Two will start with recent impacts on markets by technology, and the afternoon will end with a discussion on the market's response to new opportunities in Asia.

The Conference promises a wealth of useful information with prominent industry figures taking part. These include the Chairman of the Securities and Futures Commission (SFC), the Chairman and the Chief Executive of Hong Kong Exchanges and Clearing Limited, Executive Director of Monetary Policy & Market Department, Hong Kong Monetary Authority, CEO of the Australian Stock Exchange Limited. From the PRC, the Chairman of China Securities Regulatory Commission, Deputy Director General, State Administration of Foreign Exchange of the People's Bank of China, Deputy Director General State Statistics Bureau, and the National People's Congress in the PRC will all be taking part.

From the market, prominent business professionals to share their vast experience with ASAF participants include; the CEO and Founder of Bloomberg LP, Principal of State Street Global Advisers, USA, Managing Director of TD Waterhouse, Australia, Executive Vice President, Institutional Business Division of Samsung Securities, Korea, and Vice President, Trading Department of Taiwan Stock Exchange, Chinese Taipei, Taiwan.

On Day Three participants will visit the "Shenzhen High-Tech Industrial Park", located in Shenzhen, in southern China. The Site Visit includes a guided tour of the Industrial Park followed by a visit to two corporations within the park, and lunch at a nearby restaurant. Participants of the Site Visit will need to possess a valid visa for the PRC.

For conference details and registration information, please visit the ASAF Conference 2001 website at www.hksi.org/main_asaf.html. Enquiries may also be emailed to the Conference Organiser at csl@chamber.org.hk.