purchase of selected assets. The most recent New Zealand forestland sale at the time of writing was the 8,940-hectare sale by Fletcher Forest to UBSTI, which now has partial or total ownership over about 110,000 hectares of forestland in New Zealand. UBSTI acquired "partial rotation" cutting rights over only the older age classes in Tauhara and Tahorakuri forests. Thus it can enjoy the cream of the cumulative return curve at the top end, but leave the seller with the milk, and re-establishment/management costs.

So, are we headed for the end of global corporate forestland ownership? In the Northern Hemisphere at least, this ownership class now looks decidedly unstable. But corporate ownership can only fully disappear if there are buyers for several millions of hectares around the world. What if the TIMOs and REITs start to leave the table?

The recent CalPERS decision to reduce ownership is probably not yet the tip of a forestland fund sell-down iceberg. But most individual investment contracts with TIMO managers are only for 5-10 years. Many of these are approaching the first option-call to exit. If too many individual pension funds decide not to rollover their contracts, there could be an excessive area of forestland on the market, with too few buyers.

Maybe we will see Governments getting back into the business? This is perhaps feasible in the Central North Island to get present players out of a dilemma. In some countries, indigenous people will become owners when they receive settlement forestland over time. But they are not corporate forestland buyers. Indeed in New Zealand Ngai Tahu has already on-sold much of its forestland assets awarded as part of a Treaty settlement.

The ownership Ferris Wheel will continue to turn. Is it possible just possible that forestland values again become so attractive that at some future date we will read that Fletcher Challenge Forests has announced a new strategy that includes, "selling down processing distribution and marketing assets to focus investment in high-margin forestland ownership"?

TIMOs have landed!

Colin R McKenzie*

What is a TIMO?

Timber Investment Management Organisation's - TIMOs - have been active in New Zealand since the early 1990s when investors advised by UBS Timber Investors purchased a joint venture interest in the Nelson forest which prior to the sale was wholly owned and managed by Fletcher Challenge¹. TIMOs are on a course for continued growth as the managers of New Zealand's plantation forest estate. Who are the TIMOs? What are the drivers of their dramatic growth? What are the implications for the New Zealand forest industry?

Simply, a TIMO is an investment advisor who manages funds that focus exclusively (or very predominantly) on generating investment returns from timberlands. As such, they provide an alternative management entity to the more traditional government or corporate ownership of large forest estates. TIMOs are generally focused on just timberland ownership and sell their product as either stumpage or as logs to their customers for processing. Some TIMOs have a level of vertical integration, often resulting from the activity of the previous owner of the forest or through a joint venture relationship with a processing company, but the primary focus is pure timberland investment.

Emergence of TIMOs

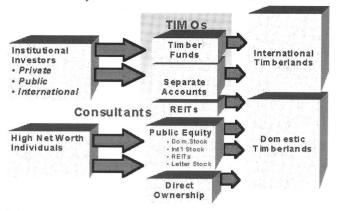
Institutional investment in timberlands emerged in the United Kingdom in the 1960s and 1970s, but since the 1980s the industry has been dominated by the United States. Hence the use of the word "timber" in reference to forests rather than "plantations", a more familiar word choice for New Zealanders. The emergence of TIMOs is due to two coincident trends in separate industries. Firstly, previously integrated forest products companies are now moving to "unlock" value by separating tree ownership from their processing and marketing activities. Secondly, investment managers in the financial sector are creating sophisticated structures to achieve specialisation in all asset classes. Timber has now emerged as an increasingly important asset class in diversifying the portfolios of the major institutional investors. The TIMO industry has grown dramatically during the past fifteen years and now manages some USD10 billion of assets. It is also globalising, with 15% of the assets under management currently outside the United States.

TIMOs facilitate timberland investment by bridging between the forest industry sector and investor entities that control and manage large amounts of capital (Chart 1). The investors, who are the clients of the TIMOs, are public and private sector pension funds, foundations, endowments and high net worth individuals. These clients may invest individually as separate accounts, or the TIMOs may arrange co-mingled accounts where the capital of perhaps five to twenty unrelated investors may

^{*} Colin McKenzie is Director of UBS Timber Investors which is headquartered in West Lebanon, New Hampshire. The company was founded in 1982 and as of December 31, 2002 managed USD1.2 billion of forestry investments in seven countries on behalf of over eighty clients. The views expressed in this article are solely those of the author and are not attributable to UBS Timber Investors.

