

THE NEW ZEALAND VALUERS' JOURNAL

September
1995

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The NEW ZEALAND VALUERS' JOURNAL is the official publication of the New Zealand Institute of Valuers. The JOURNAL is published quarterly and the Editorial Board welcomes researched articles from qualified individuals concerned with valuation, business management of a valuation practice and property related matter.

Each article considered for publication will be judged upon its worth to the membership and to the profession. The Editor reserves the right to accept, modify or decline any article. Any manuscript may be assigned anonymously for review by one or more referees. Views expressed by the editors and contributors are not necessarily endorsed by the New Zealand Institute of Valuers.

All contributions should be typewritten on one side only of A4 sized paper and must be suitable for scanning. Computer disk copies (IBM compatible) are welcome. Original photographs, diagrams, tables, and graphs (including values creating any graphs) and similar material intended to illustrate or accompany an article should be forwarded separately with the text. The approximate places where illustrations are to be inserted through the text should be clearly shown in the manuscript.

A brief (max 60 word) profile of the author, a synopsis of the article and a glossy recent photograph of the author should accompany each article.

Complete editorial policy review process and style instructions are available from the Editor. Deadline is two months prior to each quarterly publication.

Articles and correspondence for the NEW ZEALAND VALUERS' JOURNAL should be submitted to the Editor at the following address:

The Editor
NZ Valuers' Journal
PO Box 27-146
Wellington, NZ

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New Zealand Valuers' Journal September 1995

NEW ZEALAND INSTITUTE OF VALUERS
FROM THE PRESIDENT

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PO BOX 27-146
TELEPHONE (04) 385-8436
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DX 8521

Dear Member,

RE: PAN PACIFIC CONFERENCE SYDNEY, AUSTRALIA, APRIL 1996

Enclosed is a call for papers from the Pan Pacific organising committee. The Institute's Executive is very keen to see a high level of New Zealand participation in the Sydney congress. This will be the most cost effective congress that members can attend, outside of New Zealand, while interest and support from our members will ensure that there is a high attendance from Australia at the planned Pan Pacific Congress in Auckland in six years time.

The congress theme for Sydney is "Golden Opportunities" and Executive also see this as an opportunity to profile opportunities and success stories in this country. You will note that an abstract only is required at this time, to be sent direct to the organising committee chairman in Sydney, but the Institute would appreciate a copy of your abstract so that we can eventually have some input, as a profession, into co-ordinating and focussing the papers from a New Zealand perspective.

Please note the closing date for your abstract - you may care to fax an "expression of interest" to the organisers if the constraint is too tight.

In addition to the more main stream opportunities in commercial property and project development, the theme "Golden Opportunities" could also relate to a range of matters identified with New Zealand including telecommunications, land title issues (use and constraints), tourist and leisure projects; forestry investment, or other land based themes, energy and power developments; and any other land or property development initiatives that would have interest or appeal to our wider international peer group.

There is also scope for considering the "Golden Opportunities" that may accrue to property professionals who can equip themselves with the skills for an expanding global market where the higher performance required of both public and private sector property assets will continue to create openings for valuation and management expertise.

This letter is to encourage as many members as possible to submit an abstract to the Pan Pacific organising committee, with a copy to the Institute's offices, so that the expected large New Zealand contingent in Sydney will have a high degree of participation in the Congress, while also highlighting New Zealand expertise, successes, and opportunities.

Compliments of the Season.

Yours sincerely

J P Larmer
President

National President: John Larmer • Chief Executive Officer: John Gibson

7 November 1994

*18th
Pan Pacific Congress
of Real Estate Appraisers
Valuers and Counsellors
21-26 April 1996*

Mr. John P. Larmer
President
New Zealand Institute of Valuers
PO Box 27-146
WELLINGTON NEW ZEALAND

Dear Mr. Larmer,

18th Pan Pacific Congress of Real Estate Appraisers, Valuers and
Counsellors
21 - 26 April 1996
Sydney, Australia

The 18th Pan Pacific Congress of Real Estate Appraisers, Valuers and Counsellors will be held in Sydney in 1996, hosted by the Australian Institute of Valuers and Land Economists.

We are currently formulating the programme for the Congress and would appreciate if you would distribute the Call for Papers among interested members of your association. Please find enclosed fifty copies of the call for papers. I can provide further copies for distribution as requested.

Thank you for your support of the 18th Pan Pacific Congress.

Yours sincerely,

L:1 L-11 it11

DON SMITH

Chairman, Conference Organising Committee
18th Pan Pacific Congress

18th Pan Pacific Congress of Real Estate Appraisers, Valuers
and Counsellors
21- 26 April 1996
Sydney, -Australia

CALL FOR PAPERS issued 20 October 1994
(Abstracts required 31 December 1994)

*18th
Pan Pacific Congress
of Real Estate Appraisers
Valuers and Counsellors
21-26 April 1996*

This call for papers is for the eighteenth Pan Pacific Congress of Real Estate Valuers Appraisers and Counsellors.

The Congress will be held at the Sydney Convention Centre, Darling Harbour, Sydney, Australia, from Sunday 21st April 1996 to Friday 26th April 1996.

Please type your Abstract within the square on the form provided. Abstracts should be sent by post or fax to the Chairman of the Organising Committee, Donald Smith at GPO Box 4159 Sydney 2001 Australia or Fax 61 - 2 231 5773. Abstract should be typed in English. Those selected to present papers will be notified by 31st January 1995.

Papers must be written and preferably delivered in English. Final summaries to enable key points to be translated into participating languages for the use of delegates must be guaranteed by 31 March 1995.

Simultaneous translation in English, Japanese and Korean will be made at the Congress according to demand. Final texts in English must be delivered to the Congress organisers by 31st January 1996. These will be printed in a Record of Proceedings for issue to delegates.

PREVIOUS CONGRESSES

The Congress in Yokohama, Japan in May 1994 studied a theme of Real Estate and Social Wellness.

Speakers provided presentations on various related topics and included exploration of skills as well as case histories of specific projects where use made of particular procedures and techniques.

The 16th Congress in Calgary, Canada also considered differing techniques and procedures while relating them to a specific project which was complete and operational and close to the conference venue thus facilitating a site inspection.

THE 1996 CONFERENCE

The Organising Committee of the 18th Congress to be held in Sydney has selected as the theme "Golden Opportunities". This is in recognition of the prevailing phase of the property cycle. The worldwide recession is already starting to ease and by mid to late 1996 there should be no shortage of investment related Golden Opportunities for all players and operators in Property Markets.

This should be particularly true of the Pacific Rim Nations as Asia, America, Australian and Pacific investors seek opportunities to expand their operations and provide their services.

The theme is broad enough to allow a wide range of papers that should deal with specific or general opportunities in the form of projects or conditions favourable for delegate involvement. Similarly innovative techniques and processes to qualify and enable property professionals to achieve in the buoyant markets could and should be included.

CALL FOR PAPERS

LAST NAME (FAMILY):

FIRST NAME (GIVEN):

TITLE:

ORGANISATION:

MAILING ADDRESS:

Phone:

Fax:

Please type your Abstract in the box below.

Please return to:

Mr Donald Smith, Chairman of the Organising Committee

Fax: 61 2 231 5773

GPO Box 4159

SYDNEY 2001 AUSTRALIA

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Dear Member

Revision of New Zealand Institute of Valuers' Standards

The revision of the NZIV Valuation Standards and Background Papers has now been completed and is shortly to be issued as part of the new "NZIV Technical Handbook".

A mailing will be sent to active members in early 1995.

The NZIV Valuation Standards are largely based on the International Valuation Standards which were issued in March 1994. Members will note in the revision that the reference to "asset valuation standards" has been replaced by "valuation standards", emphasising that these standards are not only confined to asset valuations for financial reporting purposes. As a result the reference to "practice valuation standards" has now become "practice standards". These practice standards have likewise been revised and updated and the non binding statements have also been revised.

The standards issued by the Standards Committee are done so with the delegated authority of Council and as such they carry the authority and endorsement of Council.

The new technical handbook will contain the following material

- NZIV Code of Ethics
- Valuation Standards (previously asset valuation standards)
- Background papers
- Practice Standards (previously practice valuation standards)
- Guidance notes (previously non-binding statements and recommendations)

The work of the Standards Committee is an evolving task and new standards and guidance notes will be issued as they are developed.

Comments from users of these standards (members of the NZIV, public, lending institutions etc) are welcomed at all times on any aspect of the Committee's work. These comments should be addressed to the National Office.

Yours sincerely

I W Gribble
Chairman
28 November 1994

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A new degree course, the Master of Property Studies commenced at Lincoln University this year. It is structured as a professional degree for the senior property consultant, adviser and investor. It should be of concern to practising members that less than 25% of this year's entrants are practising valuers. The majority of students are direct investors or property developers.

A strength of this Institute is that membership includes a blend of practising and academic personnel. Each group have the special skills and resources to help the other for the common good. Practitioners need a medium such as the *NZ Valuers' Journal* to promote their individual skills and so too do the academics need an authoritative journal to display their particular endeavours to their peers. Such is progress. This Journal has been fortunate in the support it has been given by senior University staff over the years. But a number of students and post graduate researchers, most of whom have been at the leading edge of their particular property discipline have not always been able to compete for space in what has been looked upon more as a practitioners than an academic Journal. This issue contains the first of a new section of "Refereed Papers". The concept is modelled on the internationally recognised "Journal of Property Valuation and Investment" where there is a distinction made between practice papers and academic papers. A small international panel has been appointed to evaluate all articles submitted to the refereed section. The Editorial Board is expecting to publish between three and four papers each year.

Readers will note that this month's "Editor's Mailbox" contains some hard hitting intellectual intercourse. We are again reminded that "appraisal is a behavioural science". Sandy Bond's paper is another example of the study of human behaviour in the valuation process. Her paper is a sequel to that presented by Judith Callanan and Professor Bob Hargreaves in the June issue of the *NZ Valuers' Journal*.

Murray Gray offers a logical well reasoned approach to the business of income based valuations. Once again the Capital Asset Pricing Model rears its head for a pot shot. Marcus Jackson (Young Professional Valuer of the Year 1993) provides a timely insight into some of the factors which motivate international investors in property.

Richard Emary continues the developing Internet story. He has some useful practical ideas for readers. Any practitioner expecting to survive into the 21st century with but a trusty typewriter and a microfiche screen is strongly advised to seek professional help. Kensington Swan describe how New Zealand land law and the principle of the Treaty of Waitangi were at one time closely linked. This is valuable background information for every valuer and land owner.

"Legal Decisions" presents a lengthy but useful arbitration decision on the age old problem of "fair rentals". The umpire picks up on the more recent judgements and offers students and all valuers a practical insight into the many facets surrounding this often contentious part of valuation practice.

On reflection, and with thanks, this issue is dominated by some of our younger more enthusiastic members. Five contributors are from within our associate universities the other two are from multi-discipline practice. All have unselfishly offered the fruits of their own experience to their fellow members. It is a fortunate group that can share together like this in the age of user pays.

From The President's Pen

It is with pleasure that I can report on the significant progress which has been made in relation to a number of issues facing the Institute. Firstly the business plan has been developed into a strategic plan, and factors have been identified as critical to the success of the Institute's plans. These are now under action. We have set up focus groups in relation to individual activities within the Institute, each handled by a particular councillor. Councillors now have an action plan for the 95/96 year to achieve goals which have been set. This has meant the disestablishment of most Head Office Committees, with the expectation of a consequent reduction in expenditure.

Examples of new portfolios include branch support and members; editorial board; education; equal employment opportunity initiatives; financial management; marketing; legislation; standards; employer liaison; etc. We also have a Councillor responsible for ValPak whose role is to liaise with Council on the joint venture, which is, at the time of writing, due to take over the development and management of this significant income product.

Progress has been made in determining our future and in particular, the make-up of the Institute. I am encouraged at the response that we have had from the Minister in relation to the granting of full membership to our Intermediate members. Our aim is to seek a change to the Valuers' Act, to enable a return to what had been accepted for so long to be part of the make-up of our Institute.

As well as meeting with the Minister, the Vice-Presidents and I have met with the Valuer General and the Valuers' Registration Board, as well as with contract journalists to endeavour to provide a higher profile for the Institute in the media.

Our Distance Teaching Programme was very successful this year thanks to our organisers as well as presenters. This is an excellent learning medium. The only problem related to the size of the rooms. Hopefully this will be rectified next year.

I recently visited the Australian Institute of Valuers and Land Economists as their guest in Hobart.

I can report that there is a common thread of agenda items within our respective Council meetings.

There is a very close relationship between the two Institutes and this should be maintained through our involvement in the Pan Pacific Conference in Sydney in 1996.

We have commenced our visits to the main trading Banks in an endeavour to give a higher profile to registered valuers and members of our Institute and to ascertain their requirements from us as valuers. Initial talks have been encouraging; however it is evident that some of our members have given the Banks a cause for concern as to the accuracy of some of their work.

This leads me to another matter of concern. It has come to our attention that people qualified by examination have purported to be associates of our institute, to enable them to complete valuation work for the Banks. When this has come to our attention we have taken appropriate action, however it is in every member's own interest to be vigilant and ensure that such practices are wiped out. In another way, it does show that membership of our Institute is a valued commodity.

I have been able to visit only a few branches at this stage, however the Chief Executive Officer, John Gibson, has been very active in this area. In order to determine the needs of our membership, John has a planned

programme to visit branches, branch committees, as well as individual practices to get feed-back. This will complement the information we have received from Councillors and ensure that we do in fact meet your needs.

I believe that these initiatives will move us towards making our members the pre-eminent property professionals by the Year 2000.

Finally we have introduced a new logo for the Institute to reflect our greater role in property matters. It recognises our international links and involvement in Property Consultancy and Land Economy. It is part of our process to reflect more fully the roles which our members undertake in the property field.

NEW ZEALAND INSTITUTE OF VALUERS

Cam. 1., 

Iain Gribble

Personality Profiles

Gordon Kelso

It was with the idea of becoming a farm consultant that Gordon Kelso left Gisborne to go to Lincoln College (as it was then) to complete the Valuation and Farm Management course. Twenty-two years after qualifying as a valuer he has just been elected as one of the two Vice Presidents of the NZIV.

After he left Lincoln he went to work for the Valuation Department in Auckland, where he stayed for two years before arranging a transfer back to Gisborne. Two years later he resigned and joined the local valuation and farm consultancy firm of Lewis and Wright, once again with the idea of becoming a farm consultant. But it was not to be, and again he found himself doing urban valuation. Finally during the hectic years of the 80s he did some rural work, though he has gone full circle and is back doing urban valuation again.

But his first love remains the rural work. "If there was sufficient rural work I would like to be doing that," he says.

There are seven professionals working for Lewis and Wright, including Peter Wright, one of the founding partners. There are four other valuers in the Gisborne area, but they are all sole operators.

Gordon says there has been plenty of work for the last couple of years, though it appears to be easing now. "I think it was the increased confidence, and lowering of interest rates. But an element of uncertainty has crept back into the market at the moment."

Gordon is the Gisborne Branch Councillor. He believes the NZIV has undergone a major change with one of the objectives being to improve the communications between the Wellington Head Office and the branches, and to transfer some of the responsibility from the President to the Chief Executive.

There has not been a lot of time in his life for sports and hobbies, though he admits to being an avid Rugby supporter – the armchair variety. He is also a keen gardener, and with 3/4 of an acre to keep in trim it is not surprising there is little time for sport.

He is married to Sharon and they have three children, ages 20 to 16. One daughter is at Polytechnic, the other at university in Hamilton and their one son is still at college.

Bob Hargreaves

Bob Hargreaves is the Central Districts Branch Councillor. He also holds the Chair in Property Studies at Massey University. He has been at the University since 1972 when he joined the Faculty of Agriculture as a lecturer in Rural Valuation. Professor Hargreaves has been a member of the Institute of Valuers for about 30 years and has been on the council for over 10 years.

"When I became a councillor my main involvement was on the services side. We dealt with computerisation of valuation practices and because of my background in academia I was involved with the task of setting up a sales retrieval system for valuers.

"As an educator I have been involved with the education side of the Institute through mounting seminars at Massey. I am regularly providing the linkage through the University to the valuers. Often graduate students are looking for valuation related topics for research, and sometimes they are looking for funding, so there does tend to be a strong linkage," he says.

Professor Hargreaves has contributed to a number of NZIV publications, and authored a chapter in Urban Valuation Volume Two. He is also Chairman of the Editorial Board of the New Zealand Valuers' Journal.

From a farming background, it was with the idea of becoming a farmer that Bob went to Massey University in 1963 to do the Diploma in Agriculture. But being a good Kiwi male his sporting ambitions took over and paid off, when he was selected as a member of the New Zealand athletics team to attend the 1966 Commonwealth Games in Jamaica, Bob competed in the shotput.

He later joined Lands and Survey Department as a field officer. A requirement of the job was to be a qualified rural valuer. Bob did the course through the NZIV, worked during the day, studied at night and still had time for athletics.

In 1967 he moved to the University of California where he majored in Agricultural Business, a four year course, and also took all the property papers he could.

Bob returned to Lands and Survey to gain further practical experience as a valuer before becoming a lecturer at Massey University.

His wife Sandy is a science teacher, son David is a statistician with the Reserve Bank and his daughter Lynley is studying for a BSc at Canterbury University.

Editor's Mailbox

The Importance of Market Analysis in Property Valuations

Sir,

In a recent article, Dr. Terry Boyd N.Z.V.J. March 1995 presents a discounted cash flow (DCF) approach to the valuation of investment property. In order to ascertain necessary and appropriate discount rates, Boyd proposes a model of the relationship between the expected risks and returns of investment properties. Specifically, Boyd proposes that a linear relationship exists between the internal rates of return (IRR) and the coefficients of variation of the net operating incomes (CVs of NOI) of comparable sales. He cites the Capital Asset Pricing Model (CAPM) as the rationale for this proposal.

While Boyd's efforts to draw attention to DCF valuation techniques are laudable, it is unfortunately the case that the model he proposes to ascertain discount rates is economically invalid. This is due to his reliance upon the CV of NOI as a measure of investment risk. The balance of this letter argues that the definition of the CV of NOI is incompatible with the theory underlying the CAPM and that the model proposed by Boyd will produce incorrect results. Examples will be used to clearly demonstrate that this is the case.

Modern Portfolio Theory

The CAPM as independently proposed by Sharpe (1970), Lintner (1965) and Mossin (1966) emanates from Modern Portfolio Theory (MPT) originally developed by Harry Markowitz in 1952. In his presentation of MPT, Markowitz sought to develop a theory of how investors decide amongst alternative investment opportunities under conditions of uncertainty. Such a theory could then be used to produce models that could be of assistance to fund managers in identifying the composition of portfolios that maximise an investor's utility (i.e. satisfaction). It could also be used in the retrospective assessment of performance.

Markowitz began by recognising that the expected terminal wealth of a one-period investment (e.g. one year, month or day) is related to its expected one-period return or yield. He also assumed that assets' forecasted returns are random variables that adhere to a normal distribution. [In essence, if one was to plot all the potential one-period returns for an asset against the probability of each outcome, the graph would form a normal or 'bell' curve. See Figure 1]. This assumption was really a matter of

convenience, as it results in an important simplification of MPT models. Portfolios of assets whose returns are normally distributed produce aggregate returns that are themselves normally distributed.

One important aspect of MPT is its simplicity: investors (theoretically) need only know two pieces of information in order to choose between investments: the expected return and the risk of each investment. The former is measured by the mean or average of all possible returns while the latter is measured by the variance or standard deviation of those returns (a measure of the dispersion or uncertainty surrounding the mean).

Following Markowitz' work, further research based on MPT gave rise to the notion that there are actually two types of risk, systematic or 'market' risk and unsystematic or 'specific' risk. When assets whose returns are imperfectly correlated over time are combined into portfolios, total risk is reduced. This comes about because economic forces affect different assets in different ways. Forces specific to individual assets or sub-groups of assets tend to cancel each other out in a portfolio context. In this way, specific risk is reduced or eliminated through diversification.

The uncertainty or variance in returns left over after diversification has done its work is known as market risk because it reflects the effects of market-wide forces. Market risk is normally represented by β (beta) being a quantitative measure of the sensitivity of an asset's returns to market forces.

Recognition of the fact that all investors have the opportunity to diversify without cost lead to the theory that asset prices reflect the degree of market risk (not total risk) investors expect them to possess. If it is also assumed that all investors have the same expectations about the future, then the result is the CAPM. The CAPM asserts that the expected excess return on an asset over and above what we know can be obtained from riskless assets (e.g. government stock) is related to 1) the asset's market risk and 2) the excess return one could expect to secure by holding every asset in the marketplace, in the same proportion as they exist in the universe of all assets. Figure 2 shows this relationship graphically.

Figure 1

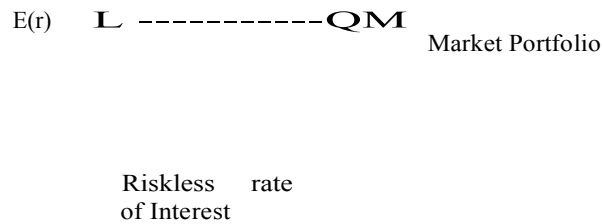
Normal Distribution

0.1
0.09
0.08
0.07
0.08
4.05
0.04
CL 0.03
0.032
0.01

Potential One Period Returns

Expected
Return ,

Figure 2



Shortcomings of the Boyd Model

The fundamental problem with the model of risk and return proposed by Boyd is that it relies on the CV of NOI as a measure of investment risk. The CV of NOI, defined as the ratio of the standard deviation and mean of an investment's forecasted periodic cash flows, is inappropriate for three main reasons:

1. CV of NOI measures the total variability of cash flow, not the variability attributable to the effects of market-wide forces only.

Boyd cites the CAPM as partial justification for his model as a great deal of research has demonstrated the CAPM to be a robust depiction of the trade-off between risk and return in an equilibrium environment. As noted above, however, the CAPM relates expected returns to market risk, as specific risks need not be borne by investors as they have ample opportunities to diversify. Hence Boyd's model is incompatible with the theory underlying the CAPM.

2. CV of NOI measures the forecasted variability of an investment's cashflows in relation to each other, while investors are concerned with the Potential for cash flows' variability as compared to other investments in the marketplace.

Risk arises as a result of uncertainty surrounding the amount and timing of future cash flows, not as a result of variation over time. To demonstrate this point, consider the example presented by Boyd. He proposes that a linear relationship exists between the expected yields and CVs of NOI of comparable property assets. The result is a line that intercepts the y-axis (i. e. at a point of zero risk) at an expected IRR of approximately 8.8%.

1.0 Systematic risk (beta)

While 8.8% isn't very different from the yield one would expect from a *riskless* investment over a nine-year holding period (such as a medium-dated government security), it is potentially very different from the yield one would demand of a property investment with constant expected cash flows (i.e. an investment with a CV of NOI equal to zero). The missing element in Boyd's analysis is *credit risk*, which is a function of the quality of a property's tenant(s). CV of NOI as a measure of risk is insensitive to variations of credit risk across properties.

To demonstrate this point again, consider two hypothetical 21 year leases on retail space granted to creditworthy tenants. The first calls for a fixed annual rent over the 21 year life while the second calls for preagreed rental increases every three years. Both offer virtually certain cash flows over the life of the lease. However, the leases will have unequal CVs of NOI, as this measure for the first lease will equal zero while for the second lease it will be nonzero. Hence two leases of similar risk will be shown to differ based on their CVs of NOI.

3. CV of NOI completely ignores what some may argue is the factor that gives rise to virtually all of a property's return performance: terminal capital value.

As defined, the CV of NOI takes no account of uncertainty surrounding an asset's disposal value at the end of the hold period. Any risk measure that ignores such information must certainly be of little use. This point may also be demonstrated by means of an example. Consider two properties in different locations, both leased to a large capitalisation multinational company on exactly

the same terms and conditions (including rent review structures). It is likely that these two leases, when forecasted over a holding period, will produce very similar CVs of NOI. However, it is also likely that the risks of these two investments would be expected to differ as the prospects for capital growth would be partly a function of location. Again, CV of NOI as a measure of risk falls on its face, in this instance for not taking account of variability in forecasted capital values.

Conclusion

We have attempted to demonstrate the economic invalidity of using the CV of NOI as a measure of investment risk, especially in a CAPM context. For this reason, the model of risk and return put forward by Boyd (1995) cannot be relied upon to produce discount rates appropriate to the risk of an investment as theory suggests it is perceived by investors. Alternatively, valuers can make use of true CAPM-based methodologies (e.g. Brown (1991), Locke (1986)) for the determination of appropriate discount rates and it is suggested that property analysts make use of these in the valuation and appraisal of investment properties.

Signed:

Edward J. Schuck

Christopher J. Hardley

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Dr Boyd Replies...

