

# Brookfield Timberlands Management LP

*Second Quarter 2009 Global Timberlands Research Report*

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## Second Quarter 2009 Research Report

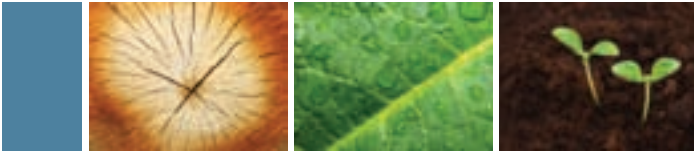
As discussed in our First Quarterly Research Report, as Manager and owner of a portfolio of international timberlands, appraisal related issues occupy a significant proportion of our time. Our First Quarter Research Report focused on issues related to the move to IFRS and the associated development of new appraisal methodologies. However, current events in capital markets have caused appraisers and timberland owners to carefully examine many of their underlying valuation approaches and assumptions. In our Second Quarterly Research Report we discuss approaches used in valuing the Higher and Better Use (HBU) component of timberlands estates and the possible implications of the recent use of more aggressive valuation strategies on longer-term value.

**Reid Carter**  
*Managing Partner*  
*Brookfield Timberlands Management*



*Brookfield Asset Management Inc. ("Brookfield") is a global asset manager focused on property, power and other infrastructure assets with approximately US\$80 billion of assets under management.*

*Brookfield Timberlands Management LP, a wholly owned subsidiary of Brookfield, has 2.5 million acres or over \$3 billion of timberlands under management in North and South America.*



## Higher and Better Use Lands within a Timberlands Portfolio

The Dictionary of Real Estate Appraisal, 3rd Ed. (1993), states that the highest and best use of a property is defined as follows:

“The reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value. The four criteria the highest and best use must meet are legal permissibility, physical possibility, financial feasibility and maximum profitability.”

As timberlands are capable of supporting multiple uses at most times, achieving the highest and best use can involve several strategies. Highest and best use can involve the continued ownership and operation of the timberland parcels in question; however, increasingly, the use of the term highest and best use has come to be associated with the sale of the timberland for a purpose other than timber production. Highest and best use involving continued ownership and operation might include capture of non-timber revenues such as recreation and road-use fees, sales of surface minerals, and the sale of specific non-timber rights such as mineral or gas rights or conservation easements. This report focuses on those situations where Highest and Best Use (HBU) relates to the expected sale of selected timber parcels for a purpose other than timber production

### Valuing mixed timber HBU portfolios during acquisition

Brookfield has chosen to separate the valuation of timberlands and HBU lands during all phases of timberlands acquisition and ownership. During the acquisition process screening processes are developed that score individual parcels in terms of such metrics as population density, change in population density, median income, change in median income, miles of paved road, proximity to major centres, waterfront per unit area, etc. Where these scores suggest lands may have significant development opportunities, we then work with local agents to identify land use, selling prices, absorption rates, etc. to develop a plan that offers a well-informed estimate of the scale, timing and risks associated with HBU cash flows. Where the present value of HBU opportunities is found to be greater than the present value associated with timber operations, we then carry out separate valuations. As a firm with considerable experience in land banking and development of master planned communities<sup>1</sup>, it has been our experience that entitlement initiatives, and the timing and value of future developments are subject to considerable risks and uncertainties with the industry

typically using discount rates for valuing such development opportunities ranging between 10 – 20%, depending on where the development process currently stands and at which stage of development the buyer intends to sell. Rates of 15% are typical for unentitled, unimproved timberland targeting sales as partially entitled rural developments.

Following the successful acquisition of a timberlands estate that includes significant HBU opportunities, the emphasis moves to establishing more formal development plans aimed at guiding operating decisions and providing a basis for appraisers to identify and assess the value of HBU opportunities within the estate.

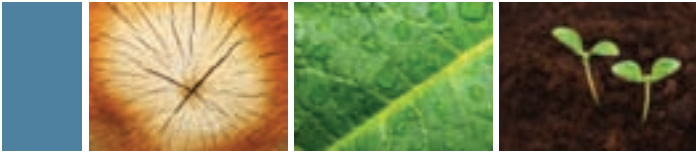
In recent surveys of organizations involved in timberland investing, including TIMOs, REITS, conservation groups, and private investors, the JW Sewall Company<sup>2</sup> found a wide range of approaches used in valuing the HBU component of timberlands estates. These responses can be summarized as follows<sup>3</sup>:

- Use a blended discount rate where HBU component exists (most common);
- HBU component viewed to increase risks and drives up discount rate;
- HBU component offers upside and improves liquidity suggesting use of a lower discount rate;
- Discount rate should not be adjusted upwards until HBU component is greater than 40% of acquisition price; and,
- Discount rate should be adjusted upwards only if HBU sales assumptions are “aggressive”.

<sup>1</sup> Brookfield is the controlling shareholder of Brookfield Home Corp. one of the 25 largest homebuilders in North America. Brookfield Homes entitles and develops land for its own communities, and sells lots to third parties with operations in five market areas: San Francisco Bay area; Southland/Los Angeles; San Diego/Riverside; Sacramento; and the Washington D.C. area.