¹ In 1997 Fletcher Challenge sold its interest in the venture to Weyerhaeuser Company, which remains our partner today.

Cart 1: Role of TIMOs in Forest Investment.



be aggregated to give the timber fund sufficient scale. Generally separate account funds are open-ended as to term, while co-mingled funds may either be open-ended or have a set date upon which investors vote on extending, or not, the fund. Other forms of timberland ownership include Real Estate Investment Trusts (REITs), equity in publicly listed forest industry companies and direct ownership of the land and trees.

The number of TIMOs has grown in recent years and the industry remains predominantly U.S. based. The oldest five firms manage approximately 70% of the assets under management and include UBS Timber Investors, The Campbell Group, Evergreen Timberland Management, Forest Investment Associates and Hancock Timber Resource Group. Others include Forest Systems, Forestland Group, GMO Renewable Resources, Prutimber and Timbervest. Of these UBS Timber Investors has actively invested outside of North America since 1992. GMO and Hancock, and more recently Prutimber, also now manage investments outside the U.S.

TIMOs as a specialist asset class

Institutional investors are attracted to timberland as a specialist asset class because plantations have been promoted as offering:

- A growing and sustainable resource base with global scale.
- The potential of competitive long term rates of return.
- A positive impact on portfolio returns with lack of a correlation to other asset classes due to the unique feature of biological growth.
- Returns driven by that predictable biological growth.
- A generally favourable demand/supply outlook.
- · Management and market flexibility.

Note that it is entirely consistent for a TIMO to be both purchasing and selling forest investments at the same time, even in the same geography. In response to the investor's timeframes some funds may be exiting around the same time that another fund is initiating purchases. However, a single TIMO will have conflict of interest issues in the transfer of a property between two funds that it manages, so such transactions do not occur.

The attractiveness of timberland investment for

institutions has been enhanced in recent years by the dismal performance of the global equity and bond markets, and the concern for "bubble" risk in real estate markets. Institutions generally allocate only 1-2% of their capital to timberland investment, but given the huge amounts of capital available to them, the TIMOs cannot claim to be capital constrained.

Choosing investment plantations

The more challenging task for the TIMOs is finding sufficient investment grade plantations. Such plantations must have high site and biological productivity, strong market dynamics within the region the estate is located in, and attractive stumpage margins. As such, a TIMO must buy well, generate sustainable cash flow, manage the associated risks (including biological, fire and market factors), and ensure that the value achieved upon exit is not prejudicial to the good results achieved whilst holding the asset. In building a portfolio of properties for a fund the TIMO will have regard to diversifying risk through a mix of geographies, species, age classes, land tenures and end-use markets. It is therefore not unusual for a single fund to hold positions in four or more plantation properties spread geographically.

Rigorous asset allocation models are used to guide the allocation of an investment fund's capital to different global investments to balance risk whilst maximising investment return. Since past performance is not a reliable indicator of future risk or performance, forest investment models should not rely on historical data. In addition, statistically meaningful historical performance data is rare in the forest sector, and forests are infrequently traded. UBS Timber Investors has therefore developed a sophisticated regional investment allocation model that addresses these concerns2. This asset allocation model is used to guide investment strategies among regions in the United States (Southeast. Northwest, Lake States, etc) and the southern hemisphere geographies of Argentina, Australia, Brazil, Chile, New Zealand and Uruguay. To date the TIMO industry has not invested outside these geographies, but other countries are under review.

Separation of plantation ownership from wood processing

Over the three decades that investment managers have been developing timberlands as an alternative asset class there has been a similar evolution in the strategic approach to security of fibre supply by the industrial owners of timberland. This was a necessary parallel development, as without parcels of forest available for purchase there would not be a timberland market available to institutional investors. The necessary step for integrated corporates was to progress from pricing

² "Regional Investment Allocations in a Global Timber Market" by Kurt Akers and Renato Staub, Journal of Alternative Investments, Volume 5, Number 4, Spring 2003 (www.iijai.com).

the transfer of goods and services between parts of the business from cost-based transfer pricing to market-determined prices. This action removed the subsidisation by one part of the business for another part, and facilitated value alignment between industrial sellers of timberland and institutional buyers.