Dear Sir,

Thank you for the opportunity of responding to a commentary on my article entitled "The Importance of Market Analysis in Property Valuations".

Unfortunately the presumption of the commentators that I use the Capital Asset Pricing Model (CAPM) as the rationale for the proposal to assess a discount rate from market evidence is wrong and the conclusion of the commentators is not correct because it is based on an incorrect premise.

It surprises me that any reader would interpret the assessment of a discount rate from four comparable sales as being based on a CAPM approach. My article is obviously attempting to identify the specific risk of individual properties and therefore does not fit within a CAPM framework which assumes that the individual risk has been diversified away. There is no intention in the article to examine historical variance of total returns to assess performance, and consequently a CAPM approach is inappropriate as the basic assumptions are violated.

I apologise if my single reference to the concepts of CAPM, being risk and return profiles and diagrams, has misled any readers into believing that the rationale behind the approach was a Capital Asset Pricing Model. On the contrary, I have chosen a market based approach because I do not consider that a CAPM can be used in this situation. The majority of market players do not use a CAPM to determine their discount rate and hence it would be folly to use such a model in the interpretation of expected discount rates from comparable sales.

I fail to understand the severity of the attack, and in particular the conclusion of the commentators that there is no "economic validity for using the CV of NOI". Such a statement is unsound but I don't consider this an appropriate forum for academic point scoring. The article was general in nature as the readership is

practitioners and no attempt was made to prove or expand on the reasons for the proposals.

However, as the use of the variance of a projected income stream has been challenged, I should give a brief background to my proposal. The section of the article being questioned was clearly under the heading of Market Analysis and within a subsection dealing with the interpretation of comparable sales. The preceding paragraphs had dealt with the assessment of expected rates of returns from sales and the use of a sales adjustment grid. In the following paragraph I suggested that the discount rate should be assessed from the market rather than financial models (and this would include CAPM). I further proposed that a measure of the level of risk of each property investment should be determined and stated (page 14) "a critical risk measure of an investment property is the net operating income trend over time". I consider this statement to be reasonable and have difficulty with the comment that a measure of expected income variability is economically unsound. Surely it is merely an expansion of the mental process undertaken by valuers when attempting to adjust returns of comparable sales to a subject property? The income variance risk measure was selected because, in my opinion, it provides a better single measure of risk than any other readily assessable measure. It does not attempt to be a totally comprehensive measure of risk but captures the component of variation in the cash flow. The fact that it does not conform to a CAPM does not minimise its relevance.

Traditionally valuers have undertaken adjustments of comparable sales without an explicit consideration of risk. If a realistic comparative risk measure can be obtained, it would improve the interpretation of property sales. Plotting the profiles on a risk/return diagram is one method of assessing the two dimensional relationship and it is

accepted that there is insufficient evidence in the example illustrated to prove whether the relationship is linear or not. The fact that I referred to the relationship as a market line does not mean it is a CAPM. In my article I suggested that a band is probably more appropriate than a line because of the level of accuracy achievable.

The commentators give a good explanation of modern portfolio theory but it is unfortunate that they did not discuss the application of CAPM in the marketplace rather than attempt to discount my model on CAPM assumptions, as I have experienced real difficulty in applying CAPM in the New Zealand property marketplace. The three suggested shortcomings in my model are, frankly, differences of opinion in the interpretation of the behaviour of the property marketplace. Because the commentators use these three points to negate my model, it is necessary to allow the reader to consider both points of view.

The first supposed shortcoming is that:

"(i) CV of NOI measures the total variability of cash flows, not the variability attributable to the effects of market-wide forces only."

I totally agree with this comment as the CV of NOI is intended to measure the variability of cash flows in order to provide a comparable risk measure between sale properties, it would be illogical to use comparable sales to test variability of market-wide forces only.

The second point criticises the risk measure because:

"(ii) CV of NOI measures the forecasted variability of an investment's cash flow in relation to one another, while investors are concerned with the potential for cash flow's variability as compared to other investments in the marketplace."

Again the CV of NOI is meant to measure the relationship between property investments. Property market analysis is primarily dealing with the property

market and, while investors do compare property with other investments, this is not relevant when comparing sales. Accordingly, why criticise an examination of comparable property investments?

The third point states:

"(iii) CV of NOT completely ignores what some may argue is the factor that gives rise to virtually all of a property's return performance: terminal capital value."

I believe that this comment is a matter of opinion and personally consider that the NOT over time is a more important indicator of the property's performance than the terminal capital value. It should be borne in mind that the terminal capital value is based upon the income at the time of termination and hence the only variable excluded, by ignoring the terminal capital value, is the difference between initial and terminal yield rates.

The readers will judge whether these three differences of opinion warrant the statement that the model is economically invalid. I outlined the theme of the article with an initial quotation from Richard Ratcliff, which was:

"Until recently, the appraisal fraternity has failed to recognise that appraisal is a behavioural science. There has been to great a preoccupation with the property object and with methodology and not enough attention to people and how they make their real estate decisions."

I believe that the debate above has fallen into the trap mentioned by Ratcliff and is a preoccupation with methodology.

Yours faithfully,

TERRY P BOYD
Professor of Property Studies
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REGISTERED VALUERS 1995

Due to a technical oversight the following names of Registered Valuers were omitted from the 1995 "Directory of Registered Valuers holding Annual Practising Certificates as at 31st March 1995".

The Registrar and the Chief Executive apologise for any inconvenience caused and confirm that the following members have been issued with current Annual Practising Certificates.

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Howard Louis Arthur Morley PO Box 28510, Remuera,
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Ah Ming Ng 13 Angelo Ave, Howick,
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Geoffrey William Tizard PO Box 795, Hamilton

Michael Ian Beattie PO Box 1235, Hamilton

Taranaki

Murray Albert Arms 50 Leslie St, Waitara

Wellington

Graham Allan Halstead PO Box 27-164, Wellington
Lynne Rowena Michael 67 Beauchamp St, Karori,
Wellington

Canterbury-Westland

Michael James Connolly PO Box 25-191, Christchurch
Cedric Spencer Croft 32 Fenhall St, Christchurch
8004

William Owen Harrington 16 Herbs Place, Cashmere,
Christchurch

Otago

Andrew Francis Parkyn Valuation NZ, PO Box 215,
Dunedin

NOTICE TO MEMBERS

REMOVAL OF NAME FROM REGISTER

The Council of the NZIV advises that pursuant to a decision of the Valuers Board of Appeal the following member has had his name removed from the Register of Registered Valuers, and as a consequence the register of members of the NZ Institute of Valuers.

Layne Stephen HARWOOD

Income Based Business Valuation

An Effective Approach

by Murray S Gray

The Discipline of Business Valuation

Three principles are combined when valuing businesses. These are accounting, valuation and finance. Because such a range of skills is required it is a specialised field. In the USA, for instance, business valuation standards are produced by an independent professional body, the American Society of Appraisers, so the discipline is recognised in its own right. In New Zealand there is no such professional body. Most business valuations are completed by accountants rather than registered valuers who are perceived as equipped to deal with property rather than businesses. The skills of both are needed and for this reason there is plenty of room for this specialised field to develop.

The practice of valuing business has advanced in New Zealand in recent years. It has become a relatively scientific affair and this is largely because there is limited access to comparable business sales. This is unlike valuing real estate where property valuers have access to substantial information about similar properties to that being valued. So, business valuers use arithmetic techniques, particularly for calculating discount rates and capitalisation rates.

The Capitalisation of Income Approach ($V=I/R$)

The bulk of this paper outlines the use of the capitalisation approach for valuing medium to large businesses. Medium businesses are broadly defined as having a value in excess of \$500,000. The market for businesses below \$500,000 tends to be rather unsophisticated and often driven by non-financial motives such as "buying a job". Consequently the principles outlined here often do not apply to small businesses.

Many people capitalise income to value a business. It is a widely used method but is not as simple as it can appear. It is often misused and this results in poor valuations.

This paper shows how to use the capitalisation of income approach to value a business. It looks first at the discipline of business valuation before outlining the valuation method. Finally it shows the danger of using the method incorrectly.

To demonstrate the steps in the valuation procedure, the valuation of a substantial North Island restaurant is included.

Many income producing assets are able to be valued using the simple formula:

$$V = \frac{I}{R}$$

R

Where V = Value

I = Income

R = Capitalisation Rate

For example, if I is \$100 and R is 10%, then the value is established by dividing \$100 by 10%. That is, \$1,000.

This simple formula is in essence the capitalisation of income approach and is what this paper will address.

It has been suggested that an understanding of $V = I/R$ is all that is required to become a valuer. Unfortunately, as all valuers can testify, it is not that easy! Whilst the mechanics of the formula are straightforward, identifying the key variables, I and R, is often an involved process. This is particularly so in the valuation of businesses.

Murray Gray is a Manager with Ernst & Young in Christchurch. He is a registered valuer and chartered accountant who specialises in the valuation of businesses, shares and tourism related ventures.

The capitalisation approach is widely used when valuing real estate. As alluded to previously, more often than not there is directly comparable market evidence available which provides guidance as to the appropriate I (rental) and R. However, for business valuations I and R are often derived by returning to first principles.

Application of $V = UR$

Capitalisation of income it is not always an appropriate method for valuing businesses. It is best used when a business:

is a Going Concern. That is, it has the capacity to:

- trade indefinitely, and generally profitably
- pay debts as they fall due.

and

generates a relatively uniform cashflow. Capitalisation is generally not applicable to businesses whose cashflow varies significantly from year to year.

In other circumstances asset based methods or more advanced income based valuation techniques may be appropriate. These techniques are not covered here.

INCOME (I)

The first of the key variables in the capitalisation process is income. It is important to realise that the income for valuation purposes is different to the accountant's income. Valuers are interested in Net Operating Income after Tax (NOPAT). Here is the difference:

Accountants present income in the following manner:

Revenue	\$200
Less Operating Expenses	\$110
Earnings Before Interest & Tax (EBIT)	\$90
Less Interest	\$40
Earnings Before Tax (EBT)	\$50
Less Tax (33%)	\$17
Net Income (or Earnings)	\$33

For valuation purposes this needs to be restated:

EBIT (from above)	\$90
Less Tax (33%)	\$30
Net Operating Profit After Tax (NOPAT)	\$60

The difference between Net Income (\$33) and Net Operating Profit After Tax (NOPAT) of \$60 is the treatment of interest. That is, net income is after interest whilst NOPAT is prior to interest payments.

NOPAT is the post tax income net of all expenses except interest. Therefore it represents the income available to reward all of the business' sources of funding debt (lenders) and equity (owners). The objective of business valuation is effectively to value all sources of finance. NOPAT provides for this by quantifying the income attributable to both debt and equity.

Cashflow vs Profit

It is important when looking at income to differentiate profit from cashflow.

Cashflow is fact; Profit is opinion

For valuation purposes NOPAT must be expressed in cash terms. That is, it should represent the business' annual cashflow, or free cashflow. This can be significantly different to the level indicated by the accountant's profit figure.

Profit often departs from cashflow because of the accrual accounting convention which requires accountants to attempt to "match" revenue with expenses. For example, if expenses are incurred in 1994 in order to generate revenues in 1995, 1996 and 1997 then the accountant will allocate the 1994 expenses over the ensuing three years. As a result the expenses are not included in the calculation of 1994 income notwithstanding that cash has changed hands.

Valuation is cashflow driven. This is because cashflow is a true measure of the benefits of ownership. Owners of the business understand cash it is a real, tangible thing. This contrasts with profit which is often subject to the accountant's judgment and opinion. Therefore the valuation process requires profit to be restated into cash terms.

NOPAT can be derived directly from the accountant's income statement provided that it is a reasonable proxy for cashflow. Often this is the case for small businesses. However, for larger businesses adjustments are generally required to remove the non-cash items introduced by the accounting process. Non-cash items include:

- goodwill which has been amortised.
- provisions for bad debts.

- deferred taxes i.e. taxes which do not correspond with those actually payable.
- unrealised gains or losses on assets. These arise as a result of asset revaluations.

Businesses generally must replace assets periodically. This must be reflected in NOPAT as an ongoing business expense. This is achieved by estimating the annual allowance which will provide for replacement of assets. This is then included in the NOPAT calculation as an expense. Whilst accounting depreciation is a non-cash item it is often accepted as a surrogate for the annual requirement for asset replacement. The depreciation figure should be adjusted when it does not approximate the amount required for replacement of assets.

Therefore income (I) for business valuation is:

- NOPAT
- Less non-cash items
except depreciation (sufficient to allow for asset replacement)

That is, NOPAT in Cash Terms

Maintainable NOPAT

The value of any asset is related to the future benefits it provides to its owner. Nil values arise when there are no perceived benefits. Therefore the value of businesses is largely dependent on expectation of future cashflows rather than past results. As a result we need to identify the level of NOPAT which the business appears to be able to maintain in future years.

Maintainable NOPAT is calculated by estimating the sustainable level of all revenue and expense items. This generally requires past results to be analysed. An illustration of this analysis using the restaurant business results is provided in Figure 1. The objective of the analysis is to identify trends and highlight one-off items which may have distorted previous results.

The maintainable level of NOPAT (the shaded column of Figure 1) is estimated by considering past revenues and expenses on a line-by-line basis. Results from past years generally provide a guide to what is maintainable. The most recent year is typically the most reliable measure. However, the overriding consideration is the future - what is likely to happen rather than what has happened.

Figure 1

FINANCIAL ANALYSIS FOR VALUATION PURPOSES:

Year	1993		1994		1995		Maintainable Level @20 June 1995	
Revenue	2,124,316	6.45% change	2,218,023	4.41% change	2,342,981	5.63% change	2,424,986	3.50% Change
Less Cost of Sales								
Open Stock	57,135		47,631		50,196			
Purchases	<u>702,316</u>		<u>715,009</u>		<u>755,231</u>			
Closing Stock	759,451		762,640		805,427			
	<u>47,631</u>		<u>50,196</u>		<u>59,089</u>			
	711,820		712,444		746,338			
Gross Profit	1,412,496	66.49%	1,505,579	67.88%	1,596,643	68.15%	1,648,990	68.00%
Less Operating Expenses								
Fixed								
Accountancy/		% of sales		% of sales		% of sales		of sales
Secreterial	27,151		28,275		22,867		27,000	
Computer Charges	3,779		3,599		0		3,800	
Fringe Benefit Tax	2,717		6,287		7,602		7,500	
Insurance	4,672		4,884		2,259		5,000	
Legal	0		8,700		80		1,000	
Licences	3,820		483		1,920		2,000	
Other	0		2,657		5,052		4,500	
Rates	979		5,255		10,536		10,500	
R&M	8,983		32,984		10,019		12,000	
Staff Amenities	3,527		5,407		1,752		3,000	
Staff Recruitment	0		576		3,867		3,000	
Travelling Expenses	0		<u>5,476</u>		<u>0</u>		2,000	
	<u>55,626</u>	2.62%	<u>104,581</u>	4.72%	<u>65,953</u>	2.81%	<u>---91,7ffO</u>	3.35%
Variable								
ACC	14,366	0.68%	13,446	0.61%	13,959	0.60%	15,762	0.65%
Advertising	25,472	1.20%	24,833	1.12%	18,553	0.79%	29,100	1.20%
Bank Fees	1,334	0.06%	1,697	0.08%	3,491	0.15%	3,637	0.15%
Cleaning	41,444	1.95%	36,011	1.62%	39,295	1.68%	48,500	2.00%
Credit Card Charges	13,209	0.62%	12,305	0.55%	7,118	0.30%	12,125	0.50%
Motor Vehicle	3,541	0.17%	4,616	0.21%	6,217	0.27%	4,850	0.20%
Other	1,205	0.06%	208	0.01%	3,412	0.15%	4,850	0.20%
Power	47,061	2.22%	52,936	2.39%	39,964	1.71%	48,500	2.00%
Printing & Stationery	10,919	0.51%	8,149	0.37%	14,197	0.61%	14,550	0.60%
Rent (T/O lease)	127,835	6.02%	134,460	6.06%	121,563	5.19%	145,499	6.00%
Replacements	18,519	0.87%	21,791	0.98%	29,520	1.26%	18,187	0.75%
Rubbish Removal	4,095	0.19%	4,548	0.21%	6,237	0.27%	7,275	0.30%
Telephone & Tolls	12,364	0.58%	15,201	0.69%	10,379	0.44%	14,550	0.60%
Wages	688,824	32.43%	696,014	31.38%	764,979	32.65%	739,621	30.50%
	<u>1,010,187</u>	47.55%	<u>1,026,214</u>	46.27%	<u>1,078,883</u>	46.05%	<u>1,107,06</u>	45.65%
Management Salaries	0		0		0		70,000	
Depreciation	29,964		39,860		38,316		38,000	
Total Operating Expenses	<u>1,095,776</u>	<u>51.58%</u>	<u>1,170,654</u>	<u>52.78%</u>	<u>1,183,152</u>	<u>50.50%</u>	<u>1,296,306</u>	<u>53.46%</u>
Earnings before Interest & Tax (EBIT)	316,719	14.91%	<u>334,924</u>	<u>15.10%</u>	<u>413,491</u>	<u>17.65%</u>	<u>352,684</u>	<u>14.54%</u>
Interest	56,783		49,870		40,690		40,000	
Earnings before Tax	<u>259,936</u>		<u>285,054</u>		<u>372,801</u>		<u>312,684</u>	
Income Tax @ 33%	85,779		94,068		123,024		103,186	
Net Income (Earnings)	<u>174,157</u>		<u>190,986</u>		<u>249,777</u>		<u>209,498</u>	
Net Operating Profit after Tax (NOPAT)								
EBIT	316,719		334,924		413,491		352,684	
Less Tax @ 33%	104,517		110,525		136,452		116,386	
<u>NOPAT</u>	<u>212,202</u>		<u>224,399</u>		<u>277,039</u>		<u>236,298</u>	

The restaurant business analysed in *Figure 1* has generated relatively consistent levels of cashflow in recent years. As such, capitalisation is an appropriate method of valuation. Points to note from *Figure 1* include:

The revenue considered maintainable is the estimated level as at the valuation date, 20 June 1995. It is assumed to be 3.5% above the revenue achieved in the 1994/95 year. This recognises that the 1994/95 sales were, on average,

made at the midpoint of the year (30 September 1994). Growth since that time is estimated at 3.5%.

Very high legal expenses and repairs and maintenance were incurred in 1994. Those levels are not normal, and therefore not "maintainable".

Wages have been artificially high over the period analysed due to above market rates being paid to employees who are members of the owners' family. The maintainable level of wages is at market levels.

The owner-operators have not drawn a salary in recent years. A market related figure is included in the maintainable income.

It is common for the average of the past three years earnings to be used as maintainable income. This is usually wrong as it is not an indication of future results. For example, simple averaging would not adjust for the restaurant's abnormal levels of legal expenses and repairs and maintenance experienced in 1994.

CAPITALISATION RATE (R)

In the preceding sections we calculated maintainable income (I), the first key variable in the valuation process. The second step is to identify the appropriate capitalisation rate (R).

Ideally R is derived from sales of comparable assets. The capitalisation rate indicated by a sale is calculated by dividing income (I) by the sale price. For example, if an asset sold for \$50 and its annual income is \$5 then:

R	I/V
	\$5/\$50
	10%

A lack of sales evidence generally means that capitalisation rates for businesses cannot be so readily calculated. Therefore in the majority of business valuations R must be derived.

The cost of a business attracting capital provides a sound basis for estimating the appropriate capitalisation rate. This cost is represented by the business' Weighted Average Cost of Capital (WACC).

Weighted Average Cost of Capital (WACC)

The ownership of most assets is financed by a mixture of debt and equity. This is certainly the case with businesses. In essence WACC is the cost of this funding. WACC is the weighted average of a business' cost of equity and its cost of debt. These costs are essentially the prices (expressed as a percentage) that equity investors and lenders require to attract their investment. Generally the higher the risk involved the higher these costs of funding.

WACC is calculated by weighting the cost of equity and cost of debt in proportion to

the business' intended capital structure. For example, if debt costs 12%, cost of equity is 20% and a debt equity ratio of 40: 60 is targeted then:

$$\begin{aligned} \text{WACC} &= (12\% \times 0.4) + (20\% \times 0.6) \\ &= 16.8\% \end{aligned}$$

The Cost of Equity

The debt component of WACC is readily identified. It is simply the interest rate payable on debt. However, the cost of equity is not so clear-cut.

The cost of equity represents the opportunity cost of the business' owners. That is, it is the return they can get from other equity investments of similar risk. This return is generally calculated using:

The Capital Asset Pricing Model (CAPM)

Build-up methods.

Capital Asset Pricing Model (CAPM)

CAPM is based on the assumption that investors in risky assets require a return in excess of that offered by risk-free investments. It is based on sharemarket data and provides a measure of return required to reward investors for risk.

Whilst CAPM relates specifically to the sharemarket it is well suited for valuing businesses. After all, shares simply provide a means of owning a business.

There are two commonly used variations of CAPM, the imputation model and the classical model. The imputation model is considered to be superior and is outlined in this paper. This is because the imputation model explicitly recognises that income tax is payable on yields from risk free investments such as Government Stock, whereas the classical model does not.

The CAPM formula (imputation model) is:

$$\text{Cost of Equity} = R_f(1-t) + (B/R_m - R_f)$$

$$\text{or } R_f(1-t) + (B \times \text{MRP})$$

where R_f = Risk free rate e.g. Government Stock. This is approximately 8.3% at the time of writing for 5 year stock.

t = Income tax rate.

R_m = The return which is expected to be derived from a fully diversified sharemarket portfolio. Empirical evidence shows that this return has historically averaged some 6-9% above the risk free rate. This 6 - 9% is known as the Market Risk Premium (MRP).

Analysts typically assume MRP is currently in the vicinity of 9% for the imputation model, or 7% for the classical model.

B = Beta coefficient. Beta is a risk index. It measures the volatility of a particular investment compared to the market average. Beta for the market as a whole is 1.0. Shares which are riskier than average have Betas greater than 1 whereas low risk shares tend to fall below 1.0.

For example, the post tax cost of equity of a relatively high risk share with a beta of 1.5 is calculated as:

$$\begin{aligned} \text{Cost of Equity} &= R_f(1-t) + (B \times \text{MRP}) \\ &= 8.3\%(1-0.33) + (1.50 \times 9\%) \\ &= 5.56\% + 13.5\% \\ &= 19.06\% \end{aligned}$$

In this instance the cost of equity is effectively:

Risk free Rate (post tax)	5.56%
Plus Premium for Risk	13.50%
Cost of Equity	19.06%

Let's have a closer look at beta (B). Beta is the key variable in CAPM.

Many organisations compute betas for listed shares although much of the available data relates to overseas markets. Notwithstanding this, foreign sourced betas can provide a good guide when valuing a New Zealand business. Value Line, an American publication, provides an excellent reference.

Beta come in two forms - equity betas and asset betas. Asset betas relate solely to business risk or operating risk. Equity betas include not only the risk associated with the business but also that attributable to the business' debt. Generally this debt related risk, or financial risk increases as more debt is incurred.

Therefore, if two businesses are operationally similar they should have similar asset betas. However, if the debt level of the same businesses is significantly different then their respective financial risks, and consequently their equity betas, will differ markedly. Thus, in order to validly compare the betas of businesses, in most cases asset betas should be used. However many publications contain only equity betas. Equity betas can be converted to asset betas (ie: de-levered) by following the procedure in *Figure 2*.

Once the asset beta appropriate to the business being valued is identified it can then be converted to an equity beta (see *Figure 2*). The resulting equity beta is then able to be entered into the CAPM formula and the cost of equity duly calculated.

Figure 2

Asset Beta (Ba) vs Equity Beta (Be)

- Asset Beta - refers to operational or business risk
- Equity Beta - asset beta plus financial risk

Note: The following applies to the imputational model of CA PM. This model recognises that the risk-free portion of the cost of equity is subject to income tax. In this respect the imputational model differs from the classical CA PM model.

De-levering Equity Beta (Be) to produce Asset Beta (Ba) is achieved by:

$$Ba = Be(1-Wd)$$

where Wd is targeted debt level as percentage of total capital employed

Example: Be of 1.5 and Wd of 40%

$$Ba = \frac{1.5}{(1-0.4)} = 0.9$$

Asset Betas are converted to (levered) Equity Betas by the formula:

$$Be = Ba/(1-Wd)$$

Cost of Equity Build-up Method

This is the second commonly used method of estimating the cost of equity. The approach has an element of CAPM in that the starting point is the risk free rate, and often the market risk premium (MRP). It offers the advantage of avoiding estimating a beta, however subjectivity is involved in quantifying the risks specific to the business.