<sup>2</sup> JW Sewall Company 2007 and 2008 Fall Investor Surveys.

<sup>3</sup> Bret P. Vicary, Ph.D., MAI (JW Sewall Company). 2008. Discount Rates in Forestland Markets. Western Forest Economists 2008 Annual Meeting.

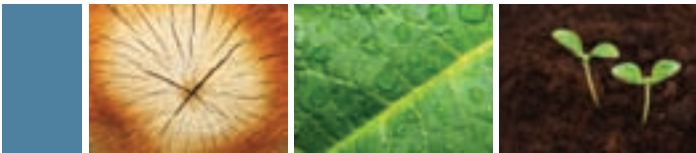


Consistent with our earlier discussion on appraisal differences under IFRS, we believe best practice requires separate appraisal of HBU lands within a timberlands portfolio with reconciliation of future timber-related cash flows derived from HBU lands. Failure to properly recognize the considerable risks and uncertainties associated with HBU sales through the use of an appropriate discount rate is likely to result in a return of capital with an inadequate risk-adjusted return. This can be demonstrated through the use of a simplified example where an acquisition of 100,000 acres of timberlands includes 10,000 acres of HBU lands expected to be sold evenly over five years for an average price of \$4,000 per acre. Use of a 7% “timberlands” discount rate would suggest that these HBU lands have a present value of \$32.8 million. However, it has been our experience that valuation assumptions at time of acquisition have a tendency toward a positive bias typically associated with expectations of short entitlement timeframes with positive outcomes and a receptive market that shares the seller’s view of best use and value. In addition, the due diligence timeframe typically does not allow for the preparation of a fully informed HBU development plan. Industry experience has more typically been long entitlement, buildout and sales periods resulting in considerable development and financial risk. As a result, discount rates of 10 – 20%, as suggested above, are typical. The sensitivity of the present value of this HBU portfolio to discount rate and sales timeframe is demonstrated below (Figure 1). We would point out that development and financial (selling price) risk could be expected to have a further negative impact on the base case PV, above.

Figure 1:

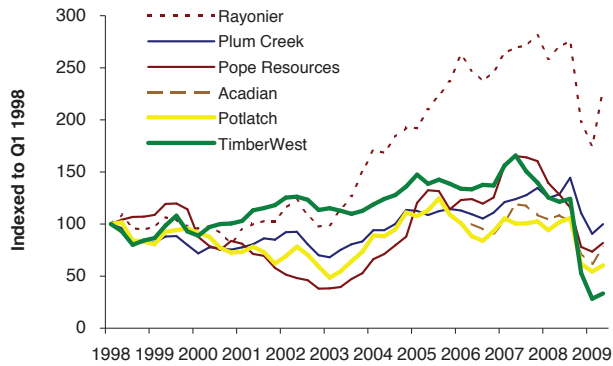
Impact of discount rate and sales timeframe on buyer’s base case present value			
Rate	Years to Complete Sales		
	5	10	15
7%	100%	86%	74%
12%	88%	69%	55%
15%	82%	61%	
18%	76%		

While it is important to recognize that many HBU opportunities represent rural and recreational use opportunities offering only slight premiums to timber values, it is our impression that many recent timberland acquisitions have used aggressive end selling price and timeframe assumptions as well as low discount rates for HBU lands in an effort to arrive at competitive offers. While the most recent NCREIF Timberlands Index returns have demonstrated stable and positive capital appreciation until the second quarter of 2009 (down 1.7% from Q1), recent mark-to-market impairment charges taken by large land development companies may result in a similar negative impact on mixed timberland / HBU estates. Many of these large land development companies are much further along the development spectrum than typical timberland HBU land seller/developers, and are, therefore, more exposed to the current housing downturn, but we think it is instructive to note that most recent impairment charges have ranged between 25 – 30% of historic costs.



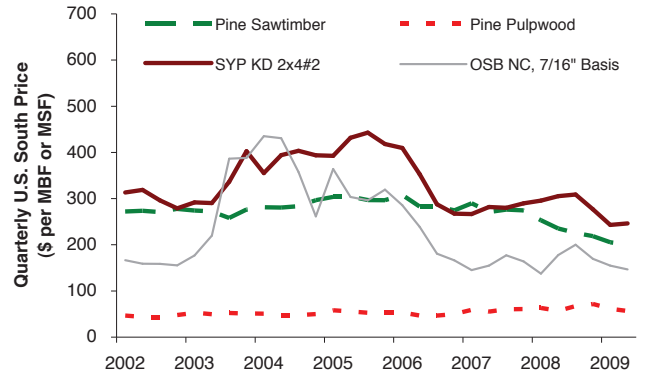
## Key Timberland Metrics

Figure 2: Publicly Traded Timberland Company Trading Performance



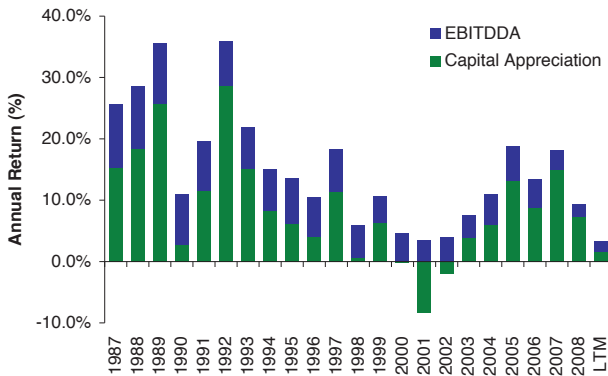
Source: Bloomberg and Brookfield internal research.