Wood processing companies that sell timberlands have also come to realise that fibre security is available through contractual arrangements and does not require direct forest ownership. Institutional investors welcome the prospect of a certain level of demand at market prices for at least a proportion of their available wood supply, so there can be a mutual benefit to both seller and buyer in reaching agreement on an ongoing wood supply.

But the main driver for industrial forestry companies now seeking to sell their forest is the recognition that for an integrated corporate the plantation ownership business is a very different business to the processing and marketing of wood products. Timberland investment is both long-term and capital intensive, but has relatively low risk and generally stable returns. Timberland investment therefore has the propensity to be a "balance sheet" driven business. By contrast, the management of processing and its associated marketing and logistics is an "income statement" business. Processing and marketing of wood products is management intensive, and can be severely impacted by short-term competitive factors that increase risk and the volatility of investment returns.

Advantages of TIMOs over corporates

Institutional investors invariably have two major advantages over corporates in their management of timberlands, and thus their ability to generate investment returns from the asset. Firstly, institutional investment is rarely leveraged. The absence of debt mitigates stresses on the business that could otherwise arise during periods of poor cash flow from adverse markets; or even peaks in tending expenditure, such as a concentrated period of pruning expenditure. Secondly, U.S. institutional investors generally are exempt tax on distributions they receive from tax paying businesses. The growth of TIMOs has been greatly facilitated by their non-leveraged positions and the tax obligation status of their U.S. clients on qualifying distributions.

TIMOs have a great flexibility in structuring transactions with the sellers of timberland. The deal can involve all of an entity's plantation estate, or only a defined proportion. Partitioning can be by geography, land tenure, species, maturity or other selected criteria. The transaction can be for land and timber, or a forestry right over the trees only. Replanting and tending obligations can be retained by the seller or pass to the TIMO. Ongoing management of the property can be contracted back to the seller, else awarded to a specialist management services provider. A wood supply agreement can be negotiated covering all or part of the woodflow, and applicable generally or across certain log grades only. The array of options is very wide and

constrained only by the seller's requirements, the TIMO's need to meet its client's wishes and investment hurdle, and the creativeness of the parties involved, subject always to the approval of their respective (and expensive!) legal counsel.

Country criteria used by TIMOs

The criteria considered by a TIMO when investing in any country, including New Zealand, includes an assessment of:

- Relative risk. What is the political and economic stability of the country, and what is the legal and ethical framework that governs business conduct in the country?
- Land tenure rights. Is security of the title and certainty of occupancy available if the investment includes the land?
- Business environment. Are central and local government supportive of the forest industry in their application of legislation, taxes and regulations; or at least neutral between industries?
- Price drivers. Is the price for stumpage driven by a deep and competitive market place, or can it be constrained and/or manipulated by other players for their own purposes?
- Currency exposure. What is the revenue and cost currency, and are they the same as the client's reporting currency? Should a currency hedging strategy be implemented for all or part of the revenues?
- Global competitiveness. Includes the quality of the infrastructure available, the availability of a quality workforce, and access to world timber markets.

Not surprisingly, given the levels of TIMO interest and actual investment, the New Zealand market stacks up well on all counts with the important exception of a lack of scale to the domestic market. If New Zealand were to lose competitiveness as an exporter of products due to, say, currency level or barriers to trade; then this would also impact negatively on the forest industry and deter the TIMOs from continued investment.

As investment advisors, TIMOs will allocate that portion of their client's capital dedicated to the timber asset class to the available global opportunities based on their relative risk/return profiles at the time. Timber assets have proven to be an attractive investment opportunity. Investors advised by UBS Timber Investors have earned a net IRR of 7.3% per year since inception of its first fund in 1987. Investment funds that have gone full cycle over a 10 or 15-year term have earned net IRRs ranging from 7.5% to 13.7%.