An illustration of the method is:

Risk Free rate	8%
Add MRP	
(per CAPM Classical Model)	7%
	15%
Add Risks Specific to the Business	
- Competition	2%
- Reliance on Key Personnel	1%
- Financial risk	2%
	5%
Cost of Equity	20%

Clearly considerable experience and judgement are required to "build-up" a cost of equity rate. In comparison, CAPM also has a subjective element- the selection of beta. However it is generally easier to obtain empirical evidence to substantiate a beta than it is to support the various elements of a built-up rate.

Now that we have worked out the cost of equity (using either CAPM or a construction approach) the business' WACC is readily calculated. WACC must then be converted to a capitalisation rate. Converting WACC to a Capitalisation Rate (R)

WACC is a discount rate. It is not a capitalisation rate. In order to use V = UR WACC must be converted into a capitalisation rate. So what is the difference between a discount rate and a capitalisation rate?

Capitalisation rates and discount rates are used for different purposes:

A capitalisation rate translates a single income figure (I) into value:
i.e. $V = \frac{I}{R}$

A discount rate translates a series of cashflows (or incomes) into value. It allows for cashflows which vary from year to year to be valued. For example, discounting provides for "lumpy" cashflows such as the following to be valued:

Year	Cashflow
1	\$ 10
2	\$ (50)
3	\$ 20
4	\$ 150

An investment has both a discount rate and a capitalisation rate. The difference between the two is the expected compounding growth in income (and therefore value). The only time the two rates will be equal is when there is no growth.

Investment property provides an illustration of the difference between discount rates and capitalisation rates. Some commentators estimate that investors in commercial property require a return of approximately 15% pa. This return comprises rental income and capital appreciation. This return is the discount rate associated with the investment.

Prime property often sells at capitalisation rates below 10%. That is, the cashflow provided by rental is less than 10% of the sale price. It is clear that purchasers of such properties anticipate future growth in the value of the asset. Growth is required to obtain the total required return of 15%. The implication is that the difference between a discount rate and a capitalisation rate is growth. Simply put,

Discount Rate minus Growth = Capitalisation Rate.

For example, if an asset has a required return (discount rate) of 15%, and annual growth in cashflow is estimated to be 3% then the yield (capitalisation rate) is indicated to be 12%.

Therefore to convert WACC (a discount rate) to a capitalisation rate an estimate of growth is required. This is then deducted from WACC to produce the capitalisation rate.

A measure of future growth may be given by, for example, forecast population increases. However, the circumstances of each business must be considered on its merits.

The capitalisation rate applicable to the restaurant is estimated in *Figure 3*. The rate of 17% is calculated using CAPM and is a real, post tax rate.

Your attention is drawn to four aspects of *Figure 3*:

1. An asset beta of 0.85 is adopted. This is a low beta for a restaurant and recognises that the business risk of this

Figure 3

CALCULATION OF CAPITALISATION RATE WACC IMPUTATION MODEL

Entity: Restaurant Business Effective Date: 20-Jun-95

Base Data

Tax Rate	t	33.00%
Cost of Debt	Kd	12.50%
Expected Inflation Rate	i	2.00%
5 Year Govt Stock Rate	Kf	7.60%
Market Risk Premium	(Km - Kf(1 - t))	9.00%
Small Companies Risk Premium		<u>5.00%</u>
Total Risk Premium	Rp	14.00%
Target Capital Structure:		
Debt	Wd	40.00%
Equity	We	60.00%
Asset (unlevered) Beta	Ba	0.85
Expected Real Growth	g	2.00%
Discount for lack of marketability	Md	20%

Calculations

1. Cost of Debt			
Cost of Debt	Kd	12.50%	
less Tax	t	4.13%	
<i>Cost of Debt (Nominal)</i>	Kd(1 - t)		<u>8.38%</u>
2. Cost of Equity			
2.1 Equity Beta (Be)			
	Ba/(1-Wd)	1.42	
2.2 Cost of Equity			
Risk Free Rate	Kf	7.60%	
less Tax	t	2.51%	
Risk Free Rate (Post Tax)	Kf(1 - t)		5.09%
Total Risk Premium	Rp	14.00%	
Equity Beta	Be	1.42	
			<u>19.83%</u>
<i>Cost of Equity (Nominal)</i>	Ke		24.93%
3. Weighted Average Cost of Capital (WACC)			
Cost of Debt (Nominal)	Kd(1 - t)	8.38%	
* Target Level of Debt	Wd	40.00%	3.35%
Cost of Equity (Nominal)	Ke	24.93%	
* Target Level of Equity	We	60.00%	14.96%
<i>WACC Nominal</i>			18.31%
1 + Nominal WACC			1.1831
Divided by 1 + Expected Inflation			1.0200
1 + WACC (Real)			1.1599
<i>WACC (Real Terms)</i>			15.99%
4. Capitalisation Rate			
1 + WACC (Real)			1.1599
Divided by 1 + Expected Growth			<u>1.0200</u>
1 + Capitalisation Rate			1.1371
<i>Capitalisation Rate (Post Tax)</i>	Cr		13.71%
Incorporation of Marketability Discount of:	Md	20%	
<i>Adjusted Capitalisation Rate</i>	Cr/(1-Md)		17.14%
		say	17.00%

particular restaurant is well below average. It is based on betas of relatively low risk restaurant companies such as those of MacDonalds. The beta is typical of hotel operators. This is reasonable because the restaurant's market is largely determined by the tourism industry, with most customers being visitors from overseas.

2. Sustainable real growth in cashflow from operations of 2% pa is allowed for. This figure has been adopted after consideration of.
 - Anticipated revenue gains due to forecast increases in overseas visitors to New Zealand, and the local population base.
 - The relativity between increases in operating profit and revenue in past years. It is assumed that this relativity will continue.
 - The limited capacity of the existing premises.
3. CAPM is based on data relating to listed, and therefore freely tradeable, shares. On the other hand a business may take many months to sell. In this respect businesses do not compare favourably with listed shares and should be discounted accordingly.

Several studies have concluded that unlisted shares sell at a discount of around 35% compared to their listed equivalent. There does not appear to be substantial empirical evidence of discounts attributable to businesses. In practice discounts of 15-25% typically are applied to majority interests in businesses.

4. Market Risk Premium

Small to medium businesses generally operate within a single industry or market. In this respect they are not as diversified as many listed companies and consequently more risky. To allow for this a small companies risk premium is introduced. This addition to the market risk premium is support by USA data.

Price to Earnings Ratios (P/Es)

Price to earnings ratios for listed shares are often the source of valuers' capitalisation rates. A P/E is the inverse of a capitalisation rate (R):

$$R = \frac{1}{PE}$$

However P/Es for listed shares are at best a rough guide to valuing a business because:

They are based on earnings after interest, not NOPAT nor cashflow. Because of this they give an indication of cost of equity only, not the cost of capital.

Often they are based on historic rather than forecast earnings. Business valuers are concerned with the future not the past.

As discussed previously, listed shares are freely tradeable. P/Es for such shares do not reflect the lack of marketability of most businesses.

Capitalisation Rate - Conclusion

Often the most technical part of valuing a business is assessing the capitalisation rate.

The CAPM method in particular is criticised as being too technical.

However CAPM works. It is accepted internationally. Its outstanding feature is that it provides a measure of the risk of various assets. In this way the valuer can use it to work out a rate of return.

Price to earnings ratios for listed shares can provide a guide to the appropriate capitalisation rate. However, it is essential that the limitations of these P/Es are understood.

VALUE (V)

So far we have identified:

$I =$ NOPAT, the income available as a return to debt and equity.

$R =$ Capitalisation rate, derived from WACC which is the cost of debt and equity.

Now we are ready to value the business. However, before we apply the $V = I/R$ formula it is essential to identify exactly what is being valued. That is, what assets and liabilities will $V = I/R$ value? This is established by separating the business' financing from its operations.

The Separation Principle

Fundamental to financial management is the principle of distinguishing finance from operations. This allows the business to be viewed from two distinct but clearly interrelated perspectives:

Operations - what the business does and how it generates cashflow

Finance - how operations are financed. Finance includes both debt from external sources and equity.

In the same way for valuation purposes we needed to separate the operational from the financial.

Finance includes not only debt but also the owners' equity in the business. This is because both lenders and equity holders invest in the business and require a return on their funds.

The accountant's balance sheet separates assets from liabilities. It does not separate finance from operations. For valuation purposes it requires restatement to separate finance from operations. A simple example of the restatement process is illustrated in Figure 4. The subject restaurant's balance sheet is used. The adjustments necessary to convert the balance sheet as prepared for accounting purposes are shown.

The change to the balance sheet (in this case) is that cash and bank deposits (or overdraft) are reclassified because they are sources of finance rather than operating items. The result is that the net assets required to operate the business (net operating assets) are clearly defined and separated from sources of finance (total capital employed).

The separation process clarifies which assets and liabilities are valued when NOPAT (I) and WACC derivative (R) are used. That is, value (V) quantifies:

Net Operating Assets (Operations)
Total Capital Employed (Finance)

The value of Net Operating Assets (NOA) and Total Capital Employed (TCE) are equal. They represent the two sides of the restated balance sheet which, by definition, must balance. Therefore if TCE is valued, the value of NOA is established.

Note: We have already satisfied the separation principle with regard to

Figure 4

L

		BALANCE SHEET RESTATEMENT PROCESS		
		"Accounting" Balance Sheet	Adjustments: Separate finance & operations	Restated Balance Sheet
Current Assets				
	Cash & Bank	\$3,200		\$0
	Debtors	\$125,982	(\$3,200)	\$125,982
	Inventories	<u>\$59,089</u>		<u>\$59,089</u>
			\$188,271	\$185,071
Current Liabilities				
	Bank Overdraft	\$43,098		\$0
	Creditors	\$72,982	\$43,098	<u>\$72,982</u>
			<u>\$116,080</u>	<u>\$72,982</u>
Working Capital				
			\$72,191	
<i>Operating Working Capital</i>				
				\$112,089
Fixed Assets				
	Total		\$205,000	\$205,000
Intangibles				
	Goodwill		<u>\$200,000</u>	<u>\$200,000</u>
NET ASSETS				
NET OPERATING ASSETS				
Funded by:				
<i>Short Term Financing</i>				
	Cash & Bank		\$3,200	\$3,200
	Bank Overdraft		(\$43,098)	<u>(\$43,098)</u>
				\$39,898
Term Liabilities				
	Total		\$273,098	\$273,098
Equity				
			<u>\$204,093</u>	<u>\$204,093</u>
NET FUNDS EMPLOYED				
			\$477,191	517,089
TOTAL CAPITAL EMPLOYED				

income by removing finance (interest payments) from the equation, thereby deriving profit from operations, NOPAT.

Often only *inventory, fixed assets and intangibles* are transferred when businesses are sold. The value of these assets can be established:

Valuation Conclusion

Now that we have assessed income (I) and the capitalisation rate (R), and we know what we are valuing, the value of the business can be established.

To illustrate, taking the calculations from Figures 1, 3 and 4:

Value of Total Capital Employed (or Net Operating Assets)

NOPAT -	
maintainable level	<u>\$236,000</u>
Capitalised @ WACC (net of growth)	17.0%
<i>Value of Net Operating Assets</i>	
<i>(or Total Capital Employed)</i>	<u>\$1,388,235</u>
say	\$1,390,000

The value of the net operating assets, or total capital employed, is \$1,390,000. From this starting point we can value interests within the business. For example, the *value of the owners' interest, or equity*, is:

Value of Total Capital Employed	
(from above)	1,390,000
Less Debt	
- Short Term	39,898
- Term	<u>273,098</u> <u>312,996</u>
<i>Value of Equity</i>	\$1,077,004
say	\$1,077,000

Market Value -

Net Operating Assets (as above) \$1,390,000

Deduct Assets included in value but not to be sold:

Operating Working Capital (112,089)

Add Back Inventory 59,089 53,000

Value of Inventory and non current assets

\$1,337,000

In summary, the valuation process is-

- Calculate the maintainable income attributable to operations (NOPAT). This is the cashflow available to reward all funders of the business.
- Capitalise NOPAT at the yield estimated to be required by those funders. This establishes the value of the total capital employed.
- Separate the balance sheet into financial and operational items. This clarifies the interest that has been valued. It also allows for various interests within the business to be valued (eg: equity). This is achieved by deducting the appropriate items from the value of the total capital employed.

OTHER ISSUES

Matching I with R

An easy way to produce a meaningless valuation is to capitalise an income figure which is not stated on the same basis as the capitalisation rate.

In the example presented in this paper both I and R are:

Post Tax

Real (ie: net of inflation)

Encompass returns to both debt and equity.

It is essential that I and R are similarly stated in these respects. To illustrate consider this simple example which addresses the impact of taxation:

Correct:

	Pre Tax	Post Tax
Income	\$100	\$100
Less Tax	-	33
	\$100	\$67
Capitalised @		
- Pre Tax	20%	
- Post Tax		13.4%
	\$500	\$500

Incorrect:

Income	\$100	\$67
Capitalised @	13.4%	20%
	\$746	\$335

The correct value is \$500. This can be calculated using either pre tax or post tax figures. However, if pre tax income is capitalised at post tax R (or visa versa) the indicated value is misleading.

Similar problems will occur unless both I and R are either real or nominal. Errors are also introduced if NOPAT is capitalised using the cost of equity only, rather than a WACC based rate. This is because NOPAT is the! relating to debt and equity whereas cost of equity applies only to equity. Alternatively, capitalising net income (after interest) using a WACC derivative is wrong.

Bottom Line Adjustments

The capitalisation process does not directly incorporate surplus assets or pending "one-off" revenues or expenses in the valuation. Examples include:

- Non income producing assets e.g. vacant property, artwork.

- Excess or deficient levels of working capital.
- Deferred maintenance.
- Contingent law suits.

Adjustments to the value of the business need to be made to account for these items. It is convenient for such items to be accounted for as "bottom line adjustments". For example, if the business valued in the previous section urgently requires plant replacement of \$100,000:

Market Value - Equity (prior to adjustment)	1,077,000
Less Capital Expenditure Required	100,000
Market Value - Equity	\$977,000

THE IMPORTANCE OF REAL ESTATE

The vast majority of businesses have an interest in property as either owner-occupiers or tenants. It is essential that these interests be incorporated into the business valuation at market levels. This is best achieved by:

Owner Occupiers - The property and the business should be valued separately. This is achieved by:

- Valuing the property using conventional methods. The basis of the valuation is that the existing use is to continue.
 - Valuing the business as if the premises are leased. This is achieved by deducting the property's market rental from the business' maintainable income. This lower maintainable income is then capitalised at the rate applicable to the business.
- The two values are then aggregated. Failure to separately consider the value of the property commonly results in a business value which is understated. It is not unheard of for the value of the business including the property to be assessed at less than the value of the property in its own right. Clearly this is illogical. The main reason why the property and the business should be valued separately is because of the difficulty in assessing a single capitalisation rate which adequately values both components. It is a simpler and more precise exercise

to assess two capitalisation rates, particularly that applicable to the property as here we generally have the benefit of comparable sales evidence.

It should be noted that separating the property from the business is feasible only for non-specialised properties. That is, properties which lend themselves to a multitude of uses. Specialised properties such as freezing works are effectively inseparable from the business and generally cannot sensibly be valued in isolation from the business.

Tenants

A major operating expense of business is rent. A business valuer should establish the market rental of the premises. If a significant change in the annual rent is imminent then the market rental should be incorporated into the business' maintainable income figure. Failure to include the rental which is likely to be payable means that the level of income used in the valuation is not maintainable. The resulting business value will be understated or overstated accordingly.

CONCLUSION

Capitalising income is an effective way of valuing a business. However, it will only give reliable answers if the right Income (I) and Capitalisation Rate (R) are used. It can be a technical process but is worth the effort as it produces a good result.

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The International Value of Domestic Property

by Marcus Jackson

The New Zealand Situation Direct Foreign Investment

As with many other parts of the world, the last decade has seen a period of financial market deregulation in New Zealand. Virtually all investment (or capital) markets, including the property market have been freed up, unshackled as it were, from most forms of government regulation, intervention and tinkering. As part of this process foreign investment has also been actively encouraged and over the last few years the capital involved, has played a large part in New Zealand's domestic recovery. The extent and success of this exercise can be gauged from the magnitude of foreign, direct, equity investment in New Zealand (ie greater than 25% ownership), including all real estate investment.

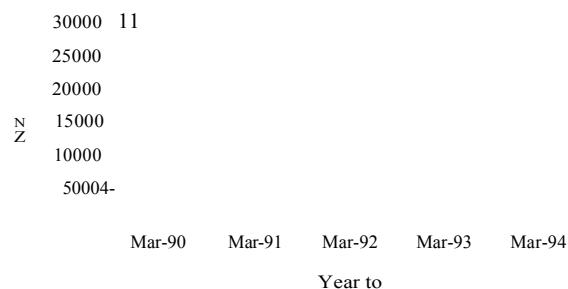
Over the four year period to March 1994, direct equity investment by foreigners increased by 115.5% to NZ\$ 26.494 billion, the direct real estate component of which increased 99.0% to NZ\$ 2.482 billion.

Richard Chung's in depth analysis of "Foreign Investment in New Zealand Commercial Property" (Ernst & Young Publication - August 1994) also points out that, over the period 1988 to 1993, 61 % of all foreign commercial property investment was undertaken by Asian-based investors (Singapore (25%), Japan (22%), Hong

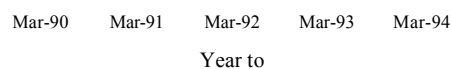
Kong (14%)). Furthermore, over 70% of all commercial property sales in Auckland were undertaken by foreign investors. These figures are all the more interesting when we remember that this escalation in direct foreign investment (approximately 9.00% of which was directly through real estate) continued over a period when the New Zealand economy and the property market itself were at best stagnant.

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DIRECT FOREIGN INVESTMENT IN NEW ZEALAND EQUITY
(NZ\$ Millions - Statistics Department)



DIRECT FOREIGN INVESTMENT IN NEW ZEALAND REAL ESTATE
(NZ\$ Millions - Statistics Department)



Capital Market Co-Integration

What the New Zealand situation does confirm is that the liberalisation of economic markets in one or more countries not only allows a far greater number of worldwide investment options but also ensures that all markets must then compete (on a hopefully level playing ground) for the right to hold and/or use the global investment 'dollar'. In the long term, it is hoped a domestic and globally integrated set of investment markets will eventuate, providing a more efficient, coordinated and stable medium for the transfer of funds between all savers and users of money in any country and at any time. From the individual or company perspective, this should also provide a far larger economic pie that we can all share in.

For capital market co-integration to successfully occur however, the presumption that all investment vehicles (or assets) be comparable and contrastable through a set of common principles and/or theories must also apply. The practical effect of this is that, as investment market themselves blend together, the underlying basis by which participants price or value assets will also tend to converge. This presumption is by no means farfetched, as can be seen today in the increasing use (by portfolio managers, Treasury and others) of finance-based valuing techniques such as the Capital Asset Pricing Method (C.A.P.M.) and Discounted Cash Flow analysis (D.C.F.) in the, traditionally distinct, commercial and industrial property sectors of New Zealand.

From the New Zealand property market perspective (especially the commercial and industrial sectors), on-going capital market co-integration means that we are now not simply an isolated grouping of individual property markets but are rapidly becoming influenced by international experiences. Milton Friedman's recent observation regarding products could equally apply to property itself, that it is now:

"possible to produce a (property) anywhere, using resources from anywhere, by a company located anywhere, to be sold anywhere." (1)

Much of this global integration is being fuelled by the rapid advances being made in the information communications field, but as John Naisbitt succinctly states:

"Information is power, but unlike earlier times, concentrating information in the hands of a few is no longer possible." (2)

Through VNZ LINK, for example, all up to date property sales information is now at the fingertips of lawyers, accountants, real estate agents, corporations, financial advisers and, in fact, any individual who wants it (and can pay for it!). Property valuers today are increasingly finding themselves not merely as information gatherers, but more as property advisers or consultants who take this information and process it in such a way that is valuable to their clients.

As more and more domestic and international investors compare, contrast and incorporate property with their other capital investment decisions, the methods and principles by which we have traditionally analysed and valued property may well require some reconsideration. A recent "First Column" article in the American "International Herald Tribune" provided the following observation:

"The three most important factors in assessing a real estate investment are, by ancient tradition,

location, location and location. But for international investors there are six other equally important criteria. The first three are taxation, taxation and taxation, then, also in triplicate, currency." (October 1994).

The international investor has a whole raft of possible motivations for investing in foreign soil. Richard Chung's article highlights the following major reasons for investing in New Zealand:

- Political stability
- Price to cost ratio
- Long term capital growth
- International diversification

The above provides many of the incentives for investing in foreign assets. If however, the expected monetary return does not match the investor's required monetary return, then in financial terms the investment may still be undesirable.

Short and Long Term Currency Effects

So how does an international investor assess the expected property return he/she could achieve in a foreign country? In a domestic sense, we know the total required return on commercial or industrial property is a function of two cash flows; firstly, the monetary price paid for the property and, secondly, the expected income stream (including capital gain) generated over the investment horizon. Where a direct foreign investment is considered, both the initial purchase price paid and future income stream are also affected by the investor's short and long term expectations regarding his/her home to foreign currency exchange rate.

Briefly, a country's monetary exchange rate reflects the demand for, and supply of, its domestic currency in relation to other foreign-based currencies. The current worth (today) is known as the 'spot rate' and is usually expressed, either 'directly' (home currency price of a certain quantity of the foreign currency) or 'indirectly' (foreign currency price of a certain quantity of home currency). Thus, in New Zealand, the Australian dollar may be quoted directly as NZ\$ 1.098 = AU\$ 1.00, or indirectly as NZ\$ 1.00 = AU\$.91. A freely floating exchange rate (one that is not controlled directly or 'pegged') measures the relative performance of a country in respect of, firstly, 'country risk' (the country's overall investment and productive environment), secondly, 'economic risk' (the country's consumer preferences and market structures) and, thirdly, 'political risk' (the stability of government and the regulatory environment).

Certain risk minimisation techniques are available to the foreign investor. Two notable options include keeping all foreign earned income in the foreign country itself and hedging (or securing) a fixed exchange rate at a stated time in the future. Both, however, have their limitations in practice the former ignores the opportunities and capital requirements of the investor in his/her home country and the latter is of little use when the investment horizon itself is uncertain. For example, to fully hedge a property investment you would not only require a guaranteed sale date but also a guaranteed sale price, obviously this is not always possible. 'Option contracts' offer increased flexibility but still remain standardised and may not fully satisfy the peculiarities of the property investment market.

In the short term then, exchange rate fluctuations (if not hedged) can lead to dramatic changes in the investor's home currency price and value of the foreign asset. Consider an Australian investor looking at purchasing a New Zealand property today. The asking price is NZ\$1,000,000 and the direct, spot exchange rate (in New Zealand) is NZ\$1.086/AU\$1.00 (meaning 1.00 Australian dollar will buy 1.086 New Zealand dollars). If the investor buys the property at the prevailing spot price, the Australian dollar requirement would be:

$$\$1,000,000 / 1.086, \text{ or AU } \$920,810$$

This optimistic investor, however, believes the Australian dollar is at present undervalued and that due to imminent and favourable Reserve Bank figures on the Australian current account deficit and economy, the NZ dollar will depreciate in the short term by 5% relative to the Australian dollar (at the time of writing it is, in fact, appreciating). If the Australian investor does hold on and the New Zealand dollar does depreciate by 5% to NZ\$1.14 / AU\$1.00 (meaning 1.00 AU dollar will now buy 1.14 NZ dollars) then the purchase price in Australian dollars will fall to:

$$\$1,000,000 / 1.14, \text{ or AU } \$877,192$$

It must be remembered that this is a short term expectation only - if the NZ dollar was expected to continue depreciating, the AU dollar cost would continue to decline and the investor may hold off until such time as he/she believed this depreciation would halt. However, if the investor bought the property for AU \$877,192 and the NZ dollar subsequently appreciated to its original level of NZ \$1.086 / AU \$1.00, then the Australian investor could immediately resell the property for the same NZ dollar value and receive AU \$920,810 - a speculative currency gain of AU \$43,618.

This short term exchange rate expectation offers a possible explanation for the apparent increase in Asian-based direct foreign investment in New Zealand real estate over the five year period to 1993. As *Figure 1* shows, during much of this time the New Zealand dollar depreciated relative to most Asian and world currencies.

Analysts believed that this was a necessary result of a NZ dollar artificially held at inflated levels prior to 1986 and the continued restructuring of the New Zealand economy. If Asian investors believed this appreciation in their currency relative to the NZ dollar was, in fact, only a short term correction (as it would seem it has turned out) and not a long term trend, then buying New Zealand property before the NZ dollar slowed or stopped its descent made good financial sense.

In effect, Asian investors, from an Asian currency perspective, were buying New Zealand property "cheap" relative to, firstly, the expected future cost or price and, secondly, what they could receive from reselling in the longer term - when the NZ dollar appreciated

-15.00% -

-- RBNZ Overall Index

again.