Figure 5: Quarterly Average Prices for U.S. South Sawlogs, Pulpwood, Lumber, and OSB



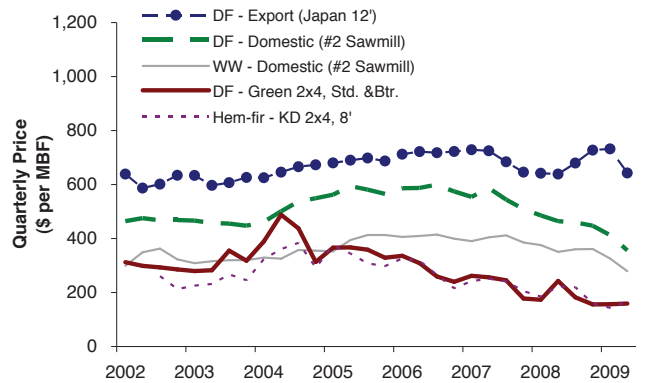
Source: Timber Mart-South and Forestweb.

Figure 3: Annual Returns for Private U.S. Timberlands



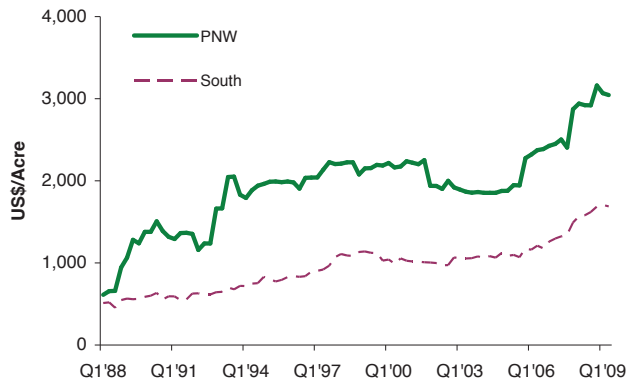
Source: NCREIF Timberlands Index.

Figure 6: Quarterly Average Prices for PNW Sawlogs and Lumber



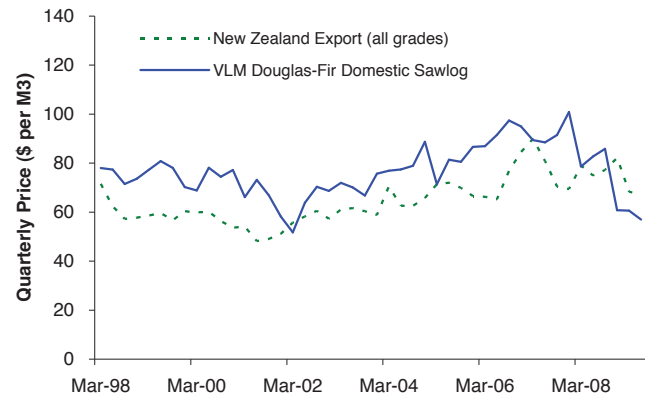
Source: LogLines and Forestweb.

Figure 4: Quarterly U.S. Timberland Values (\$ per acre)



Source: NCREIF Timberlands Index.

Figure 7: Global Sawlog Prices



Source: B.C. Ministry of Forest and Range, NZ Ministry of Agriculture.

## Contact

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### Vancouver, Canada

Suite 458, Bentall 5  
550 Burrard Street, Box 51  
Vancouver, BC V6C 2B5  
T. 604-669-3141  
F. 604-687-3419

### Toronto, Canada

Brookfield Place, Suite 300  
181 Bay Street  
Toronto, ON M5J 2T3  
T. 416-363-9491  
F. 416-365-9642

### New York, USA

Three World Financial Center  
11th Floor  
New York, NY 10281-1021  
T. 212-417-7000  
F. 212-417-7196

### London, United Kingdom

40 Berkeley Square  
London, W1J5AL  
United Kingdom  
T. 44 (0) 20 7659-3500  
F. 44 (0) 20 7659-3501

### Rio de Janeiro - Brazil

Rua Lauro Müller 116, 21º andar  
22290-160 RJ  
Botafogo - Rio de Janeiro  
T. + 55 (21) 3527 7800  
F. + 55 (21) 3527 7799

### Sydney, Australia

Level 1  
1 Kent Street  
Sydney, NSW 2000  
T. 61-2-9256-5000  
F. 61-2-9256-5001

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Forestweb, Inc.  
1801 Avenue of the Stars, Suite 520  
Los Angeles, CA 90067  
310-553-0008 · [info@industryintel.com](mailto:info@industryintel.com)

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