Advantages of TIMOs for the forest industry

The presence of an active TIMO industry in New Zealand brings a number of important structural advantages to the forest industry:

• Firstly, the new capital injected to purchase the trees allows the seller the option of further investment in

processing and market penetration, alleviating concerns over the supply of capital to process the 'wall of wood' opportunity. Other options exist for the released capital, such as in a recent example where a capital distribution was made to the shareholders in a public company following the sale by the company of forestry rights to institutional investors.

- Secondly, markets are more transparent because TIMO investments are rarely leveraged, so they can respond to market signals in their harvest planning without the necessity to meet cash flow hurdles or other corporate or bank imposed constraints by harvesting at an inappropriate time.
- Thirdly, TIMOs expand the number of suppliers of stumpage and/or logs to the open market. Though the seller may negotiate a wood supply contract such commitments will not extend to the full woodflow available. The availability of open market wood in all grades to all processors adds to the competitiveness and depth of the wood supply market in New Zealand. UBS Timber Investors is the largest TIMO in New Zealand with a current gross area of 115,000 productive hectares and associated woodflow of some 2.1 million cubic metres per annum. These assets represent a significant market volume from a now independent and non-integrated supplier. This allows independent processors who specialise, say, in extracting value from pruned logs, to expand their capital investment with the assurance that an independent and sustainable supply of quality logs will be available to the most efficient competitors.
- And fourthly, TIMOs are generally small and focused organisations staffed with specialists. TIMOs generally contract the services that are needed to manage and market the assets they control. UBS Timber Investors prefers such contract arrangements, and for our New Zealand properties contracts the day-to-day

management either to the joint venture partner, or the vendor or to independent forest management companies. Particularly in New Zealand, this has assisted the emergence and sustainability of service providers in such areas as forest protection and management, harvest planning and execution, marketing and appraisals. The forest industry in New Zealand is richer for the energy and commitment from these independent service providers.

In creating these advantages to the forest sector in New Zealand, TIMOs also bring with them certain disciplines that need to be understood. TIMOs represent their clients and are absolutely focused on realised investment returns. Whilst the early years of the TIMO industry may have included some transaction-driven individuals, the standard now is for a disciplined team approach focused on the financial risks and outcomes of the proposed transaction. Investment return must be driven by the realised cash flow and not rely on appraised valuations, which can be erroneous. Historically, over-reliance on appraisal value has masked the true volatility of timberland investment and has led to inappropriate management strategies. TIMOs have no interest in rescuing those companies that have chosen to overvalue their plantation assets.

The TIMOs have landed! New Zealand has provided an attractive geography for forest investment, but it is not the only one available to the global investment management industry. The New Zealand forest industry must continuously improve its global competitiveness else the capital will flow, very freely, to other countries offering a better matrix of risk and return. The New Zealand forest industry has a constant challenge to ensure the TIMO partnership continues. I personally hope that this challenge is accepted.

Bigger role for smaller growers

ost land based primary industries would appear to have a fair bit in common. You grow things, then harvest, process and market them. Regardless of whether the product is wood, milk, meat, wool, or arable crops the basic theory is much the same. So it is surprising that the commercial structures for these industries are so different. In forestry vertically integrated companies seem to have been accepted as the dominant industry players, while farming has always been based on the family farm, but with markedly different processing and marketing structures beyond the farm

gate for the different products. If you are looking for parallels, the New Zealand dairy industry and parts of the Scandinavian forest industry might be the closest.

While New Zealand pastoral industries have seen numerous examples of farmers owning the processing and marketing sectors, mainly through cooperative structures and with varying levels of success, we have not seen successful examples of processors owning the farms. Indeed, corporate farming structures in New Zealand, have, almost without exception, failed (is Landcorp really a corporate?) and the family farm structure has continued, sometimes with quite a few bells and whistles. The reason might be debated, but I believe key reasons are the combination of motivation and acceptance of capital accumulation as an alternative to cash flow. In other words, land prices are too high to ensure adequate cash flow returns.

Denis Hocking is a long time, second generation, farm forester. The opinions expressed in this article are those of the author and not necessarily those of the NZ Farm Forestry Association.