During 1994, the NZ dollar did, in fact, start a steady and continuing appreciation relative to most world currencies it will be interesting to see whether or not direct foreign investment continues at the rates experienced in the past (unfortunately the March 1994 to March 1995 data will not be available until May 1996).

Short term expectations impacting on the purchase price of foreign property are, however, only one part of the total investment return. Once the purchase price is known and/or stated, longer term currency movements become important, impacting on the conversion of the future income stream and growth potential of the asset. If we ignore for the moment the international perspective, the expected income return for every dollar invested domestically can be broken down into two distinct returns:

(1)

The "cash in hand" return (r) or cap rate. This provides the investor a real return, exclusive of the capital gain potential.

(2)

The capital gain or growth potential (g). This return is especially important to property investment and provides the investor with an unrealised but expected return due to inflationary pressures, demand and supply for space, etc.

The one period (or year) total domestic return is simply the addition of the cash return

and growth potential of the asset over that year, that is:

$$\text{Total Return} = r + g$$

Where a direct foreign investment is considered however, the total expected return incorporates a third component (taxation changes are ignored here).

(3)

The percentage appreciation/depreciation in the investor's home currency relative to the foreign currency (c) over the term of the investment.

A depreciation will increase home currency returns by increasing the relative value of the foreign currency earned. An appreciation will reduce home currency returns by decreasing the relative value of the foreign currency earned.

Figure 1

PERCENTAGE CHANGE IN AVERAGE YEARLY EXCHANGE RATE (Reserve Bank & ANZ)

m Japanese Yen

-e- Singapore Dollar

Thus, from an international perspective, where a home currency exchange rate depreciation is expected the one period, total return becomes:

$$\text{Total Return} = [[1+(r+g)] \times (1+c)] - 1$$

Where an exchange rate appreciation is expected, divide (not multiply) by (1+c).

If we were to consider the same Australian investor looking at holding a New Zealand property as a long term investment, then the Australian investor will not only be looking at the total New Zealand domestic return (ie: r + g), but also how that return will be affected by long term changes in the value of the Australian (home) relative to the New Zealand (foreign) dollar. It is important to remember that the initial (spot) exchange rate is not important by itself; what is important is the change (or expected

change) that occurs in that exchange rate over the period of ownership.

Suppose, after lengthy discussions, the Australian investor chooses a New Zealand property and agrees to a purchase price of NZ\$1,000,000. The property yields a cash return of 7.5% per annum, which is well below New Zealand expectations. The expected capital gain is 3.00% per annum and assume for simplicity no debt and a one year term. The direct spot exchange rate in New Zealand is again NZ\$1.086 / AU\$ 1.00. There are no short term exchange rate movements expected and the Australian dollar is predicted to depreciate by 5.00% over the one year period to NZ\$1.034 / AU\$ 1.00.

The total (one year) expected return to the Australian investor, in Australian dollars, is:

$$[[1+(0.075 + 0.03)] \times (1+ 0.05)] - 1 = 16.0\%$$

That is:

	AU\$		NZ\$
Yr 1 Start Purchase	(920,810)		(1,000,000)
Yr 1 End - Income	72,533	A.	75,000
	996,131	-4'	1,030,000
Total Return	16.0%	(with rounding)	10.5%

Compare this figure to the domestic (New Zealand) return over the same one year period:

$$[0.075 + 0.03] = 10.5\%$$

and, despite the low initial cap rate or yield, the potential of the Australian investor to achieve a greater return (than the New Zealander) from the investment property is obvious. However, it

must also be remembered that the risks (ie country, economic and political) associated with international investment are also far greater. If the Australian dollar was to appreciate in value by 5.00% to NZ\$1.14 / AU\$ 1.00, then the 10.5% domestic property return is now worth only:

$$[[1+(0.075 + 0.03)] / (1+ 0.05)] - 1 = 5.23\%$$

in Australian dollars at the end of the one year investment term.

That is:

	AU\$		NZ\$
Yr 1 Start Purchase	(920,810)		(1,000,000)
Yr 1 End Income	65,789		75,000
	903,508		1,030,000
Total Return	5.23%	(with rounding)	10.5%

Forecasting Exchange Rate Movements

The capacity to forecast favourable short and long term exchange rate movements is a critical part of any international investment, including real estate, and, from the international investors perspective, may well override certain domestic investment criteria. This view is supported by the obvious growth in direct foreign

investment levels in New Zealand over a period when the domestic economy and property markets were on the whole stagnant. It also reinforces the argument that expectations play a vital role in how investors see and value commercial real estate. Coming back to the Asian-based escalation, the ability to correctly predict a NZ

dollar going through a short term depreciation then (hopefully) long term steady appreciation (relative to Asian currencies) has allowed the Asian investor not only the ability to buy New Zealand property relatively "cheap" in the short term but also, in the long term, gain increased returns - one could never argue with this investment strategy.

Exchange rate forecasting is certainly not an exact science. Techniques are varied and all are open to debate - the easiest and certainly the cheapest involves an examination of exchange rate futures contracts with our main trading/investing partners or a trend analysis of the trade weighted index (TWI) which measures the effect of changes in the currencies of New Zealand's five major trading partners. Other relationships which attempt to model the international monetary environment and play an important role in exchange rate movements include:

(1) Purchasing Power Parity, which, in its relative version, states that the home to foreign currency exchange rate will adjust to reflect changes in the price levels of the two countries.

(2) The General Fisher Effect, which states that real interest rate returns across countries should be equalised through arbitrage. In effect, currencies with high rates of inflation will have higher interest rates than currencies with low rates of inflation.

(3) The International Fisher Effect, essentially a combination of the above, which states that currencies with low interest rates will be expected to appreciate in relation to those currencies with high interest rates.

On a more practical front, one should also not ignore Reserve Bank policy statements and the Bank's ability to influence/guide the New Zealand dollar exchange rate while controlling internal inflationary pressures. For example, in order to comply with Clause 11 of the Reserve Bank Act regarding the 0-2% underlying inflation target, the Bank, by holding domestic interest rates high, will not only dampen internal economic growth but also increase the international demand for NZ dollar deposits. This will put additional upward pressure on New Zealand's exchange rate and not only ease export-led growth by reducing profit margins but also put pressure on domestic producers to remain price competitive with cheaper imports. The trick is not to stop New Zealand's growth but to control it for the long term. Many analysts therefore see a steady appreciating dollar as a sign of superior performance both in productivity and inflation control.

This low inflation policy signals what will hopefully be a period of relative stability for New Zealand's commercial and industrial property sectors. Much of the boom and bust cycles in the past have been based on over zealous capital gain expectations rather than on favourable investment fundamentals. If the Reserve Bank succeeds in its aim of controlling economic growth and inflationary pressures, property performance will depend more on improving underlying productivity, measured through such tech-

niques as 'Economic Value Added' (EVA), rather than relying on an expectation of inflation-driven capital gain. A continuing steady appreciation in the New Zealand dollar should also favour the longer term foreign investment strategy and reduce the number of short term foreign speculators in the New Zealand commercial property markets.

Conclusion

Currency fluctuations and their impact on commercial property income and returns also raises some important philosophical issues relating to our concept of 'market value'. Are currency fluctuations merely another unique imperfection on our 'willing buyer willing seller' paradigm or is it an issue that every prudent and knowledgeable participant should be aware of? In this new co-integrated environment, does our concept of the 'market' now encompass the international stage or should we try and hang on to a more domestic perspective? In other words, do we consider foreign purchases of New Zealand real estate as relevant to an assessment of 'market value'?

In my very humble opinion, I believe that we have no choice - to ignore foreign participants is to remove ourselves, not only from reality but also from our primary aim that is, to assess what a property • vu sell for. We cannot and should not judge where the 'market' of participants begins and ends, only on how those willing, prudent and knowledgeable participants, on average within that market, price or value real estate. Clearly the last decade has shown that while not having to become expert on foreign exchange matters, we must if required, be able to recognise and allow for the foreign-based perspective on property income streams and returns.

Footnotes

- (1) John Naisbitt, "Global Paradox". Allen & Unwin 1994, page 19
- (2) John Naisbitt, "Global Paradox". Allen & Unwin 1994, page 56

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- (1) F.L. & L.A. Rivera-Batiz, "International Finance and Open Economy Macroeconomics". Macmillan Publishing Company 1994.
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The Impact of Transmission Lines on Property Values

by Sandy Bond

Introduction

The effects of high voltage overhead transmission lines (HVOTL's) on property values has been of interest to electricity companies both in New Zealand and overseas for many years. Information about the effects has aided in planning the routing of HVOTL's and for determining compensation to property owners. The owners of affected properties have also been concerned with understanding the possible magnitude of impacts. Studies show that HVOTL's are no longer seen as a welcome sign of progress and it is commonly believed that this will be reflected in lower values of housing adjacent to them.

Public attitudes to HVOTL's appear to be changing particularly as a result of media attention to the potential health hazards (unproven to date, Consumer (1994)) detailed in epidemiological studies which claim a positive correlation between long-term exposure to the electromagnetic fields produced by HVOTL's and certain types of cancers. Yet the extent of opposition from affected property owners by the siting of HVOTL's is still uncertain. Some studies to date indicate that the perception that this opposition will be reflected in lower property values is simply a belief unsubstantiated by market evidence. To help determine the level of opposition (and to help avoid it) the identification of the fac-

tors that influence public acceptance/rejection of HVOTL's is needed.

This article summarises the results of research carried out to answer the question of how those who live near HVOTL's and those working as real estate salespersons and valuers in areas affected by these perceive the HVOTL's and evaluate their impacts. Of particular interest are the perceived impacts of HVOTL's on residential property values.

The project was commissioned in 1993/94 by Transpower. It consisted of two parallel efforts: Firstly, an analysis of sales of properties within the HVOTL corridor to determine the effect of HVOTL's on residential property values conducted by Millar and Hargreaves (NZVJ June 1995). Secondly, and the focus of this article, was a study conducted by the writer, of the attitudes and reactions of property owners toward living close to HVOTL's and of persons considered to be potential influences on home buying decisions toward the behaviour of the residential property market affected by HVOTL'S. Thus, the study included three separate groups of respondents: residents located within 300 metres of the HVOTL's and both real estate agents and valuers working or involved in work in the Newlands area affected by HVOTL'S.

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Development of the case study involved:

- Selection of an area in which HVOTL's have already been built.
- Development of two questionnaires: one aimed at assessing the degree to which residents pay attention to the HVOTL's and how they assess the effects, the other aimed at determining how real estate salespeople and valuers working in the area assess the effects.
- Administration of the questionnaires to a sample of the area's residents and those persons and organisations involved professionally in the area's property market and statistical analysis of the questionnaires' responses.

Study Area

The area selected for the case study consisted of a low to middle income single-family suburb, known as Newlands. Newlands is a hillside location situated on Wellington's northern slopes above and overlooking the harbour. It is crossed by two 110KV transmission lines with 26 metre high steel pylons located on private land. The study area included homes located within 300 metres of the line. For purpose of analysis sites were divided into two categories according to their distance from the pylons. Those sites

which were within 50 metres of a pylon and/or the HVOTL's were termed "close". All sites 50-300 metres from a pylon and/or HVOTL's were classified as "distant". Most of the residential development occurred subsequent to the erection of these lines during the 1960's and the 1970's. However, housing construction is continuing at the present time in the north east section of the suburb overlooking the harbour and city. Despite having a reasonably homogeneous group of housing in a quantity that provides

a good sampling base various complicating factors emerged upon a visit to the site such as the topography which permits some properties to obtain a harbour view and/or to screen the view of the lines.

One of the key factors upon selecting this area as an appropriate one for study was that there were enough households and potential respondents falling into each class of interest (i.e. distance from the line) to provide sufficient numbers to permit meaningful statistical analysis of the data.

Summary of Case Study Findings

Results of Residents' Questionnaire

Of the 796 questionnaires mailed to homeowners and tenants in the study area, 58% were completed and returned.

Feelings toward Transmission Lines as an element of the neighbourhood

The essential finding is that residents generally think of HVOTL's as a negative element in their environment. When asked about a variety of factors that could affect their neighbourhood's attractiveness 78.5% of those responding indicated that they think high voltage HVOTL's have negative effects.

When asked how they would rate the HVOTL's appearance, over 80% indicated they would rate it as either somewhat or very negative, 18% gave it a neutral rating, and fewer than 2% indicated they found it attractive.

They were then asked to rate their neighbourhood in comparison to others in the Newlands area. Over 66% of the respondents rated their neighbourhood as somewhat more or much more desirable. This somewhat contradictory finding may be the result of the many factors which make up the characteristics of the neighbourhood. That is to say that despite the negative feelings about the high voltage HVOTL's there are many other features in Newlands which do make the area somewhat attractive as a place to live.

Concerns About the Transmission Line

Residents evaluate the HVOTL that runs through their neighbourhood in negative terms because of its perceived impacts on aesthetics, noise, health and safety. Of those respondents living "close" to the lines, 87% hear "buzzing" or "crackling" either sometimes or often. Of these, 78.3% are bothered to one degree or another by this noise.

The most important concerns about possible transmission line hazards appear to be the health effects and lines breaking during earthquakes. In terms of health effects 62.5% of the respondents indicated that they worry somewhat to a lot and 52.3% indicated that they worry somewhat to a lot about lines breaking during an earthquake.

Items that respondents felt were effected most by the HVOTL's were attractiveness of their homes with 60% indicating a negative response, attractiveness of views from their home with 61.6% indicating a negative response and 65.4% of respondents felt that the resale value of their property was negatively affected by the HVOTL'S.

Affect on Decision to Purchase or Rent

For over half (68.1%) of the respondents, the presence of the line didn't influence their decision one way or another, for 29.5% the line's presence created mild to strong reservations about buying/renting the house.

Similar results were obtained for the ways in which the presence of the line affected their price decision with 79.6% of the respondents not being influenced by this one way or another.

In general terms, the residents who notice the transmission line the most and who evaluate it most negatively are those

who live within 50 metres of the HVOTL's termed "close". Evaluation of the responses to the questionnaire's background questions revealed that 72.8% of the respondents were male and 27.2% were female. The average age was 30-49 years. 73.1% of the respondents were in full-time employment. Home owners made up 97% of the sample with only 2.9% being tenants. Those situated within 50 metres of the HVOTL's and/or pylons made up 43.7% while those further than 50 metres made up 56.3%.

Results of Valuers' Questionnaire

Of the 12 responses to the questionnaire 83% of the respondents rated Newlands as a somewhat less desirable place to live compared to other nearby suburbs. A similar percentage indicated that people living near the HVOTL's notice them often to always. Some 92% of the respondents perceive that residents feel somewhat negatively when they see the HVOTL'S.

Similarly, 83% of the respondents felt that the willingness of buyers to purchase properties located close to HVOTL's were negatively affected. However, none of them felt that the availability of mortgage financing was affected as a result of being close to a HVOTL.

Half of the respondents felt there was up to a 10% reduction in value as a result of being close to the HVOTL's. Sixty percent felt that the impact was largest closer to the transmission tower and/or line decreasing with the distance from it.

All of the respondents felt that the effects change over time, the most commonly cited reason being due to the more recent media attention given to the health issues relating to the HVOTL's. Similarly they all vary their assessment of value of property intersected by a HVOTL with half reasoning it is because HVOTL's affect the saleability of the property. Sixty percent of the respondents vary the value by up to 10%. All of the respondents were registered public valuers between the age of 30-49 years with 83% being male.

Results of Real Estate Salespersons' Questionnaire

The real estate salespersons appear to have perceived the HVOTL's more negatively than the valuers. However, they felt that this affected sale price or value to a similar extent that is up to 10% of property value. Of the seventeen responses received 82% of these indicated they felt that effects varied over time and gave a similar reason to the valuers, being the increased media attention given to the health issues. Again the majority of them, 88% reduce the value of properties situated close to the HVOTL's, the most commonly cited reason being that the saleability is affected. Eighty percent of the respondents vary the price by up to 10%. Evaluation of the responses to the questionnaire's background questions revealed that 69% of the respondents were male and 31% female. Over 70% of the respondents were aged between 30-49 years. Nearly two-thirds of those contacted were certified sales people. Close to 60% of the respondents had between 0 and 10 years selling experience in the Newlands area.

As can be seen from these results, both valuers and real estate agent groups are particularly negative in their reactions towards the saleability of properties situated close to the towers and/or HVOTL's. Conceivably, these negative attitudes translate themselves into advice to potential buyers or sellers and/or judgments about the market value of such properties.

Conclusions

Briefly stated, the results of this study indicate all of the respondents, residents living near the lines, real estate salespersons and valuers working in the area, think of the HVOTL's in negative terms. The proximity to HVOTL's is an important aspect determining the degree of negativity with those closer to the HVOTL's having more negative attitudes than those further away. Areas of concerns ranked in decreasing order included: property values, health and aesthetics.

A high percentage of real estate professionals and valuers thought that HVOTL's have a negative effect on the property value and that this lessened relative to the proximity from the HVOTL's. The decline in value was assessed at around 10%. It is interesting to note that the perceived negative attitude may or may not be reflected in the price actually paid for property. The study by Millar and Hargreaves (NZVJ June 1995) showed that the effect on price paid varied depending on the location within the Newlands area that the property was situated. Hence, it can be concluded here that the negative attitudes reported here will not necessarily be reflected in lower prices. Conceivably, as both the real estate professionals and valuers are particularly negative in their reactions towards the saleability of properties situated close to the HVOTL's these negative attitudes translate themselves into advice for potential buyers or sellers and/or judgements about the market value of such properties which could translate through to the sale prices themselves, however as indicated this has not been well supported by the sales evidence analysed with the results of such analysis being somewhat variable.

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Technology Forum

Technology Forum is a regular feature of the NZ Valuers' Journal. Its aim is to report on computer technology as it evolves with particular emphasis on information systems, property sales and database issues, telecommunication, computer hardware and software developments. It will also endeavour to cover technological developments in the building, mapping and other similar land based industries.

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Any subscribers encountering technology related problems or seeking advice on computer issues are encouraged to use the Mail Bag for appropriate discussion and comment. In addition to answering queries direct the letter may be published (anonymously if preferred) in order to share problems, answers and outcomes within the subscription membership. Prospective authors in this field, practitioners with technology problems or ideas and anyone with computer skills willing to assist should feel free to contact:

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THE INTERNET "THE BOTTOM LINE"

by Richard Emery

The objective of this article is to examine whether a practising valuer can profit from connecting into internet. Briefly the answer is "No not yet". Internet, how it works, and what you need to access it has been discussed by Bell (NZVJ March 1995). This article contributes by providing an evaluation of the costs and benefits to a practising valuer.

The internet will be evaluated in relation to two hypothetical practices. First, a sole practitioner with PC a 286 with 4Mb of RAM who is running an early version of Windows and Valpak.

Second, a national corporate firm with offices in the three major cities of NZ. Each office has a server with networked PCs with a dedicated line which can be used for data transfer via modems. PC configurations include at least one 486 with 12Mb RAM and 280Mb hard drives. The firm uses Windows for Workstations 3.11.

In terms of costs the national corporate firm needs no additional hardware. Additional software required includes:

- Electronic mail software such as Eudora software.
- Software to access Newsgroups.
- NETSCAPE the equivalent software for the World Wide Web (WWW).
- FTP software.

The firm requires an account at an internet provider. Most users use the internet gateway at Waikato University. Two organisations have their own gateways, Comuserve and IBM. Charges are approximately \$75 monthly and this includes 15 hours access to the internet and \$11 per additional hour.

The sole practitioner's PC is unable to run recent versions of windows. Their costs are considerable. These include a new PC (\$2,500) and a modem, (\$500). These costs are necessary access to WWW and newsgroups. DOS environment software would be probably free, shareware, if only Email and FTP were required.

Bell (1995) discusses the prospects of internet and categorises these into real

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estate listing services, practice promotion! marketing, electronic libraries, file transfer protocol, newsgroups, education prospects and global electronic mail. So what of the opportunities to secure a return on the investment. It is best to follow the Bell (1995) classification.

REAL ESTATE AGENCY

Most valuers are not practising real estate agents. This section is directed at members of the Institute who are practising real estate agents.

Real estate listing services includes the electronic posting of Property For Sale notices. This form of advertising reaches a potential market of 25 million interneters. There are two possible methods. First, to publish property particulars on a Newsgroup. Many newsgroups have an

unwritten code not to advertise for products or services. If you contravene this you may receive "hate mail". This is junk mail sent as a form of retribution.

The preferred method is to post a page on the World Wide Web (the WWW). This is browsed by those cruising or surfing internet. Interneters may download any listing if they are interested. There is a catch. If someone visits your page and downloads it you are charged in New Zealand, but not necessarily overseas.

There are certain newsgroups where advertising real estate is allowed. The Real Estate Network GEMS Global Real Estate network is one. These will, as predicted by Bell (1995) "revolutionise the selling of property".

In the USA there is a for sale by owner newsgroup which bypasses real estate agents.

The Real Estate Institute of Victoria in Australia has developed a central database which includes the name of the real estate agent in place of the vendor. Once established this system could be linked to internet for general public access.

PRACTICE PROMOTION/ MARKETING

The most important feature for practising valuers may well be the selling of professional services using the WWW or alternatively on bulletin boards. There is already a board called Corporations and this includes real estate and valuation firm listings. For example one entry *J H Isaacs - a multi faceted property service organisation in South Africa*. If you go into the page more information about the company is revealed. This includes the services provided and contacts both conventional addresses and via the internet. The sole practitioner may find the cost may not be justified by the business generated.

TELNET

Telnet provides the ability to call up a remotely located computer. NZIV could develop a national database of property transactions extending Valpak with additional "valuer provided" comment. This would be available only to those who contribute to the service. Non members would be excluded, It could in time give members of the NZIV the competitive edge in the market place and could be a core component of the next five year business plan for the Institute.

ELECTRONIC LIBRARIES AND JOURNALS

Overseas and regional libraries, including the local Australian New Zealand joint venture (NDIS), have their collections electronically catalogued. To access these categories you use TELNET. Your PC becomes a remote terminal and interacts with the software to search for the publications.

Some libraries require a fee before you can log onto their system. Abstracts are going electronic and in addition to securing the citation and abstract in some cases the article can be acquired. Because of the small number of instances a sole practitioner will need articles from say the Appraisal Journal it would be better to use the NZIV library. A national corporate practice may have more unusual instructions and need to source international literature more frequently. The internet may be a useful tool to identify articles and source the document.

FILE TRANSFER PROTOCOL

This facility enables a user to copy files from other locations. These files include free software known as shareware, games, and can include colour photographs or short video clips. A national corporate could collate different office contributions for a valuation exercise from different offices internet. The network is insecure and transfers of files transferred via FTP can be hijacked by expert "hackers". Until encryptions become the norm firms may prefer to courier hard copy or alternatively to send direct down the public telephone line using modems and an encryption machine or alternatively down a dedicated line. At present with little additional cost (modem and internet connections) Valpak data could be transferred electronically via internet rather than by disks.

NEWSGROUPS

Newsgroups provide the opportunity to tap into the expertise of others. Much of what has already been covered in newsgroups is practise promotion and marketing. A sole practitioner may not have any qualms about posting a "help for information" notice (if he/she did not want to be identified they could use a proxy to post the notice and give their email address).

EDUCATION PROSPECTS

This has potential for an organisation such as the New Zealand Institute of Valuers. In a world where a high percentage of practitioners were hooked up to internet it could replace much if not all of the correspondence within the Institute. The fact that the Technical handbook has been made available in as an ASCII text file on disc suggests that many practitioners are using PCs in some form or another. CPD modules could be written and placed in a public archive. Members could then copy these files onto their own PCs and work through at their own pace. Interactive modules requiring responses could be emailed back. The possibilities are endless once it is realised that images both still and moving can be transmitted via internet.

CONCLUSIONS

If a valuer is primarily engaged in residential valuations he/she may well find that there is little incentive to upgrade and their potential to use internet for commercial benefit is minimal.

For the practitioner who has or is about to upgrade to a current generation computer then there is a minimal cost (ie the modem and internet fees). Whether they can profit from internet surfing is perhaps dependent on whether they can secure and tackle assignments on the extremities of their skills and whether they want to conclude with others to satisfy their clients needs. I suspect the very public nature of a newsgroup will mean that this will not be the case. In such instances then the internet will remain essentially a recreational and educational resource, assuming the Valpak service is not extended to internet.

I predict the spread of the internet will be like the fax machine. We survived prior to its arrival but as soon as our rivals secured a machine we had to match them. Today most valuation practices will, at least, have the facility to send or receive a fax. The fax has become an essential tool. I guess in time the same will be said of the internet!

LEGAL ISSUES

The Treaty of Waitangi and Title to Land

by Deborah Edmonds

Nineteenth-century developments

In one sense the Treaty of Waitangi is the foundation of all real property law in New Zealand. Aspects of the Treaty of Waitangi were swiftly translated into legislation at the outset of New Zealand history. The principle was established early on that the whole of the soil of the country was Maori-owned, and that Maori title could only be extinguished by the Crown. In particular, the doctrine of pre-emption, contained in Article II of the Treaty of Waitangi by which only the Crown could extinguish Maori title to land was translated into statute by the Land Claims Ordinance of 1841.

This has meant that the situation that evolved in New Zealand was fundamentally different from that in Australia. In Australia it was assumed that the indigenous population were too nomadic to give a title to land recognised by the common law, and it followed from this that all land belonged to the Crown. Vast stretches of Australia today are unallocated Crown land. Only recently, with the High Court of Australia's decision in *Mabo v. Queensland* and with the Commonwealth Government's Native Title Act 1993, has aboriginal title to Australia been formally recognised in Australian law. In New Zealand Maori title has always been recognised; the issue today is not the existence of such title but the methods used by the Crown over the course of New Zealand history to extinguish it.

The Crown's right of pre-emption was abolished by the first New Zealand Native Lands Act 1862. Thereafter Maori Land, once it had passed through the Maori Land Court, was theoretically alienable to anyone (although, as anyone familiar with Maori Land will know, there are today many restrictions on freedom of alienation of Maori land). This, and the development of a system of land registration after the enactment of the first New Zealand Land Transfer Acts, led to the emergence of the recognised categories of "general" and "Maori freehold" land.

The final step in the process came with the decision of the Privy Council in *Assets v. Mere Roihi*, decided in 1905. In this case the Privy Council overruled the New Zealand Court of Appeal and held that alienation of Maori land by fraudulent practices had no effect on the title of a registered proprietor, provided that the registered proprietor was not *personally* guilty of fraud. The effect was to completely sever any connexion between Maori grievances and ordinary conveyancing of land. Conveyancers needed to concern themselves only with land transfer register, and

Introduction

This article considers the links between the principles of the Treaty of Waitangi and ordinary land law in New Zealand. New Zealand land law and the principles of the Treaty were at one time closely linked. With the emergence of the Native Land Court and the establishment of a system of land registration based on the South Australian model the links between the Treaty and the ordinary law of title to land came to be of less relevance. Until recently most ordinary conveyancing, unless it happened to involve parcels of Maori freehold land, was wholly unaffected by the law relating generally to the Treaty and Maori issues. As a result of a number of recent statutory developments, however, this has now changed. These changes are perhaps best thought of as instituting a new kind of statutory exception to the general doctrine of indefeasibility of title protected by the Land Transfer Act 1952. These changes perhaps pose some interesting new problems for valuers.

This material has been prepared as a Member Service for the NZIV by KENSINGTON SWAN, Barristers, Solicitors & Notaries Public in Auckland and Wellington. Members having any enquiries on the issues reported should contact the offices of Kensington Swan or their own legal advisors. The NZIV accepts no responsibility for the opinions expressed.

T ANTI 'd'III tAITANGI

(The text in Maori)

O WIKTORIA, to Kuini o ingararti, i tana mahara tawai ki nga Rangatira nme nga f i o Nu Tiranii Lana iahia hokikia tohungia ki a rand ratourangatiratanga, rye to ratou wenua, a kia mai tr3ll♦tt i to Rongo ki a rtou mete Atarroho hoki kua wake is he mea tika kia ,qua mai tetahi Rangatira hei kai wakarite ki nga Tangata aori o Nu Tirani-kia wakaaetia e nga Rangatira maori t Kawanatanga o to Kuini ki nga wahikatoa o to Wenua ei me nga Motu-na to mea hoki he tokomaha ke nga.; ♦ngata a tuna Iwi Kua noho ki tonei wenua, a e haere

Cp teKuini e hiahia ana kia wakaritea to Ka wanatanga, ai nga kino e puta mai ki to tangata Maori ki to ...:e. the tore kore ana, e Kumi kia tukua a hau a Wirerriu Hoptriona le Rotary At wi hei Kawana mo nga wahi rtei, amua atu ki to Kuini e °I nga ngt iIra o to wakaminenga o nga u:t W Tirani me i ra Rangatira atu enei tore ka orerotia nei.

KO TE TUATAHI

<Ko nga Rangatira o to Wakaminenga me nga Rangatira katoa hoki ki hall uru ki taua wakaminenga ka tuku rawa a;tu ki to Kuini o ngarani ake tonu atu-to Kawanatanga kkatoa o o ratou wenua.

KO TE TUARUA

*Igo to Kuini a ngarani ka wakarite ka wakaae ki nga ♦zim filtl t- nga hapu-ki nga tangata katoa o Nu Tirani ft#i fg #iratangaao #tlt t erg. aoratoukaingame *ttga katoa tia nga Rangatira o te e game nga Rar tfakafaoa atu ka tuku kite''' t u ni to hokonga o era wa At en i e phi ai to tangata r?ona to Wenua-ki to ritengaa t eivattaritea ale ratou ko to kai hoka e meatia nei e to ff t hei kai hake nmona.*

KO TE

ei wakaritenga mai hoki te/ et kaaetanga kite t awanatanga o to Kuini Ka tta > a ,ta Kuini o Ingarant raga tangata maari katoa o No Tr'anika tukua ki a ratou rtga tikanga katoa rite tahi ki aria mea ki nga tangata a krgarani.

*(Signed) WILLIAM HOBSON.
Consul and Lieutenant-Governor.*

Na ko matau ko nga Rangatira o to Wakaminenga o nga m'apu o Nu Tirani ka huihui nei ki Waitangi ko matou hoki ko nga Rangatira o;Nu Tirani ka kite nei i to ritenga o enei .tpu, ka tarrgohia ka wakaaetia katoatia e matou, koia ka tohungia ai o matou ingoa o matou tohu.

Ka meatia tenei ki Waitangi i to one o nga ra o Pepueri i.Je tau kotahi marla, e ware tau e wa to kau o to tatou riki.

Ko rrga Rangatira a to wakaminenga.

(From the Treaty of Waitangi Amendment Act 1985)

Maori who felt that original alienations of title had been fraudulent or in breach of the Treaty of Waitangi were unable in any way to impeach the title of a registered proprietor.

Meanwhile other cases established that the Treaty of Waitangi had no effect unless it was incorporated into a statute. This was settled in another decision of the Privy Council, *Hoani to Heuheu Tukino v. Aotea District Maori Land Board*, decided in 1941. This still basically the law at the present day. However, while no statutes referred to the Treaty of Waitangi in 1941, a significant number today do - including the State-Owned Enterprises Act 1986, the Resource Management Act 1991 and the Crown Minerals Act 1991.

To return to the main point, the ordinary work of conveyancing title to land became completely disconnected from Maori grievances touching on how the land was alienated in the first place. The Land Transfer system meant that it was not necessary to trace through a chain of titles in order to determine whether the original title was flawed in any way, including a defective or fraudulent acquisition from the original Maori owners. This is still the situation which prevails today. However some recent developments have once again established a connection the between Maori claims and private titles.

The Waitangi Tribunal process and private land

The Waitangi Tribunal was established by statute in 1975. It was directed to make recommendations after hearing claims brought by Maori that acts or omissions of the *Crown* were contrary to the "principles" of the Treaty of Waitangi. It could not enquire into the actions of private individuals. The legislation did not, however, prevent the Tribunal from recommending that the Crown acquire private land as a way of remedying a grievance that it found to be well-founded.

The Tribunal, probably well aware of the political risks involved in making any recommendations relating to private land, carefully avoided this issue until its *Te Roroa report* of 1992. This was a claim relating to some lands on the west coast of Northland, in the area between Dargaville and the Hokianga harbour. In its final list of recommendations the Tribunal indicated that the Crown should consider acquisition of some privately-owned blocks. The Tribunal did not discuss the matter in any detail in the body of the report, and probably did not mean to suggest that the land should be compulsory taken to do so would, in any event, have required an amendment to the Public Works Act. It probably meant to suggest nothing more than the Crown and the private owners enter into some negotiations with a view to acquiring the land by an agreement and a full market price and returning it to the Maori claimants. This was, moreover, just one small part of a comprehensive set of suggested remedies.

Nevertheless the Tribunal's actions aroused a considerable political storm, and led to a number of representations to the government from Federated Farmers and other organisations.

The government chose to amend the Treaty of Waitangi Act (Treaty of Waitangi Amendment Act 1993). This prohibited the Tribunal from recommending either "the return to ownership of any private land" or "the acquisition by the Crown of any private land". In this enactment "private land" is defined to mean any land, or *interest* in land, held by a person other than the Crown or

a Crown entity (as defined by the Public Finance Act 1989). Land held by State enterprises or local authorities is not "Crown land" in this sense either, which means that State enterprise and local government assets are also immune from recommendations by the Tribunal. This restriction does not however apply to any land or interest in land transferred to a state enterprise under the State-Owned Enterprises Act 1986, which is discussed below.

Maori claims and certificates of title

Despite the Treaty of Waitangi Amendment Act 1993, Maori claims can still affect private titles. This result has been achieved not as an outcome of the Waitangi tribunal process, however, but as a consequence of the Court of Appeal's decision in *Maori Council v. Attorney-General*, decided in 1987, and the rather complex legislation enacted to implement a settlement between the Crown and Maori negotiators after the case. The Treaty of Waitangi (State Enterprises) Act 1988 allowed the Crown to proceed with its programme of assets identification and transfer to State enterprises, but authorised the Waitangi Tribunal to order

the *resumption* of any land so transferred if it found the claim to the relevant land or interest in land to be "well-founded". This was to give to the Waitangi Tribunal a new binding authority in addition to its ordinary power to make recommendations. Similar regimes, also giving the Tribunal special binding powers, were subsequently implemented as an outcome of other settlements (Crown Forest Assets Act 1989, New Zealand Railways Corporation Restructuring Act 1990).

The various agreements between the Crown and the new State enterprises usually stipulated that the State enterprise was to receive a registered title for land transferred to it. Such land remained, of course, subject to the Waitangi Tribunal's power of resumption, which remained even if the State enterprise decided to on-sell the parcel to a third party. In effect, then, a new category of title was created, one which in effect conveyed or granted a full fee-simple tenure, but which had a rather curious limitation: that is, it was liable to be compulsorily acquired by the Crown for value at some unspecified future time should the Waitangi Tribunal so recommend.

THE TREATY OF WAITANGI (The Text in English)

HER MAJESTY VICTORIA Queen of the United Kingdom of Great Britain and Ireland regarding with Her Royal Favour the Native Chiefs and Tribes of New Zealand and anxious to protect their just Rights and Property and to secure to them the enjoyment of Peace and Good Order has deemed it necessary in consequence of the great number of Her Majesty's Subjects who have already settled in New Zealand and the rapid extension of Emigration both from Europe and Australia which is still in progress to constitute and appoint a functionary properly authorised to treat with the Aborigines of New Zealand for the recognition of Her Majesty's Sovereign authority over the whole or any part of those islands Her Majesty therefore being desirous to establish a settled form of Civil Government with a view to avert the evil consequences which must result from the absence of the necessary Laws and Institutions alike to the native population and to Her subjects has been graciously pleased to empower and to authorise me William Hobson a Captain in Her Majesty's Royal Navy Consul and Lieutenant Governor of such part of New Zealand as may be or hereafter shall be ceded to Her Majesty to invite the confederated and independent Chiefs of New Zealand to concur in the following Articles and Conditions.

ARTICLE THE FIRST

The Chiefs of the Confederation of the United Tribes of New Zealand and the separate and independent Chiefs who have not become members of the Confederation cede to Her Majesty the Queen of England absolutely and without reservation all the rights and powers of Sovereignty which the said Confederation or Individual Chiefs respectively exercise or possess, or may be supposed to exercise or to possess over their respective Territories as the sole Sovereigns thereof.

ARTICLE THE SECOND

Her Majesty the Queen of England confirms and guarantees to the Chiefs and Tribes of New Zealand and to the respective families and individuals thereof the full exclusive and undisturbed possession of their Lands and Estates Forests Fisheries and other properties which they may collectively or individually possess so long as it is their wish and desire to retain the same in their possession; but the Chiefs of the United Tribes and the individual Chiefs yield to Her Majesty the exclusive right of Preemption over such lands as the proprietors thereof maybe disposed to alienate at such prices as may be agreed upon between the respective Proprietors and persons appointed by Her Majesty to treat with them in that behalf.

ARTICLE THE THIRD

In consideration thereof Her Majesty Queen of England extends to the Natives of New Zealand Her Royal protection and imparts to them all the Rights and Privileges of British Subjects.

W. HOBSON Lieutenant Governor.

Now therefore We the Chiefs of the Confederation of the United Tribes of New Zealand being assembled in Congress at Victoria in Waitangi and We the Separate and independent Chiefs of New Zealand claiming authority over the Tribes and Territories which are specified after our respective names, having been made fully to understand the Provisions of the foregoing Treaty, accept and enter into the same in the full spirit and meaning thereof: in witness of which we have attached our signatures and marks at the places and the dates respectively specified.

Done at Waitangi this Sixth day of February in the year of Our Lord One thousand eight hundred and forty.

[Here follow signatures, dates etc]

(From the Treaty of Waitangi Act 1975)

A statutory exception to indefeasibility

It is well-established that one of the many exceptions or limitations to the principle of indefeasibility (including equitable interests, personal rights and so) is that of a statutory exception. The State enterprise (or its transferee) acquires a parcel which although a full-fee interest is liable to resumption in the circumstances provided for in the statute. The legislation expressly requires a certificate of title to be specifically endorsed as follows (State-Owned Enterprises Act 1986 s 27A):

Subject to s 27B of the State-Owned Enterprises Act 1986 (which provides for the resumption of land on the recommendation of the Waitangi Tribunal and which does not provide for third parties such as the owner of the land, to be heard in relation to the making of any such recommendation).

However there are some instances where land subject to resumption does not in fact have a s27A memorial. Mostly these are titles issued to or transferred to State enterprises in the first years after the enactment of the State-Owned Enterprises Act when the process was still new and when systems of asset transfer were still being developed. It is clear law that it is not necessary that a statutory exception to indefeasibility be effected by a notification on the register. Accordingly it would be wise for all titles deriving from a asset transfer from the Crown to a State enterprise - whether there is a 27A memorial or not - be checked carefully to see whether the transfer was made under the State-Owned Enterprises Act. If so, then the resumption provisions will be operative..

It is interesting that the certificate of title expressly provides notice that the affected landowner has no right to be heard when the Tribunal is considering whether or not to order resumption. This is obviously intended to serve as a fair warning to any transferee that the parcel is subject to a Crown duty of resumption following a directive from the Waitangi Tribunal. Such a notification could possibly severely affect the value of the parcel. Assessing this is not easy, however. The Tribunal has not to date exercised its binding power to order a resumption, and is probably waiting to select the appropriate circumstance very carefully. It is likely that a reckless over-use by the Tribunal of its jurisdiction to order resumptions might well lead to the provisions being modified or even abolished.

Another uncertainty relates to regional variations. It is probable that resumptions are more likely in some regions than in others. In areas such as the Waikato, where a large-scale settlement has recently been negotiated between the Crown and representatives of the Tainui federation, it would seem that it is less likely that the Tribunal would be willing to order resumptions outside the parameters of an existing comprehensive settlement. In areas such as Northland, however, where there are many claims and a number of tribes, and no general settlement likely in the foreseeable future, the risk of a resumption is correspondingly greater. All resumptions are deemed to be made under the Public Works Act 1981, and the provisions of the Public Works Act, including the assessment of compensation to the affected landowner, will apply. It may however not be an easy matter to determine the market value of a parcel liable to a right of resumption for the purposes of compensating an affected landowner.

Perfecting the incomplete grant

The Crown's right to resume can also be usefully thought of as a reservation or limitation in a Crown grant. In this sense it is rather similar to a reservation by the Crown of minerals and rights of access under the Crown Minerals Act or of marginal strips under the Conservation Act. There is, however, a difference. A Crown reservation of minerals will run with the land permanently. Short of attempting to persuade the Crown to sell the minerals, there is nothing the affected landowner can do to fully perfect the title. However, the Treaty of Waitangi (State Enterprises) Act does in fact permit the affected landowner to apply to have the right of resumption removed from the title. The 1988 legislation gave to the Waitangi Tribunal a further power (Treaty of Waitangi Act s 8D) to issue a binding recommendation to the Minister of Survey and Land Information that the land is no longer liable to resumption. An affected landowner can make an application seeking the cancellation of the resumption at any time. Such applications must be publicly notified and there are special provisions designed to ensure that affected Maori claimants are aware of the application. Following a recommendation from the Tribunal the District Land Registrar is required to take all steps necessary to cancel the memorial of resumption on the title.

The landowner's right to have the Crown's right of resumption removed is a useful safeguard. However it does impose the costs and burden of making such an application on the State enterprise or its transferee. There is no "sunset clause" in the legislation automatically cancelling the right of resumption after the elapse of a suitable period - say ten years. Presumably the government felt that such a clause would violate the spirit of the agreements it entered into with Maori following the 1987 decision of the Court of Appeal. The resumption provisions have, however, now been in existence since 1988. It could be argued that a ten-year sunset clause to be enacted at the present time should allow affected Maori claimants more than enough time to lodge claims affecting the relevant parcels.

Summary and conclusions

In general, the basic principle still remains that in most situations non-compliance by the Crown with its Treaty of Waitangi obligations will not affect private titles. However, as described above, there is now in existence a special group of private titles which are liable to resumption following a finding of the Waitangi Tribunal. Oddly, perhaps, direct purchases from the Crown at the present time are not affected by any kind of resumption process - the latter applies only to land transferred to and from State Enterprises and some other Crown agencies. Sometimes, of course, there may be a risk of Maori protest or legal action in the case of direct purchases from the Crown, but this will vary according to circumstances. It would probably be advisable for all purchasers of land from the Crown to investigate whether there are any concerns or grievances by local Maori affecting it, and whether the land has any particular value or significance to local Maori.

Specifically in relation to titles affected by the resumption provisions of the Treaty of Waitangi State Enterprises Act, there will always be a risk of its resumption at some future time following a ruling from the Waitangi Tribunal. One option for a purchaser would be to insist that the Crown take steps to have the memorial removed prior to purchase. In any event, any purchaser of Crown or State-Owned Enterprise land would be well advised to make appropriate enquiries as to the position and status of Maori claims affecting the land.

Legal Decisions

Lease rental review - Restrictions on use in lease - Assessment of rental where restrictions on use are contained in lease Post-review evidence Effect on rent review clause on valuation Whether an allowance should be made for management fee and head lessee's margin - Arbitration Act 1908; Judicature Act 1908, s 26M.

IN THE HIGH COURT OF NEW ZEALAND CHRISTCHURCH REGISTRY

M 371/91

UNDER The Arbitration Act 1908 and its Amendments

BETWEEN GARY ROBERT FAIL of Ashburton, Solicitor and JANET ALICE WALKER of Ashburton, Married Woman Plaintiffs

AND BURNETT TRANSPORT LIMITED a duly incorporated company having its registered office at Auckland Defendant

Hearing: 20th, 2st July and 27th August, 1993.

Counsel: D I Jones for the Plaintiff
Mr Brodie for the Defendant

Date of Judgement: 24 September 1993

Award and Reasons for Award of Master Hansen

The parties, having commenced High Court proceedings, consented to my being appointed as an arbitrator pursuant to s26(m) of the Judicature Act 1908.

The dispute between the parties relates to the rental of commercial premises situated in Ashburton.

The relevant Deed of Lease was dated the 15th February, 1985, and was for a term of 12 years from that date, With three rights of renewal for a term of 6 years. That gave a total term of 30 years available to the defendant. The initial rental was \$42,000 per annum.

Clause 1.19 of the lease provided for rental reviews every three years, and it is the reviews of rental for two periods that have led to this arbitration. The parties have consented to me fixing rent for the three year period commencing the 15th February, 1988, and the three year period commencing on the 15th February, 1991. There was an earlier arbitration relating to the

first period, but this was set aside by Holland J. (see *Burnett Transport Limited v Davidson* [1991] 1 NZLR 121.)

This arbitration is not so much about experts on both sides being unable to agree, but a fundamental difference of approach in the assessment of rental. Mr McLeod, who carried out the valuations for the plaintiffs approached the matter by taking comparative rents from what he considered to be similar, or comparable, situations. Mr Aubrey, the valuer retained by the defendant, took what is sometimes described as the "subjective" approach, and took into account the financial circumstances of a subtenant of a major part of the property in question.

The Lease

The relevant terms of the lease are as follows:

1. For a term of 12 years from the 15th February, 1985.
2. Clause 1.04. This clause sets out the permitted use and provides that the lessee shall not (without the previous written consent of the lessor) use the demise premises or any part of thereof other than for the use as a garage, motor vehicle repair workshop, new and used vehicles sales centre, and fuel storage and sales centre.
3. Clause 1.17(3) provides the sub-lease of the premises to a company known as Autolines (Ashburton) Limited, a subsidiary company of the tenant, shall not be a breach of the prohibition on assignment.
4. Clause 1.18 contains the following positive obligation:
"The lessee shall retain and maintain the business presently carried on at the demised premises, including that business of motor vehicle dealers, liquid petroleum gas merchants, fuel and oil resalers, and shall not do any act or omission of a wasting or reversionary nature that will cause or be likely to cause the demised premises to be rendered unfit for the purpose of the business for which the premises are presently used."

5. The clause dealing with the rent review, with which we are concerned, is clause 1.19, which reads: "1.19 The rental payable hereunder shall be reviewed once every three years during the term of the lease to such rental as shall be mutually agreed upon between the lessor and lessee and failing such agreement aforesaid then at a rental to be determined by arbitration in accordance with the provisions contained herein PROVIDED HOWEVER that the rental as determined shall not be less than the rental payable in respect of the preceding three year period."

It can be seen that the clause contains a normal ratchet clause.

6. Clause 2.02 of the standard lease form document is deleted, which means there is no obligation on the landlord to maintain the exterior of the building, and all other expenses associated with the building are to the tenant's account. The tenant is, therefore, liable for exterior maintenance.
7. Clause 2.04 reads:
"If the tenant at any time requests the consent of the landlord pursuant to any clause in this lease which provides for consent by the landlord, then the landlord shall not unreasonably withhold that consent."
8. The sub-lease to Spiers Motor Group Limited for 9 years 6 months commences on the 15th July 1987, which, therefore, ties it in with the period of the head lease. It is limited to occupying the premises as a "garage, motor repair workshop, new and used vehicles sales centre and fuel storage and sales depot." It will be seen that this closely follows clause 1.18 of the head lease.

Premises

The premises are situated at the southern end of the main street of Ashburton. They are situated in East Street between Dobson and South Streets.

There are essentially three separate parts of the property overall. The major part comprises a motor garage and service station, which is sub-leased and occupied by Spiers Motor Group Limited. That also

includes the car yard fronting Dobson Street. on the East Street frontage on the southern side is a smaller building, which is also sub-leased. At the rear of each, with access from both side streets is a sizeable industrial type building used by Burnett Transport as a freight depot.

The property sub-leased to Spiers Motor Group consists of a main workshop, containing a lettable area of 576m², including office areas with a mezzanine floor above of 151m². It is built on a concrete foundation with a concrete floor and concrete block walls. A portion of the walls are novalite. on a street frontage is a large door opening for vehicular access. There are steel roof trusses and a corrugated iron roof. The car showroom, office and service station contains a lettable area of approximately 541m², built on a concrete foundation and floor, internal back and side walls being common walls, and plate glass windows around the majority of the showroom frontage. on the East Street frontage is a car showroom. Two offices, a staff social room and toilets face out to Dobson Street with outlook over the car sale yard. The area behind the showroom is divided into two parts stores, with a mezzanine floor above of 65m². The petrol sales area on Dobson and East Street corners has concrete paving and a canopy, and a small Caltex Star Shop. The car sales yard fronting Dobson Street contains an area of approximately 325m², being hot mix with a low concrete block fence along the street frontage.

The building on the southern boundary was an auto electrical workshop, but is now occupied by a furniture restorer. It has a lettable area of some 308m². It has a concrete foundation and floor slab, with the back and south walls being concrete block, and the northern wall being common to the main workshop. The frontage is of glass to the showroom area, with the balance being sliding doors. The interior is divided into three equal parts, two being workshops, and the balance showroom and offices. There is an alley at the rear for storage.

The freight depot is a drive through building, and set back approximately 20 metres from Dobson Street. It extends along the eastern boundary to exit on South Street. The lettable area is 1,301 m². The floor is a concrete slab. Part of the exterior walls are tilt concrete slab to approximately 2 metres high. The balance

of height being corrugated iron or part weatherboard and part hardiflex walls. The western wall adjoining the East Street frontage buildings is for the majority of its length a common wall. The roofing is corrugated iron over trusses being of railway iron construction for approximately two thirds, with the balance being wooden trusses.

Relevant History of the Site and Leasing Arrangements

The site was purchased by the plaintiffs from the defendant in February of 1985. At the same time, the property was leased back to the defendant in terms outlined above. Clause 1.17 of the lease was the standard prohibition against assignment, sub-letting or parting with possession without consent. However, an additional sub-clause (3) was introduced to provide that the sub-lease of the premises to Autoline (Ashburton) Limited, a subsidiary company of the defendant, would not be a breach of the provisions of that clause. Whether or not there was a formal sub-lease is unclear, and, certainly, one has not been produced in the course of the arbitration.

By way of a sub-lease dated the 2nd October, 1987, Burnetts sub-leased a large part of the area, being the service station, showrooms, repair garage, offices and car yard to Spiers Motor Group Limited. That was to be for a term of 9 years and six months at an initial annual rental of \$26,398.68, inclusive of G.S.T., until the 15th February, 1988. Thereafter the rental was set at 57.14% of the rental paid by Burnetts under its lease of the full site, plus G.S.T. On the 28th November, 1986, Burnetts sub-leased the southern building to Naysmiths Automotive Services Limited at an annual rental of \$6000. It was for a term of three years from the 7th July, 1986. There was a formal sub-lease. It is unclear from the evidence before the Court if there is a later Deed of Sub-lease relating to the premises which were at some stage occupied by Ashton Furniture Restorers, and now by a motor cycle shop. It is also unclear when these later sub-tenancies commenced. Again, it is unclear what rent they are paying pursuant to any sub-lease.

Valuation Evidence

The valuer for the plaintiffs was Mr CM McLeod of Ashburton, and for the defendant Mr RA Aubrey of Christchurch. Period Commencing 15th February 1988 In the report dated the 28th August, 1991,

Mr McLeod values the rental of the entire premises for the period commencing on the 15th March, 1988. He sets out the particulars of the lease, and the general matters referred to above. He also gives reference to zoning and site, which both parties are in agreement in relation to.

In his remarks he states that this was a first rent review. He states that the property was purchased at a price of \$350,000, and leased back to the vendors at 12% purchase price. He states he considers that was below the market rental at that time, and a return of 14% would have been more realistic. He claims this was made known to the purchasers in a valuation report relating to the sale and lease back. They obviously ignored this advice. He goes on to say that the rental he sets is on a comparison basis with other rents paid in the Ashburton area. He accepts that the lessors are subleasing the majority of the area, which has developed into an industrial and trades workshop type complex, accommodating complimentary businesses. He describes the site as a top location. He considers the rental set is more than fair, and allow's for a deduction for volume of 10%. He then refers at appendix 6 to the comparable rentals relied on. He states the majority of the comparable rentals are in close proximity to the subject premises, but in less favourable locations. Two of the comparables are shown at dates later than the lease review date but show market evidence, the first being Helmac to Goodyear Tyres, which was a new lease, and which he says must be evidence of economic trends and levels the market is prepared to pay. There is also a lease of Nordqvist to GUS, a basic warehouse. it is unnecessary to break down the rental calculation he reaches, but overall on, the basis of those comparisons, he states a fair rental to be \$96,220.80. It is, of course, of relevance to break down the three areas of the premises. As follows, he calculates:

Truck Shed	\$28,000.00
Auto Electrical Workshop and Paved Yard Building	\$10,943.00
Spiers Motors Premises & Car Yard	<u>\$67,969.00</u>
	\$106,912.00

From that he deducts a 10% on the comparable market rental, being an allowance for volume.

The only reference to general economic trends and matters must be to the new rentals in the remarks. There is certainly no

evidence of any consideration being given to the limitations contained in the lease, the requirements that the lessee is responsible for exterior maintenance, or the profitability, or otherwise, of the businesses conducted on site. There is certainly no calculation involving the profitability of Spiers Motor Group, or of a reasonable tenant in their position.

In essence, one could say that Mr McLeod has approached the matter from an open market rental perspective. Indeed, in cross examination, he conceded he ignored what could be called the "subjective" factors of profitability etc. At page 14, line 6 of the evidence appears the following question and answer:

Q. Going back to Aubrey's approach because of the nature of premises and restrictions on use if the Master finds these premises can only be used for a service station workshop and dealership it would be appropriate in determining fair rental to try and ascertain what a prudent hypothetical tenant might pay on the open market. Do you agree?

A. Yes.

Mr Aubrey, on behalf of the defendants, sets out various principles which he says are applicable. He then proceeds to calculate the rental on the same open market basis as Mr McLeod. His figures are not greatly removed from Mr McLeod, and the method used to reach them is similar. It is done by considering comparisons, and is done on the basis of normal leases that he believes are contained in the leases of buildings providing the sources of rental comparisons. The conclusion he reaches on that basis is as follows:

Spiers Motors Premises	\$61,353.00
Naysmiths Automotive portion	8,610.00
Freight Depot	<u>\$21,312.00</u>
	\$91,275.00

However, he considers that even on such a comparative open market basis, certain allowances should be made. These relate to the external maintenance liability on the lessee, which he says is unusual, a management figure, and a head lessee's margin. On the basis of that, he calculates rents as follows:

Rental calculated as above	\$91,275.00
Less allowance for external maintenance liability on the lessee	\$4,600.00

Management	\$69,963 at 2.5%	\$1,749.00
Head Lessee's margin	\$69,963pa at 7.5%	\$5,247.00
		\$11,596.00
TOTAL		\$79,679.00

However, Mr Aubrey then goes on to consider subjective considerations, which based on the principles he refers to in his report he considers must properly be taken into account in any rental assessment of these premises. There is no change to the Naysmiths Automotive portion, but the rental for the Burnett freight store is increased, because he considers the property would be worth more to Burnett Transport than to a hypothetical lessee assumed in the objective rental assessment. That is increased to \$25,574.00. A relatively insignificant sum. The major difference comes in his consideration of the rental of the Spiers Motor Group portion of the premises on a subjective basis. He considered on the principles he mentioned earlier in his report that such an approach was necessary. Those principles will be considered in due course.

His subjective assessment took into account the trading position for the year ended the 31 st March, 1988. On that basis, he assessed affordable rentals. His recast figures were:

Sales	\$3,480,867
Gross profit 4.4%	\$175,608
Sundry Income	<u>\$2,902</u>
	\$178,510
Running expenses (before interest, rent and plant and equipment depreciation)	\$80,290
Cashflow	\$98,220
Depreciation plant and equipment \$50,000 @ 15%	\$7,500
	\$90,720
Stock obsolescence-reduction in value say	\$25,000
	\$65,720

Return on funds	
- plant and equipment	\$50,000
- stock (5.5wks purchases)	\$350,000
	<u>\$400,000 @16% 64,000</u>

Available for rental and proprietorship	<u>\$1,720</u>
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He considered that this exercise demonstrated that even disregarding the

interest burden disclosed by the accounts, the business afforded minimum return to the proprietors and no increase in the contract rental of \$24,000, exclusive of G.S.T. could be justified. He states the affordable rental conclusion of \$24,000 has to be considered in relation to the \$61,353 he arrived from a purely objective approach. He concludes:

"The blind application of so-called market rental rates without knowledge or consideration of the trading ability of a lessee locked into a specialist type of use can be grossly unfair to that lessee." Mr Aubrey concluded that in taking this subjective approach, maximum rental should be calculated as follows:

Spiers Motor Group portion	\$24,000
Naysmiths Automotive portion	\$8,610
Freight depot	<u>\$25,574</u>
	\$58,184pa

Less allowance for external maintenance burden on lessee	\$4,600
Less management	\$ 815
\$32,610 @ 2.5%	\$ 815
Head lessee's margin	\$2,446
\$32,610 @ 7.5%	\$7,861
	<u>\$50,323pa</u>

Period Commencing 15th February 1991.

Both valuers adopted the same approach for this period. It is unnecessary to detail that evidence. Mr McLeod in his remarks stated that rentals over the last three years have remained static for least favourable locations, or have shown increases in the more favoured high traffic flow areas fronting the main street. He set out recent rent reviews in appendix 6 and maintained that well located real estate has a rental growth, and uses as an example the 10% increase for a two year term for the Shell Oil West Street complex and a 39.5% increase for Wrightsons over a three year period. He continues that the subject property is in a most desirable location for a service station/garage type business, being on a length of State Highway 1, where all major roads merge for the bridge crossing, the only one in the area over the Ashburton River. He considered the rental set is fair compared with other light industrial areas, and that the buildings appear to be fully utilised. On that basis he concludes a fair rental is \$115,671, less the

10% on comparable market rentals for a volume allowance, giving a rental of \$104,104. The break down of this is as follows:	\$50,000 @ 15%	\$7,500
		\$81,734
Truck Shed	\$30800,	
Auto Electrical Workshop & Paved Yard	\$10943,	
Spiers Motors Buildings	\$73,928	
	<u>\$115,671</u>	
Less 10%	<u>\$11,567</u>	
	\$104,104	

Mr Aubrey approached his valuation for this period on the same basis as his earlier report. Firstly, he considered the objective approach, and considered there was no rental evidence to justify an increase over the earlier period. He stated he had a general impression, supported by local opinion, that over the three year period from 1988 the industrial and retail sectors in Ashburton declined, in line with those in other regions in New Zealand, due to the worsening economic situation. There was no direct evidence of that. However, he concluded that on an objective basis the rental remained as at his earlier assessment of \$79,679. He took into account the increased petrol sales for the 1991 year that were up 4.13%, and said at first sight this would indicate a justification for a higher valuation of the land. He said this has to be considered in relation to the downward trend since the 1989/90 year. He said in 1990/91 sales were down 13.9%, and for the first seven months of 1991/92 down 24.8%. He considered that decline unavoidable due to such factors as the realignment of the West Street/East Street link, stiffer competition, and less spending powers. Overall, he was satisfied with his objective assessment being the upper limit.

He then did a similar subjective exercise in relation to the subjective considerations. His recast figures were, (based on accounts to 31/3/91):

Sales	\$4,052,531
Gross profit 4.7%	\$195,987
Sundry income	<u>\$11,120</u>
	\$207,107
Running expenses (before interest, rent and plant and equipment depreciation and directors fees)	\$117,873
Cashflow	\$89,234
Depreciation plant and equipment	

Return on funds		
- plant and equipment	\$50,000	
- stock (4.6wks purchases)	\$340,000	
	\$390,000 @15%	
		,\$58500
Available for rental and proprietorship		\$23,234

He again concludes that the exercise demonstrates that even disregarding interest, the business afforded minimum reward to proprietors, and that no increase in initial contract rental of \$24,000 could be justified. In conclusion, he reached the same figure.

General Valuation Evidence

The only additional evidence outside the reports was a list of new businesses prepared by Mr McLeod detailing businesses that have opened in Ashburton recently. It was suggested that this indicated and supported an improving trend. However, such a list is of little assistance unless it is accompanied by a list of businesses that closed during the same period. If this evidence was to suggest an overall economic improvement during the relevant periods, either nationally or locally, in my view it falls well short of establishing that.

Accounting Evidence

This evidence related only to the operation of the service station, garage and car sales part of the premises by Spiers Motor Group, who, as noted earlier, are sub-tenants of that portion from Burnetts. .

The accounting witness for the plaintiff was Mr Owens, a chartered accountant of Christchurch. For the defendant it was Mr Myers, who is also a one third shareholder in Spiers Motors Limited.

Mr Owens' evidence could be said to fall into three broad categories. The first is a description of the premises, and of the substantial competition in Ashburton, and the need for businesses to both open longer hours and to modernise. It seems to be common ground from all concerned that there is a need for the premises to be modernised to compete with new, or upgraded, competition in the general area. The second thrust of Mr Owens' evidence was by way of a comparison of Spiers Motors' accounts, with an extract from the New Zealand Society of Accountants'

Business Performance Comparison. He submitted this was a guide to the results of similar firms throughout New Zealand, and indicated that the rental level paid by Spiers was very low compared with other businesses operating in a similar sector. He also referred to Mr McLeod's exhibit showing a comparison for three other service stations and workshops in Ashburton. He pointed out that the total area of Spiers Motors was considerably larger than all three, with larger workshop, store, showroom and office space. He pointed to the fact that the rent of the two Shell sites was considerably higher than Spiers Motors, while that of an older Mobil site was similar, but much smaller. I would have thought size in this context would only be relevant if it led to increased work or profit.

The third thrust of his evidence related to the accounts and the treatment of them by Mr Aubrey and Mr Myers. He questioned the figures used by Mr Aubrey for the period ended 31st March, 1988, and also set out the profit earned by Spiers before taking into account Mr Spier's and his wife's remuneration and directors' fees. He considered the profits of 1990 and 1991 were significant. He also noted that although losses were recorded in 1992 and 1993, those losses were after directors' fees and salaries. However, the adding back in the Spiers' salaries ignores the fact that if Mr & Mrs Spiers did not fulfil their functions in the business, someone would have to. There is no evidence to support a suggestion their replacements could be employed more cheaply.

However, in cross examination Mr Owens conceded that the business, in all the circumstances, seemed to be run as well as it could be by Mr Spiers and accepted that he was already working very long hours. However, it was his view that the shareholders' remuneration had been taken each year from the business, while the rent had remained frozen, which means the plaintiffs, as landlord, had been asked to suffer the effects of the downturn in business in 1992 and 1993, but have also received no additional contribution from improved profits in 1990 and 1991. However, in relation to the Spiers' wages the comments above apply.

Mr Owens was concerned that the stock write down was taken twice. He accepted it was a proper deduction but pointed to note 2 to the 1988 account that states:

"Stock on hand - has been allowed at cost price F.I.F.O. basis after making allowance for deterioration and obsolescence."

He queried Mr Aubrey deducting the amount of \$25,832, which appears to deduct it for a second time.

Mr Myers' evidence related the difficulties confronting the business in a small rural town over the relevant period. As well as highlighting the difficulties suffered by Spiers Motors Group and its poor results, he also gave evidence that its predecessor, the subsidiary of the defendant, incurred a loss of \$104,938 for the year to the 31st March, 1986, and approximately \$60,621 for the year to the 31st March, 1987. He detailed factors that had adversely affected this site, apart from the general downturn in activity in the rural economy. He said this downturn affected new car sales in mid Canterbury, not only for the franchise of Mitsubishi, but for all other makes as well. He said that despite this the company had won national customer awards from Mitsubishi Motors in 1989 and 1990.

He highlighted the serious affect on the business by work carried out by Transit New Zealand when there was a major realignment of the main road through Ashburton. Previously, it all travelled down East Street, but because of the work had been diverted along West Street on the other side of the railway line. There was a substantial realignment in the vicinity of the Spiers Garage, and as a result traffic is directed round two sweeping curves before rejoining the Main South Road in line with the Ashburton River bridge. It was his opinion that the garage, whilst still on the main road, was now in an awkward position on the outside of a sweeping curve. He said the construction work depressed sales of petrol and other products by approximately 20% over a period of at least 6 months. Since then sales have fallen substantially, and there have been no signs of recovering to their original level. It was his opinion that the fall off in literage resulting from the road realignment is permanent.

He also referred to the new Shell Service Station close at hand in West Street. It has more extensive parking available; it was a modern high canopy premises; and was serious competition for Spiers.

He also said that the present buildings do not lend themselves particularly to the operation of a successful business of this nature. He says they were somewhat

disorganised and not well designed. of particular concern was the small forecourt to the service station, which was not particularly visible and well sited for access purposes.

It was his view that Mr Spiers, who was experienced in the industry with a good reputation, ran the business as well as could be expected. They also received good support from Mitsubishi corporation and Caltex Oil.

Effectively, this last evidence was in line with the cross examination of Mr Owens, who conceded that the business was well run, and in its present format no great improvements in income could be expected.

Mr Myers also explained the deduction of stock obsolescence figures. Given the note to the 1988 accounts I cannot accept his explanation as satisfactory. The accounts clearly state an allowance was made in the accounts and I do not accept the explanation. However, even allowing for that figure, the profit was not great.

It was also clear from Mr Myers' evidence that steps had been taken to investigate other possible franchises and other steps to improve profitability. In his view all that could possibly be done had been. The only possible criticism that could be levelled at the operation was the decision not to deal in Japanese imports. But although Mr Jones raised the matter there was no evidence from Mr Owens, or anyone else, that it would improve profitability.

Other Relevant Evidence

Mr McLachlan, the South Island Marketing Manager for Caltex, also gave evidence. He was responsible for approximately 100 service stations south of a line between Kaikoura and Westport.

He first of all detailed trends in the motor spirits retailing industry since 1987. The principal reason for the trends was the deregulation of a strictly licensed industry. He said that the sale of fuel and oil has become very much more competitive, which has been characterised by declining retail profit margins, and increasing competition for sales. He said this has caused retailers who deal with the problems by:

- a. Increasing sales volumes, particularly by reducing prices.
- b. Improving premises by increasing their size,, improving layout and increasing the number of lanes and pumps.

c. Greatly enhancing the image and appearance of service station premises, both in the visual appeal and in the service offered.

d. Expanding considerably the range of formerly nonrelated product for retail sales.

He said this has manifested itself in the emergence of the newer style service stations, which have become major retail outlets. They are specialised, typically costing between \$.75 to \$1.5 million, and selling as well as the normal products at a service station a wide range of associated grocery, hardware and other items. Many such stations offer car wash, LPG and similar activities.

He also said that petroleum prices are very market sensitive, and that modern service stations use petrol sales as a means of attracting customers to the premises. He said that petrol sales contribute substantially less to the industry's profits than previously.

He was familiar with the Spiers Motors outlet, and considered that it was a medium sized outlet operating from basic premises, with significant drawbacks. He said the premises were not particularly suitable, with poor access for approaching motorists and the piecemeal construction over the years does not lend itself to a desirable service station. In his view, modern premises required an appealing street visibility, useful visible shop retailing as an adjunct, and a motor vehicle dealership with a good street frontage. It was his view that Spiers had none of those advantages. He said that literage had remained constant from 1987 to the present, with a surge in late 1988, early 1990. It was his view that this was related to a successful nation wide promotion organised by Caltex. He said apart from that the sales had been static, or declining, in terms of litres sold, but more significantly retail margins on those sales declined significantly between 1987 and 1991.

He also pointed to adverse effects of this service station by the major realignment of main through traffic mentioned by Mr Myers. He contrasted these premises with the new Shell Station in West Street, and pointed to reasons why it was more likely to attract custom than the Spiers Group. He also highlighted problems with the underground tanks at this particular site. He said this was going to involve substantial expense at some stage, and on its present

turnover, and without security of tenure, the service station did not warrant that expenditure. He said the turnover for Spiers could be improved by refurbishing and redesigning the buildings and improving the street appeal and the general layout, but that was inhibited by the position with respect to the tanks and the short tenure remaining.

Whilst it is clear the sub-tenant enjoys the same rights of renewal as the head lessee, Mr McLachlan was of the view that the security of tenure related to the viability of the business, and if the rent was too high so the business could not continue, he did not consider there would be any security of tenure from the point of view of Caltex. It was also clear that if at all possible, Caltex was interested in assisting Spiers.

He referred to Mr McLeod's evidence, and said while the site may have attractions for the reasons given by Mr McLeod, in its present form, the garage, service station is ill equipped to capitalise on the advantages. He said the building was unsuitable in terms of design and layout, with an unappealing and unattractive street frontage. There were only two lanes of pumps, and street access was poor. North bound traffic is faced with a left hand bend and a highly visible service station immediately ahead, and to turn into Spiers would present difficulties. He also pointed out that south bound traffic is also confronted with an awkward access across a side street, and that traffic flow into and out of the service station was not particularly convenient. He said the street visibility was poor, and there were no adequate facilities for ancillary retailing. He said space available as a shop, as presently set out, is incorrectly located and lacks profile and visibility. He also gave evidence that on present literage, longer hours were not viable because the business could not afford the necessary overtime wages.

It was his view that in its present form, the service station will never generate more sales than the present level. He accepted the site had potential, but that would require major capital expenditure on the site, requiring complete demolition and rebuilding.

Overview

Overall, the plaintiff's stance seems to be that there is no evidence to suggest that Burnett Transport cannot afford a rental increase based on comparative values. Even if one has to consider the financial viability

of this site with its restricted use, the evidence is such that clearly funds are available for a substantial rent increase. On the other hand, the defendants' position is that because of the reservation of use and the type of rent review clause included in this lease it is essential to take into account the financial factors relating to this site. Indeed, it was Mr Brodie's position that the profitability, or otherwise, of the business was an overriding factor, for, as he asked rhetorically, who would rent the premises if a loss was inevitable? It was also the defendants' position that this was strengthened by the fact that they had responsibility for exterior maintenance.

Legal Approach to Valuation

As was indicated earlier, the first arbitration for the period commencing 15th February, 1988 was set aside by Holland J. because of the arbitrator's failure to take into account general economic conditions and also the particular economic factors relating to the operate to a business on the site.

Restriction On Use

The first matter to address in this case is the lease contains a restriction on use. Indeed, this particular lease goes further, because clause 1.18 carries with it an obligation on the tenant to conduct a service station, car sales and associated businesses. The draftsman seems to have overlooked that this applies to only part of the site, but it is clear that the lease carries a positive obligation on the tenant to use the site in this manner. It is clear from decisions such as *Plinth v mot Hay & Anderson* [1979] 24 EG 1167, and *Burns Phillip Hardware Limited v Howard Chia* [1987] ANZ R 185, that restrictions on business use impact on rentals. That impact, of course, is for a lesser rental. In the *Plinth* case the possible relaxation of the user restriction was considered too intangible to be assessed. Where there is a user restriction the rent is obviously set lower. It is a factor that must be taken into account. Normally such user restrictions are subject to no change without the approval of the landlord, such approval not to be unreasonably withheld, and this is found in clause 1.04. In this particular case, however, a specific clause has been added to the printed form, placing an obligation upon the tenant to use the property in a certain way.

The positive obligation found in the additional clause 1.18, in my view, is clearly to supersede the provisions of clause 1.04. The fact that the draftsman overlooked the

fact that the restriction should clearly apply to only part of the site does not alter the situation. It would not allow the tenant to escape this obligation. In my view, clause 2.04 does not assist the landlord. It provides that if the tenant requests any consents of the landlord pursuant to any clause in the lease providing for the landlord's consent, such consent shall not be unreasonably withheld. It has no application to clause 1.18 because that clause does not provide for the landlord's consent.

Post Review Evidence

Mr Brodie submitted that it possible to take into post review evidence in establishing a valuation or rent as at a review date. This is of some importance in this particular case, because it is clear that as at the relevant review dates much of the financial information relied on by Mr Aubrey would not, or could not, have been available.

The decision relied on by Mr Brodie was *Segamma NZ v Penny Le Roy Limited* [1984] E.G. (Digest) 74. In that case Staughton J. held that an arbitrator was entitled to take into account post review comparative rentals. He pointed out that the weight to be attached to such evidence was dependent upon the lapse of time between the review date and the evidence. The longer the gap, the lesser the weight. It is to be noted that Staughton J. was considering a lease that required market rent to be set. The lease required rents for similar [rentals] to be considered. The case is not authority for any wider proposition. A similar point was considered by Judge Finlay QC in *Gaze v Holden* E.G. (Digest) 1013. The question in that case, however, was not the ability to refer to comparable rentals after the review date, but whether account should be taken of events which had happened at the date when the valuation was made, notwithstanding that the value had to be ascertained as at the earlier date, when an option was exercised. The Judge concluded that he could not. At page 1025 he said:

"I have come to the conclusion that "valuation in the usual way" means taking into account the events which have happened as at the date when the property falls to be valued in this case, February 8 1980 and taking into account not only the actualities at that date but the possibilities in relation to all the circumstances; and that the valuer has, as best he can, to form his own judgment

as to how these possibilities and the various prospects that are inherent in the then existing situation affect the value of the property as at that date; but that he is not entitled to take into account events which happened subsequently and which resolve how these various possibilities and prospects in fact turn out. To do so would be to introduce into the valuation a species of foreknowledge which would not be available to any willing buyer or willing seller entering into a contract as at the date upon which the property falls to be valued. The real exercise which the valuer is carrying out in making a valuation in accordance with the principles laid down by the testator in the first schedule of his will is the exercise of determining, applying to the problem all the skill and experience which he has, what a willing seller would be prepared to accept as a price and what a willing buyer would be prepared to pay. To endow either buyer or seller or both of them with foreknowledge of how events were going to turn out would make that exercise one that was entirely different in character to that which the testator has indicated as the appropriate method of valuation.

In reaching that conclusion I am fortified, on reconsidering the authorities to which I am referred, by the fact that in the very first of them (the *Bwllfa* case) it is made clear that the House of Lords was not dealing with the matter as a case of valuation but as a case of determination of compensation. I have come to the conclusion (fortified, as I say, in that way) that the *Bwllfa* principle does not apply to the valuation that has to be effected for the purposes of administering the testator's estate in relation to this option." (My emphasis) I consider this case dealing with willing buyer/willing seller has application here where I must consider hypothetical reasonable landlord/tenant.

In New Zealand Archer J. said in the *Poverty Bay Catchment Board v Forge* (The Valuer, Sept. 1956, p. 36):

"It is common ground that the market price of the land in the Gisborne district was rising at the specified date and it has continued to rise from that date until the present time. Valuers who are now required to value Mr Forge's land at the 22nd January, 1954, had the benefit of later information concerning this rising

trend in values, which was not available to buyers or sellers of land at the specified date. A valuer now valuing the property is entitled to have regard to all relevant facts within his knowledge, including information as to sales subsequent to the specified date for valuation, but should use that information only for the purposes of determining the market value of the land at that date. It follows though a valuer is entitled to make use of facts disclosed subsequent sales, he is not entitled to assume that such information was available to buyers and sellers at the specified date. "

Both these citations seem to me to be of relevance in the present case. No authority has been advanced for the proposition that financial information can be considered if it comes into existence after the review date. As I understand it, Mr Aubrey accepts that the rent should be assessed on the basis of hypothetical willing, but not anxious, landlord and tenant. That rent is to be assessed as at the review date. The factors that the reasonable landlord and tenant could take into account, in my view, could not include the certainty of future events. Such a reasonable tenant would no doubt take into account his estimate of future profitability. But in this case reference to the later accounts are as to the certainty of future events. As Judge Finlay said at page 82:

"To do so would be to introduce into the valuation a species of foreknowledge which would not be available to any willing buyer or willing seller entering into a contract as at the date on which the property falls to be valued. "

I do not consider the law goes as far as Mr Brodie submitted. In my view, the financial factors to be taken into account would be those available to the reasonable landlord and tenant as at the review date.

Accordingly, any post review evidence that may be taken into account must be in the limited fashion set out above.

Rent Review Clause and its Effect on Approach to Valuation

The next factor for consideration is the actual rent review clause here. It has been set out in full earlier, and, in my view, is indistinguishable from clauses considered in *Thomas Bates & Sons Limited v Wyndham's (Lingerie) Limited* [1981] 1 All ER 1077, [1981] 1 WLR 505, and *Mahoney v R.C. Dimock Ltd* [1990] 3

NZIR 114 (*Modick v Mahoney* [1992] 1 NZLR 150 CA.) In the *Thomas Bates* case the rent review provision was:

" at a rent to be agreed between the landlords and tenants, but in default of such agreement at a rent to be fixed by an arbitrator".

In *Modick v Mahoney* the relevant portion of the clause read:

The rental fixed at each review shall be such rental as that agreed upon by the landlord and tenant and if they cannot agree to be determined by arbitration in the manner herein provided, but not in any case to be a rental less than the rental chargeable immediately prior to such review.

In my view, there is no relevant distinction between the clause I am concerned with here and those considered in *Thomas Bates* and *Modick v Mahoney*. Such clauses are sometimes referred to as "subjective" because some cases suggest the rental must be set subjectively, determining what would be a fair rent for the parties to agree in all the circumstances. However, other cases have been somewhat critical of the use of the term "subjective".

In the *Thomas Bates* case, it was held that such a clause meant that the rent to be agreed under such a clause was to be the rent which it would be reasonable for the particular parties to agree, having regard to all the circumstances which were relevant to their negotiations for a new rent. It was not a rent to be assessed objectively on the basis of the market rent at which the premises might reasonably be expected to let.

In the *Mahoney* case, a clause almost identical with the present was considered by the Chief Justice. The head note records: "Held: 1. The rent review clause in the lease required a subjective approach in fixing the rent on review. The arbitrator should therefore have approached the arbitration by determining what would be a reasonable rent for the parties to agree to in all the circumstances taking into account all considerations existing at the review date pertinent to the demised premises and the relationship of landlord and tenant which would have affected the minds of reasonable persons in their position had they been negotiating the rent themselves. The profitability or otherwise of the business which the tenant

proposed to conduct on the premises could not be automatically and in all respects excluded. Excluded as a consideration, however, was the tenant's ability to pay or the landlord's need to receive some minimum figure to survive. Ability to pay (or survive) was to be assumed. The financial situation of the business of the tenant was relevant only in respect of the particular business carried on at the premises in question.

This decision was confirmed on appeal. In the Court of Appeal Cooke P. stated at page 155:

"A clause of the kind found in the present case, under which the inquiry is as to the rent that would be agreed between reasonable parties, embodies the same idea as and is indeed a manifestation of the familiar willing vendor-willing purchaser test.

The question is what figure would notionally be agreed upon by the parties, acting freely and adequately informed. Figures fixed by arbitration or rent reviews as between captive parties are not necessarily a reliable guide, since they do not represent the unfettered play of market forces, but rather the arbitrator's assessment (assuming that he has applied himself to the task correctly) of what market forces should produce. It is only a freely negotiated rent on a new letting that can confidently be taken to be truly comparable, provided of course that there are also sufficient similarities in site and otherwise."

As the Chief Justice said, in *Mahoney* at page 122:

It is now necessary to clear away matters not in contention, and to endeavour to refine the actual issue. The lessee does not contend that the evidence of the financial situation of the lessee is relevant, other than in respect to the viability of the business of the tenant carried on at the particular site, or what the tenant considers it worth to continue to conduct the business which it is present conducting from those particular premises. The emphasis is on the particular business, carried on at the premises in question. Thus the issue does not concern any question of the state of the country's economy as a whole. Nor does it relate to any downturn in the motor industry in general. These considerations would necessarily be in the mind of any parties negotiating a review of rent, and would

properly be taken into account in assessing the rental on an open market or objective basis. The same applies to any suggestion of a localised state of business depression. Likewise, if the tenant wished to suggest that the particular location had become less attractive, for example by reason of a street closure, or the institution of a one way traffic system. Needless to say evidence pointing to opposite trends in any of the respects mentioned would equally be relevant."

Further, in the judgment of the President in the *Mahoney* case, at page 152, he stated:

In Jeffrey's v R. C. Dimock Ltd [1987] 1 NZLR 419 on an earlier award in the form of a special case stated, Barker J held that the rent review clause required what in the relevant line of authorities is sometimes called a "subjective" assessment by the arbitrator, by which is meant an assessment taking into account all the considerations that would have affected the minds of the parties if they had been negotiating the rent themselves. The authorities indicate that in some cases a figure so assessed will not be the same as a market rent. That, however, is not necessarily the case; I shall return to this point."

He continued at page 153:

"The essence of the judgment of the Chief Justice was that the so-called subjective approach was appropriate and that the profitability or unprofitability of the tenant's business would be relevant, if reasonable persons in the shoes of the parties would have taken it into account. It was for the arbitrator to determine whether or not they would have done so and, if yes, with what effect on the agreed rent. Accordingly the Chief Justice answered the question as follows at p. 123:

- (i) The arbitrator should have approached the arbitration by determining what would be a reasonable rent for the parties to agree to in all the circumstances, taking into account all considerations existing at the review date pertinent to the demised premises and the relationship of landlord and tenant, that would have affected the minds of reasonable persons in their position had they been negotiating the rent themselves.
- (ii) To the extent that the arbitrator considers appropriate, having regard to the answer under (i) and the evidence before him."

And further at page 154 and 155:

"Although the expressions "objective" and "subjective" have occasionally been used in contrasting two kinds of rent review clause (see for example *Ponsford v HMS Aerosols Ltd* [1979] AC 63, 85 per Lord Keith; *Lear v Blizzard* [1983] 3 All ER 662, 668 per Tudor Evans J), I think with respect that they are not truly helpful. The wider approach, whereby the arbitrator has the task of determining what reasonable parties would have agreed, itself poses an objective test of reasonableness. The real question in such cases as *Ponsford* has been whether the review clause is worded in such a way that, even if reasonable parties would have agreed on a deduction to reflect tenant's improvements, the arbitrator cannot take that into account. In *Ponsford* the majority of the House of Lords attributed that inhibiting effect to a clause requiring an assessment of "a reasonable rent for the demised premises". They held that a reasonable rent was the market rent. The minority view is embodied in this passage in the speech of Lord Wilberforce at p.75:

"My lords, clear words may sometimes force the courts into solutions which are unjust and in such cases the court cannot rewrite the contract. This is not such a case; in my opinion logic and justice point in the same, not opposite, directions. I cannot attribute any other meaning to 'reasonable rent' in this context than one which takes into account (or disregards) what any lessor, any lessee, or any surveyor would consider it reasonable to take into account (or disregard). In this case the surveyor should disregard any effect on rent of improvements carried out (viz paid for) by the lessee."

In the present case the relevant wording of the review clause is perfectly general "such rental as is agreed upon by the landlord and the tenant and if they cannot agree to be determined by arbitration" and there is no basis for suggesting that, if satisfied that reasonable persons in the shoes of the parties would have taken a certain factor into account in arriving at an agreed figure, the arbitrator should nevertheless ignore that factor. Inevitably it follows, as the Chief Justice held, that the arbitrator should have taken the tenant's trading results into account if he found (the question being for him) that a reasonable landlord and a reasonable

tenant would have done so in their negotiations. The arbitrator does not appear to have addressed himself to that question. Accordingly the award was rightly remitted to him for consideration

So called "market" rents arrived at on a basis which put the premises beyond the economic reach of reasonable tenants would, of course, not be true market rents. I am not saying that such is the case here, only that the matter requires consideration by the arbitrator. In the present economic climate the point may be of some general importance.

The instant lease does not stipulate a market rent; but, apart from the issue as to tenants' improvements, it may well be that there is no practical distinction between such a rent and that which would be agreed between reasonable parties. The arbitrator could take the view that a reasonable landlord would require and a reasonable tenant would pay a rent commensurate with the optimum use of the premises for a motor vehicle dealing business. In theory that would be a market rent. The tenant would not be entitled to a lower rent if, for instance, it had organised its business in an unprofitable way or accepted an unfavourable franchise. Still less could the tenant pray in aid any financial circumstances peculiar to itself. The question must be what rent should fairly be paid for the premises during the relevant period by a reasonable motor vehicle dealer. Presumably a reasonable motor vehicle dealer would give prominent regard to potential profitability.

It is conceivable that there is enough evidence of truly comparable transactions to enable the proper rent to be arrived at with sufficient confidence without any consideration of the tenant's accounts. If so, it would be proper for the arbitrator to find that reasonable parties would go no further. But, in the light of the evidence and the questions asked by the arbitrator of the Court, I think that the tenant is entitled to an opportunity of contending before the arbitrator that this case is not in that category."

Against that background where the so called "subjective" approach is required it is necessary, in determining the reasonable rent for the parties to agree to, to take into account all considerations relevant at the review date relating to the premises, the restricted use, and the relationship of

landlord and tenant, which would have affected reasonable persons in the position of the landlord and tenant had they been negotiating a rent themselves.

In this case it was Mr Jones' initial submission that Burnetts were clearly in a position to afford the rent, and the accounts of Spiers Motors were, therefore, irrelevant. He said even if they were relevant, they were only a small factor in the overall assessment of rent for the relevant periods. He submitted that Mr McLeod was much more experienced in valuations in the Ashburton area than Mr Aubrey. He submitted there was clear evidence of an upturn in the area, and he submitted that the comparative rentals put forward by Mr McLeod were a good guide to what rent should be assessed for these premises.

On the other hand, Mr Brodie submitted that Mr McLeod had ignored the effect of the decision of Holland J., and had not taken into account general economic conditions, and the economic condition of a particular industry if the building was peculiarly designed for that industry. (See [1991] 1 NZLR 127). He submitted that the profitability of Spiers Motors was the overwhelming factor in considering rental for that portion of the premises. He said this was especially so when it was conceded that the site faced real difficulties, there were restrictions on use, the property must be valued in its present state, and because of the general evidence relating to the downturn of the business. He said this was further strengthened by Mr Owens' concession that there was nothing to suggest the business could be more effectively or profitably managed.

In relation to the positive obligation on the tenant to carry on the motor business at the premises, Mr Jones said that there was no suggestion that that use was not the optimum use for the site, and no approach had been received from the tenant for an alternative use. Mr McLeod appears to have approached the matter on the basis the restrictive clause was ineffective. That overlooks the fact that the positive obligation was a requirement of the landlord, and it is the landlord that has imposed not only a restricted use, but the positive obligation to limit the use of the premises in clause 1.18. It is a clause that does not have the usual proviso of change of use with the landlord's consent.

There is a further evidential point of some significance in approaching this assessment of rental. This is to be found in a letter from

Mr McLeod to the solicitors for the plaintiff, dated the 31st January, 1989. It is of importance and should be set out in full: "Mr B Walker,

Spencer Walker & Kean, Barristers and Solicitors P.O. Box 8

ASHBURTON

Dear Sir,

Re Rental Arbitration - James Johnson Family Trust Lessor to Burnetts Transport Ltd Lessee East Dobson & South Streets Ashburton.

The outstanding disputed rental on the above has now been settled for the renewal period from 15th February 1988 with a copy of Umpire's Award enclosed. This settlement has taken a considerable time which at stages bought (sic) some strained relationships between the Arbitrators as you are aware. The original rental asked of \$72,900 I consider was a rack rental at that time. The later rental asked at time of Arbitration of \$96,220.80 was a figure that I could justify to suit my argument and case presented but fully expecting a substantial rejection. It appears this rejection and maintaining of the higher rental level has only been possible through lack of factual evidence presented by Lessees Arbitrator resulting in a very satisfactory outcome for your clients.

If you require any more information or wish to discuss this matter further please do not hesitate to contact the writer.

Please find enclosed account covering fees

Yours faithfully

C M McLeod"

Rack rental is defined by the Oxford Dictionary as "a very high, excessive, or extortionate rent; a rent equal (or nearly equal) to the full annual value of the land". In cross-examination Mr McLeod conceded that a rack rental is a rental at the upper level. He accepted that he expressed the view in the letter that the second figure that he had contended for in the arbitration of \$96,220.80 was too high and that he expected it to be reduced. He also accepted that with the figure he was now contending for, and it is interesting to note that he expected a substantial rejection. That letter is, of course, quite revealing.

In my view in this case a number of factors are necessary to be taken into account in assessing the rent. Those factors are matters that would have affected the mind of a reasonable landlord and tenant negotiating

the rent themselves. Comparative rents are one factor as are recent trends in the Ashburton area. The limitation of use expressed in the way it is clearly significant. In my view Mr McLeod is wrong to suggest the use is not restricted because applying the contra proferentum rule clause 1.1 a clearly takes precedence over the restricted use clause. The profitability, or otherwise, of an efficiently run and managed service station, car sales and associated business on this site is relevant. The restrictions on the site and changes in the motor spirits industry are also clearly relevant. Overall, I consider a hypothetical willing, but not anxious, landlord and tenant would consider the following factors:

Considering those factors in this case:-

1. Site Suitability.

Despite Mr McLeod's description, I am quite satisfied on the evidence that there are very real difficulties associated with this site. This is made clear from the evidence of Mr Myers and Mr McLachlan. I prefer their evidence to that of Mr McLeod. While the site had initial attraction for the operation of a service station, car sales and associated facilities, there are clearly very real drawbacks. The first relates to the ad hoc conglomeration of buildings on the site. It is clear from Mr McLachlan that this type of service station is no longer attractive and appealing to customers and that substantial redevelopment is required. Although this may be possible I am bound to assess rent on the basis of the buildings as they are. The second is the evidence I accept of difficulties in access to the site. This is not so bad with southbound traffic but the access is still by way of the side street. For north bound traffic it creates a very real problem. I note in this regard, with the consent of the parties, I viewed the site. This confirms Mr Aubrey's evidence.

2. Competition.

Again it is quite apparent from Mr McLachlan's evidence that the motor spirits retailing business has undergone significant changes since 1987. It is clear that these changes have led to substantially increased competition and a reduction in margin on petrol sales. It is also apparent from his evidence that to compete modern multi-purpose service stations are required. It is clear from Mr McLachlan's evidence that they must offer a wide range of services and the present premises that we are concerned with cannot adequately compete.

3. General state of the economy.

It is clear from the decision of Holland J, when the previous arbitration was set aside, that this is a factor to be taken into account. In this regard not only has there been the general downturn in the economy of the nation in the relevant period, it is also apparent from Mr Myers, evidence that rural areas were particularly hard hit. His evidence in that regard was unchallenged. Although it is also a factor that impacts on the market objective rents. (See *Mahoney v Dimock* at p.122.)

4. Comparable rentals.

Both valuers referred to comparable rentals. Mr McLeod in particular relied on this as the basis for his assessment. Mr Aubrey used it for the rather more limited purposes of firstly undergoing an objective approach to his assessment.

Apart from the service stations referred to by Mr McLeod in his supplementary evidence none of the premises, in my view, could be said to be truly comparable. I will turn to the service stations in due course. In this particular case there is no evidence to suggest that the original letting of the premises was not at arms length. There was Mr McLeod's evidence that he considered the return was too low at the time of the original transaction but there is no evidence it was not negotiated between the parties freely and unhindered. The same comment applies to the sub-lease between the tenant and Spiers entered into shortly before the first review date.

Mr McLeod, in my view, has failed to justify his explanation as to why the original rent was artificially low. The increase contended for by the plaintiffs for the first three years was effectively seeking a 129% increase. Even the figure acknowledged by Mr McLeod as a rack rental was effectively a 71.5% increase. The reality is that despite what Mr McLeod says there is no evidence to suggest the parties did not agree to a market rental at the time of the original lease. There is no evidence from either the plaintiff or defendant to suggest that for some reason the rent was fixed at an artificially low figure. Certainly there is no explanation or evidence to suggest that market rentals have moved to the extent of the figure now contended for by the plaintiffs, or even the lower figure described as a rack rental.

The comparables are of assistance and must be considered but when they are not truly comparable, as in this case, they must

be treated with caution. They are a factor to be considered but unless truly comparable, care must be given in the weight attached to them. In this case they are not truly comparable but I accept those contained in the second report show a trend towards a slight increase. On the other hand, comparatives 6 and 8 in Mr McLeod's earlier report reviewing rentals in 1987 and 1988 of rentals set in earlier years, show little or no increase.

5. Deduction for management and head lessee's margin.

The valuers are in disagreement as to which applies. In my view, it is appropriate to allow a deduction for size or volume (i.e., if a property area increases the rate diminishes on an objective basis) On the evidence, I am satisfied a correct figure should be 10%. Although in the end result because of my conclusions, this is of little moment.

There is disagreement whether or not there should be an allowance for the management risk/profit associated with sub-letting. Mr McLeod made no such allowance initially but Mr Aubrey did. Mr McLeod's response was that he did not make a provision under this head because if he did he would increase rentals to cover it. In my view there is a justification for ahead lessee's margin and I agree with Mr Brodie's submission that it cannot be circumvented by artificially inflating the sub-tenant's rent. I also accept Mr Aubrey's evidence relating to a management file.

6. List of new businesses

Mr McLeod tendered a list of businesses. I took it this was to indicate an improving trend within the economy. It is certainly a factor it is appropriate that I take into account but little weight can be given to it because there is no evidence given by Mr McLeod as to businesses that closed during the same period. That may be a greater or lesser list.

Although specifically not raised under this head Mr McLeod also gave evidence of businesses such as the warehouse seeking rental premises in Ashburton. This was to indicate a certain shortage of supply for premises that would justify increases in rent. That overlooks the fact that the limited use of the premises prevents any comparison being made with the demand for premises from such businesses.

This is also the appropriate point to deal with Mr Jones' submission that there had been no application by the tenant for an

alternative use. He suggested this supported his view that it was a prime site for the activity undertaken and that was the optimum use for the site. I also took the submission to be on the basis that if the Spiers Motors business was unprofitable there was nothing to prevent the tenant opening a more profitable business on site so he could afford a higher rent.

In relation to the first point it has already been pointed out that although the site has attractions there are very severe drawbacks both in relation to the building and access. In relation to the second point it overlooks the positive obligation imposed on the tenant to operate a service station and car sales and associated businesses on the site. Mr McLeod's view was that the restriction was not a hindrance. I consider that completely overlooks the reality of the contractual relationship between the parties. The fact that it has been overlooked in the sub-leasing of Naysmiths and the fact that the Burnett shed is not used for that purpose does not remove the obligation imposed on Burnetts by the head lease and on Spiers by the sub-lease. The reality is the use of the site is restricted by a positive obligation and that is a factor I must consider in assessing rental.

7. Burnetts Freight Depot:

On the evidence I am satisfied that this has a particular value to Burnetts as it is clearly associated with their other premises. There is no satisfactory evidence to approach the rent to this part of the premises on a "subjective" basis. Given the use, I consider an open market approach is appropriate, but with an allowance for its added value to Burnetts.

8. Naysmiths Auto Electrical

This site is now sub-leased by a motor cycle shop. It appears in the relevant period that two other businesses have been unsuccessful on the site. one was the auto electricians and the other a furniture restoring business. There is no evidence to suggest whether or not those businesses were effectively run and whether their failure related to the rent. However, the failure of those businesses is a factor which I can take into account, albeit a factor of little weight. Overall, in relation to this part of the premises, the comments I made relating to the freight shed are also applicable.

8. Competition

It is evident from Mr McLachlan's evidence, and also that of other witnesses,

that there has been increased competition in the motor spirits retailing business in Ashburton. There is a new modern Shell premises and other service stations have upgraded.

9. Road Alignment

This clearly overlaps with site suitability. It is quite clear, however, that before the realignment that took place main road traffic travelled down East Street. The realignment had the effect of placing Spiers Motors' premises on a curve in an awkward position and this has no doubt contributed to the downturn in petrol sales. Again, it is a factor to be considered.

10. Comparable Service Station Rentals
In his supplementary affidavit Mr McLeod annexes a schedule referring to the rentals for service stations. This shows the rentals for two Shell Oil service stations and one called Garry Cook Autocentre Ltd. The first Shell Oil is the new premises constructed in West Street which had a larger forecourt, no workshops and stores, and a smaller showroom and offices. It shows a rental from April 1989 of \$40,000 per annum and April 1991 of \$44,000 per annum. The second is a Shell Oil station fronting Highway 1 towards the southern town boundary. The forecourt area is slightly smaller than Spiers Motors group and the workshop, showroom and offices are also smaller. It shows a rental of \$28,930 from November 1988 and \$33,020 per annum from November 1992. It should be noted that this lease unlike the West Street premises does not require the lessee to be responsible for exterior maintenance. The third premises is situated by the post office and has been disadvantaged by the change of moving State Highway 1 from East Street to West street. It is a Mobil service station. It has a larger forecourt area than Spiers Motors but the workshop, stores, showroom and offices are smaller. The rental assessed for that was \$22,000 from July 1990.

These comparatives are clearly relevant for consideration. However, it is to be noted that the Shell Oil site in West Street is a newly constructed premises without the site problems confronting Spiers Motors. The other Shell Oil site also clearly has easier access than Spiers Motors.

11. Exterior Maintenance

In his valuation, Mr Aubrey deducted an allowance for this item. He gave no authority for deducting it in this way. I consider it is a factor that a reasonable

landlord/tenant would consider in negotiating a rent. Further, it clearly would be a factor considered in the arms length negotiations, that led to the original lease and sub-lease.

12. Profitability of the business.

In my view, because of the particular type of rent review clause contained in the lease, and because of the restriction of use, this is a relevant factor for consideration in assessing rent for the relevant periods.

I do not accept Mr Jones' submission that the subtenants' profitability is irrelevant. The lease requires this type of business to be conducted on the premises and it was previously conducted by a subsidiary of the tenant. It is clear from Mr Myers' evidence that that business suffered a substantial loss in the two years preceding the take-over by Spiers Motors. Whether it is the tenant or sub-tenant, such a business must be maintained on site.

I am also concerned that Mr McLeod in his valuation appears to have ignored overall economic factors and profitability. It was the failure of the previous Arbitrator to consider these factors that led Holland J to set aside the award. In my view, it is quite clear from the decided cases that leases containing review clauses such as this require a valuer or an Arbitrator to consider such factors. This is even more so when there is a restrictive use covenant.

I consider that the general approach to the assessment of rent by Mr Aubrey is the correct approach. The very high rental contended for by Mr McLeod on the basis of comparatives is, in my view, clearly shown to be excessive in the light of his own letter when he stated that the much lower figure of \$72,000 was a rack rental. He did not accept that a rack rental was necessarily a landlord overcharging but did accept it was a rental at the upper level. If a rental of \$72,000 was at the upper level then I find it difficult to conceive how he can still contend for his much higher figure. He can only do that by ignoring this particular factor which has been held by the High Court to be relevant.

In relation to the first period, there is nothing to indicate that the sub-tenancy rental was not negotiated at arms length. The agreement was executed in October 1987.. The financial accounts for the year ended 31/3/88 would not have been available at the first review date to allow for a reduction in rental. Even if the tenant's subsidiary made a loss, clearly, Spiers would have

considered that factor on entering into the sub-lease. Mr Aubrey has reached his conclusions by considering evidence for the year ended 31.3.88. The financial year ended after the review date. Perhaps figures could have been extracted at that stage to show that the business was profitable for this short trading period, but it is so close to the date of sub-lease that it would not persuade me the arms length sub-lease rental should be altered.

For the second period it is proper to consider the results of the proceeding period and such figures that would have been available on review date. Later accounts could not be considered.

Award

Because of the particular rent review clause it is necessary for me to determine a reasonable rent for the premises taking into account all matters which would have affected the minds of reasonable persons in the position of the landlord and tenant. In my view all of the above factors, and the decided principles, should be taken into account by reasonable landlords and tenants in negotiating or assessing a rent for these premises. Some carry more weight than others for the reasons given. It is particularly so with a restricted use, whereas Mr Brodie said no one would enter into the lease on the basis that they must inevitably make a loss.

For the period commencing 15 February 1988 I consider that Mr Aubrey has considered the correct approach in relation to the Spiers Motors portion of the premises. Clearly, Mr McLeod was instructed to ignore profitability and economic factors in his assessment, despite Holland J's earlier decision. However, for the reasons given above, the evidence of the profitability must be limited. I conclude there is no evidence to suggest the arms length rent in the sub-lease of October 1987 should be changed. It is the closest and best comparable available. However, in relation to the freight shed and the Naysmiths Auto Electrical premises, there is nothing to suggest that they should not be valued on an objective basis, save that it seems clear that the freight shed has a particular value to Burnetts, as it is associated with their other business. As noted earlier, the draughtsman has obviously overlooked the fact that the motor business does not cover the whole site. These two particular portions of the premises are clearly in breach of the

restriction of use clause and indeed clause 1.18 of the deed. This has been so since the beginning and there must be implied consent to this. Considering all factors, I consider Mr Aubrey's values for these portions of the premises to be correct.

Period commencing 15.2.88

Accordingly I assess the rent for the period of three years commencing 15 February 1988 as follows:

Spiers Motors group portion (Rounded)	\$24,000
Freight Depots	\$25,574
Auto Electrical Workshop	\$8,610
	\$58,184

I consider that the allowances made by Mr Aubrey for management costs and head lessee's margin should be correctly allowed. Accordingly there should be deducted:

Less management of \$32,610 at 2.5%	\$815.00
Head lessee's margin on \$32,610 at 7.5%	\$2,445.00
	<u>\$3,260.00</u>

Accordingly I assess the rent for this period as follows:

Rent as assessed	\$58,184.00
Less allowances	3,260.00
	\$54,924.00

Period commencing 15.2.91

Again, I consider the approaches of Mr Aubrey in relation to Spiers Motors correct and that of Mr McLeod not so. I also accept the objective values on a comparative basis by Mr McLeod for the freight depot and the Naysmiths Auto Motors portion for reasons given above.

However, much of the evidence focussed the financial results of Spiers MQtorGroup Limited up to the present time. For reasons given earlier, that evidence is not a factor, as it was not available at review date. The reasonable and hypothetical willing but not anxious landlord and tenant would not have been in a position to have this knowledge at the date of review. In my view, the figures have been used in that manner and as at the review date in 1991 the figures for years ending 31 March 1988 and 1990 showed profits ignoring the tax write downs. There was a substantial loss in 1989 but as figures from the accounts for 1991 could have been extracted at the review date some six weeks before the end of the financial year it is apparent that there

would have been a profit in that year as well. However, averaging out the profits satisfies me there is no room for increase. There is no evidence a reasonable tenant could have done better than Spiers, and the hypothetical reasonable tenant would consider the trading figures. In relation to the balance of the premises, there is evidence from Mr McLeod of an upwards movement, and I accept that. Accordingly, for the freight shed and what was called in the hearing, the Naysmiths premises, there should be a 10% increase. The deductions and the rates remain the same. For completeness, I have rounded the figures to the nearest dollar for both periods. Accordingly the rent for the non-Spiers Motors premises will be increased by 10% for the second period. The allowances remain at the same percentages.

Spiers Motors group portion	\$24,000.00
Freight Depots	\$28,131.00
Auto Electrical Workshop	<u>\$9,471.00</u>
	\$61,602.00

Less Management of \$33,471.00 @ 2.5%	837.00
Less Head Lessee's Margin on \$33,471 @ 7.5	\$2,510.00
	-\$3,347.00
	\$58,255.00

Interest

The plaintiff also claimed interest on the outstanding amounts backdated to the date of their respective review dates. It seems clear to me from the decision of the Court of Appeal in *Body Corporate No.95035 & Others v Auckland Regional Council* (CA.215/92 unreported 22 March 1993) that interest for the earlier period is not recoverable. Interest should run only from the date of the award on arrears then accrued. Such interest should be at the Judicature Act rate of 11 %.

Goods and Services Tax

All award are G.S.T. exclusive.

Note :

An Appeal against the sole arbitrators decision was disallowed by Holland J. in a written judgment dated 2nd September 1994 [M361/93] Christchurch Registry.

Editor

Young Professional Valuer of the Year 1995

Members are reminded that The New Zealand Institute of Valuers seeks nominations of suitable candidates for the Young Professional Valuer of the Year by the 30th November each year. Members are encouraged to identify potential nominees and where appropriate to advise their employers of the award. Information kits are available from the General Secretary.

Eligibility Criteria:

Nominations are limited to Members or Affiliates aged 30 years or less who have achieved outstanding significance within any one or more of the following criteria:

- professional participation within the NZIV
 - original research
 - original authorship
- and
- outstanding technical and/or professional excellence
- or
- significant contribution to the community that brings credit to the Profession.

Initial selection will be at Branch level with final selection made by the National Award Panel. There will be one national award each year and this will only be conferred if the candidate is worthy of it.

Previous Awardees:

1993 Marcus Jackson B.Sc.,B.P.A. Otago

1994 Leonie Freeman M.Com(VPM) Auckland

The New Zealand Valuers' Journal Annual Manuscript Competition Conditions of Entry

The New Zealand Valuers' Journal Editorial Board offers an annual Award for a leading article to be published in the Journal. The Award has a value of NZ\$1000 and shall be paid to the successful applicant who meets the following conditions:

1. The competition is open to any author of an original work based on research into or comment on a topic related to the valuation of real property and entries should be submitted to the Chief Executive Officer, New Zealand Institute of Valuers, PO Box 27-146, Wellington.
2. The article shall not have been submitted to any other journal or publisher prior to being submitted for entry into the competition.
3. The article shall not exceed 10,000 words including any equivalent space where illustrations, diagrams, schedules or appendices are included.
4. The manuscript shall be typewritten.
5. The author shall supply a short synopsis of the article, setting out the main thesis, findings or comments contained in the article.
6. The author shall provide a brief biographical note which may be published.
7. The closing date for submission of manuscripts shall be 1st April in each year and any winning article shall be published in the Journal.
8. Judging shall be by the Editorial Board and shall be on the basis of the relevancy, quality, research and originality of the article to the principles and practice of valuation. The judges' decision shall be final and binding. The Editorial Board shall not be bound to make an award in any year if no article meets an acceptable standard.
9. The winning manuscript shall become the property of the New Zealand Institute of Valuers and the author shall agree as a condition of receiving the award to pass copyright to the Institute and no reprinting of the article shall take place without the express consent, in writing, of the Editor of the New Zealand Valuers' Journal.
10. All unsuccessful applicants for the Award shall be advised.
11. The decisions of the Editorial Board on any matter relating to the competition and Award shall be non-reviewable and correspondence shall not be entered into nor reasons given for the decisions of the Board.

INTEREST RATE CONSISTENCY IN THE ANALYSIS OF PROPERTY CASH FLOWS

by Edward J. Schuck

Abstract

Though property analysts may be aware of the definitions of nominal and effective rates of interest and the differences between them, it is often the case that this difference is ignored when analysing property cash flows. In certain circumstances, the use of a discount rate derived on the basis of assumptions that are incompatible with a particular set of cash flows can lead to economically invalid results. This problem often arises when using valuation models that have been formulated on the basis of implicit assumptions about how interest rates are stated. Lessons that have been learned in the financial markets may be of value to property analysts. Two conclusions that are reached in this paper include the following: 1) practitioners must investigate, and make allowance for, the basis upon which rates of return are derived, and 2) models should be specified universally in terms of effective interest rates.

Keywords: Compounding, interest rates, valuation models

1. Introduction

In the course of a Discounted Cash Flow (DCF) analysis, property practitioners sometimes make use of formulas to ascertain the present values of cash flows with definable characteristics (e.g. constant or periodic growth annuities and perpetuities). Unless explicit attention is paid to the terms in which cash flows and interest rates should be stated, inconsistencies can sometimes arise between the assumptions used in originally deriving the formulas and the terms in which cash flows and discount rates are stated. For example, a nominal rate of interest may inadvertently be used when a rate stated in effective terms is required (or vice versa).¹ Similarly, the compounding frequency assumed in the derivation of a particular nominal rate may be inconsistent with the frequency of a property's cash flows. One result of inconsistent terms of reference may be unacceptably biased valuations.

Consider the following illustrative example:

A valuer has been instructed to value a new hypothetical lease with rent paid annually in arrears. The initial rent is \$1,000 to be reviewed annually thereafter. The valuer decides that the cash flows constitute a perpetuity and estimates that they will grow in perpetuity at a mean annual rate of 2%. After conducting some type of risk assessment, he/she also concludes that an expected rate of return for an investment of this risk is approximately 10% per annum, constant over the life of the investment.

Since this cash flow stream is a constant growth perpetuity, its present value can be calculated using the following equation (generally known as the Gordon Model):

$$V = \frac{a}{r-g} = \frac{\$1,000}{0.10-0.02} = \$12,500 \quad (1)$$

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where a is annual cash flow and r and g are interest and growth rates per annum.

Just prior to issuing the report, the valuer is contacted once more by the client with new information regarding the terms of the lease. The lessor and lessee have recently agreed that one-twelfth of the annual rent of \$1,000 should be paid monthly in arrears. All other terms remain the same.

The cash flow series has become a periodic growth perpetuity with the first year's monthly payments being equal to $\$1,000 / 12 = \83.33 . The valuer makes use of the

following general-form model which finds the present value of a periodically growing stream of perpetual cash flows in arrears:

$$V = aY \left(\frac{1+r}{1+rD} \right)^n \left(\frac{1+r}{1+n} \right)^{\infty} \quad (2)$$

where: a initial rent per annum
 p review period (years)
 n number of payments per annum

Inserting a = \$1,000, p = 1, n = 12, r and g as above yields a value of \$12,388 as follows:

$$V = \frac{\$1,000}{0.10} \left(\frac{1+0.10}{1.10} \right)^{12} - 1 \left(\frac{1+0.10}{1.10} \right)^{12} = \$12,388$$

This result is intuitively incorrect as one would expect the value to be greater than \$12,500 as a result of the new payment terms. An error has occurred because the same interest and growth rates are used in equations (1) and (2) though these models are derived on inconsistent terms. Equation (1) is specified on the assumption that interest and growth rates are stated in effective terms per cash flow period (i.e. the rates take account of any compounding that occurs during the cash flow period). In contrast, equation (2) has been specified on the expectation that such rates are stated in nominal terms and that the compounding of interest occurs at a frequency n.

In order to rectify the demonstrated problem, an investigation of the assumptions made when deriving and applying interest and growth rates is required.

2. Sources of Inconsistency

A necessary step in the DCF analysis of a property's cash flow stream is the adjustment for risk. This maybe effected through the use of risk-adjusted discount rates. Such an approach has its roots in the capital markets, where it is common practice to compare and value financial securities on the basis of their yield to maturity. This measure is nothing more than an investment's annualised internal rate of return (IRR) - a rate of interest that equates the present value of all future cash in-flows with an initial cash out-flow.² Sale prices are assumed to reflect zero net present value (NPV) transactions; IRRs derived from information on completed sales are then used to value comparable assets.³

In the world of property, yields are derived in a similar manner, with reference to the expected rates of return evidenced by recent property transactions. Often there are insufficient recent sales to arrive at a market consensus on expected returns. At such times of sparse trading, either in general or within particular risk classes, capital market yields (e.g. bond yields plus a suitable liquidity premium) become a proxy for property transaction data. In fact,

prudent practice dictates that the yields on alternative assets should always be examined, in recognition of property's role in the range of investment-grade assets.

It is a result of this process of deriving and applying yields across assets with differing cash flow profiles that issues of consistency arise. In order that comparable yields may be applied in an economically sound manner to value an asset's expected future benefits, attention must be paid (at the very least) to the assumptions made in deriving those yields.

3. Fixed Income Securities Market Experience

According to Gilmore and Hogg (1988), debt securities in New Zealand constitute money market instruments (e.g. shorter term maturities such as Treasury Bills, Transferable Certificates of Deposit, Promissory Notes, Commercial and Bank Bills) and coupon-bearing instruments (e.g. longer term maturities such as Government and Local Authority Stock and the debentures of financial institutions and commercial companies). Prices of the former are normally quoted as a percentage discount on a face value. The latter are generally priced on the basis of a yield to maturity (IRR) that is a function of the quoted offer price (discount or premium on face value), fixed coupon rate (as a percentage of face value), coupon frequency and maturity. It is the yields on longer term debt securities that are normally of interest to property analysts.

The reader will recall that, in general, yields/IRRs are derived using iterative routines that may be automated through the use of a financial calculator or spreadsheet formula. The objective is to procure the periodic interest rate that equates the present values of all cash out-flows with those of all the in-flows. The periodic rate is then annualised, with the result being stated in nominal or effective terms depending on the method of annualisation used. Consider a simple investment that generates \$52 in six months' time and \$52 in one year and that has a price of \$100. Assume initially that interest compounds semi-annually. Equation (3) shows how an IRR might be calculated:

$$\$100 - \frac{\$52}{(1+r)^1} + \frac{\$52}{(1+r)^2} \quad (3)$$

The investment is found to have an r equal to 2.655%. This equates to a nominal annual rate of 5.31 % (two times 2.655%) and an effective annual rate of 5.38% (the result of applying 2.655% every six months with interest being reinvested to secure further interest).

In the New Zealand money markets, analysts customarily assume that interest compounds with the same frequency as the cash flows (Gilmore and Hogg (1988)). This is a practice that was originally established at a time when yields had to be derived manually. The assumption enabled discount factors to be calculated based on whole numbers of discrete compounding periods. Since the majority of bonds carried semi-annual coupons, fixed income traders adopted a convention that states yields to maturity in nominal terms, being a simply derived figure that is nothing more than two times the investment's IRR based on six month

compounding. Similarly the yields on quarterly-paid coupon bonds are four times the IRR calculated on the assumption of three-monthly cash flows. One can easily see that comparison of the nominal yields on investments with differing cash flow frequencies is not an entirely accurate methodology.

A similar example of this problem involves discount priced securities. These do not bear coupons in that the investor's entire compensation takes the form of capital gain. In order to be able to compare such securities with interest-bearing bonds, Stigum (1981) describes how equivalent bond yield could be used as a common yardstick. This measure restates yields on discounted securities on a basis that makes them comparable to the nominal yield to maturity figures quoted on coupon-bearing securities. Traders made use of this measure to price different money market instruments on the basis of nominal yield figures calculated on terms that were consistent with bonds (assuming a standard compounding frequency).

Stigum and a number of other authors including Levine (1975) and Fabozzi (1987) subsequently recommended that different investments should really only be compared by first converting their conventional (nominal) yields to their effective equivalents. They correctly noted that it is not possible to compare nominal yields without benefit of information on the differing compounding assumptions used to derive them as the critical impact of interest-on-interest (a secondary source of return) may be distorted. Stigum (1981) asserted that traders "who appreciate the importance of compounding" should always convert nominal yields to their effective annual equivalents before undertaking any comparison.

It should be pointed out that one need not necessarily assume that interest compounds at the same frequency as the underlying cash flows in order to calculate an investment's effective annual yield.

For example, the fact that some bonds bear fixed coupon interest semi-annually does not mean that the analyst must assume that yields compound semi-annually. After all, the coupon payments on bonds in the secondary markets (where it is only by coincidence where the fixed coupon rate equals the prevailing yield rate) are just interim distributions of capital and accumulated interest. One could assume that returns compound on any basis that is at least as frequent as the cash flows. The nominal interest rates derived on the basis of these assumptions will differ but their effective annual equivalents will be the same.

Looking back at the example shown earlier in this section, if it was assumed that interest compounds quarterly, then the denominators' exponents would instead be 2 and 4 respectively. This results in an r equal to 1.319% which equates to a nominal annual rate of 5.28% but the same effective rate of 5.38%.

4. Overcoming Inconsistency

Since property analysts are typically faced with investments that generate cash flows with a wide range of frequencies, it is likely that property yields are being unwittingly quoted on just as wide a range of terms. It will normally be the case that the compounding periods of conventional fixed-income yields (e.g. semi-annual, quarterly) will differ only slightly from those of property investments, assuming that the latter generally produce monthly cash flows. Even so, these differences can propagate into valuation errors, making it all the more important to a) quote property yields on a standard basis, and b) modify formulas to make use of yields stated in the standard terms.

Property yields should ideally be quoted uniformly in terms of effective annual equivalents. This would obviate the need to investigate further the assumption on which a yield was derived. However, since a groundswell of support for this standard is unlikely to emerge, it falls to the analyst to ensure that the terms of reference are noted when discount rates are being procured from data on financial securities and property transactions. Necessary conversions may then be undertaken so as to make accurate use of the data in suitably modified property valuation formulas.

It will often be the case that interest rates will be stated (possibly by convention such as in the money markets) as a nominal annual rate r based on a compounding frequency f times per year. To convert this to an effective interest rate per period (denoted by the subscript prd) assuming n cash flows per year, one could use equation (4):

$$r_{prd} = \left(1 + \frac{r}{f}\right)^{\frac{1}{n}} - 1 \quad (4)$$

This is particularly useful in situations where f does not equal n , as might be the case when a money market yield ($f = 2$) is to be used to value monthly rents ($n = 12$). For a nominal yield r of 12% per annum, the effective interest rate per period is:

$$r_{prd} = \left(1 + \frac{0.12}{2}\right)^{\frac{1}{12}} - 1 = 0.00976$$

On other occasions, the reference interest rate may be stated as an effective rate per annum. If we denote this as r embed Equation.2 (the effective result of compounding a nominal annual interest rate f times per year), then periodic rates are obtainable as follows:

$$r_{prd} = \left(1 + r\right)^{\frac{1}{f}} - 1 \quad (5)$$

For example, the interest rate per month of an effective rate of 12% per annum is 0.949.

Note that it is in the derivation of interest rates where discrepancies will usually arise, as they may appear in nominal or effective forms, depending on their source. On the other hand, rental growth rates are customarily (though not necessarily) stated in effective terms only. This is because rental growth rates are rarely derived from IRRs that have been annualised by multiplying them by f ; they are usually obtained from historical figures or forecasts of indices.

Since one can assume that changes in market rentals occur continuously (even if they are somewhat event-driven), then a discrete periodic growth rate may be derived by de-compounding a forecasted effective annual rate, as follows. As is the case with equation (4), let us denote the effective growth rate per annum (after compounding) as r . Then:

$$r_{iprd} = \left(1 + r\right)^{\frac{1}{n}} - 1 \quad (6)$$

With respect to the specification of valuation formulae, recall the criticisms of equations (1) and (2). It was noted that (1) is stated rather ambiguously while (2) implicitly assumes that interest and growth rates are stated in nominal terms with a compounding frequency equal to the cash flow frequency of n times per year. Since it may be difficult to discern the terms in which an unfamiliar DCF formula is drafted, it would be useful to restate these equations in forms that explicitly recognise the periodicity of cash flows and interest/growth rates. Equations (1) and (2) now become:

$$V = \frac{a \text{ } rpr d}{rpr d \text{ } gpr d} \quad (7)$$

and

$$V = \frac{\frac{a}{rpr d}}{(1 + prd)^{np} - (1 + gpr d)^{np}} \quad (8)$$

These equations are now stated in forms that expect cash flows of a dollars per period payable n times per year with interest and growth rates stated in consistent terms being the effective rates per cash flow period.

5. Example Revisited

The original example may now be revisited in order to ascertain the impact of consistently applied interest and growth rates: If, with respect to the original deal, the discount rate was stated in nominal terms (perhaps it was a NZ Government Stock yield) then the annual rentals will no longer result in a value of \$12,500. A nominal rate of 10% per annum based on semi-annual compounding equates to an effective rate per period (i.e. per year) of 10.25% as follows:

$$rpr d = \left(1 + \frac{r}{f}\right)^f - 1 = \left(1 + \frac{0.10}{2}\right)^2 - 1 = 0.1025 = 10.25\%$$

The growth rate of 2% per annum may be assumed to be an effective annual rate already. Insertion of the periodic equivalents of the cash flow, interest and growth rates (\$1,000, 10.25% and 2% respectively) in equation (7) yields a V equal to \$12,121 reflecting the value of the lease as it was originally agreed between the client and tenant.

To value the revised terms requires use of equation (8) assuming monthly cash flows:

$$gpr d = n(1 + g) - 1 = 12(1 + 0.02) - 1 = 0.24 = 24\%$$

$$rpr d = \left(1 + \frac{r}{f}\right)^f - 1 = \left(1 + \frac{0.10}{12}\right)^{12} - 1 = 0.1047 = 10.47\%$$

$$\frac{a}{apr d - n} = \frac{\$1,000}{0.1047 - 0.24} = \$83.33$$

and

$$V = \frac{\$83.33}{0.008165} \left[\frac{(1 + 0.008165)^{24} - 1}{0.008165} - \frac{(1 + 0.001652)^{24} - 1}{0.001652} \right] = \$12,680$$

The present value of the lease has increased \$559 now that annual rentals are spread into equal monthly payments (such that 11/12 of the annual sum is now received earlier).

As an aside, in circumstances similar to those in the example it is unlikely that a rational and informed lessee would agree to the new rent payment pattern without further negotiation. If it is assumed that the original terms were agreed so as to arrive at a zero NPV transaction, then the lessor's subsequent demand for monthly rentals would likely have been met by the lessee with a counter-proposal that takes account of the time value of money. In this way there would be no net transfer of wealth to the lessor. Reflecting this more probable series of events:

The lessee counters with a proposal that the annual rent in arrears of \$1,000 be converted to monthly payments in arrears by means of a sinking fund.

$$\$1,000 = C X^t \left(\frac{1 + rpr d}{rpr d} \right)^{nt} - 1$$

where: C = Rent per month
such that C ends up equalling \$79.66. Inserting this figure for $ayrd$ in equation (8) results in $V = \$12,121$ thereby preserving the NPV balance of the agreed terms.

6. Conclusion

A number of arguments exist in favour of NPV over IRR as an economically valid measure of an investment's worth. Since it is expected that practitioners will continue to make use of IRRs to analyse property cash flows until NPV gains complete acceptance, this paper has sought to eliminate one potential source of error, that of inconsistency in the derivation and application of IRRs. Examples have been used to show that it is necessary to refer to the terms upon which a discount or growth rate is stated before using it in a valuation model.

An ideal solution to the problem involves establishment of industry standards for the terms on which yields should be quoted and valuation models are expressed. Until such time as such standards may be adopted, property practitioners are advised to be sensitive to inconsistencies in the terms on which interest rates and valuation models are expressed.

Notes:

1. In this context the terms 'nominal' and 'effective' refer to whether a particular rate incorporates the effects of compounding, i.e. whether an interest rate is annualised to reflect the payment of interest on interest.
2. This discussion should not be interpreted as an endorsement of comparing investments on the basis of their internal rates of return, the primary argument being that IRR-based comparisons may give conflicting indications to NPV. Recall that NPV is a sounder measure of an investment's contribution to present wealth. Such conflicts arise when comparing investments with substantially different cash flow profiles. Securities traders may be able to ignore this conflict safely because they compare alternatives within a class of investments that enjoy similar cash flow characteristics.

3. Most analysts may find it convenient to use a single rate of interest to discount a stream of future cash flows. This methodology implicitly assumes that a single market yield may be identified that is a unique approximation for a range of expected returns applicable to cash flows of different maturities. Such a range of returns constitutes a term structure of spot rates. Since a bond's yield is a weighted average of spot rates applicable to its cash flows, a uniquely representative yield does not exist (several different term structures may have the same geometric mean). Ideally one should discount cash flows using rates of return selected to reflect the uncertainty (a function of investment horizon, liquidity, expected inflation and borrower's credit) of each individual cash flow. The disparity between results will be a function of the degree of the term structure's deviation from a flat line over time.

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