



The Changing Landscape of Timberland Ownership in the United States

The Emergence of TIMOs

Mike Clutter
Hargreaves Professor of Forest Finance
Center for Forest Business
Warnell School of Forest Resources
The University of Georgia



Commercial Timberland Transactions

- Over 23 million acres of industrial timberland has changed ownership in the past five years (in large transactions)
- The traditional vertically integrated forest products companies have been the sellers and the TIMO community have been the purchasers
 - Trends are evident by region (NE, South, Lake States, PNW)
- Trends appear to be continuing with additional asset sales by integrated forest products companies.



Why ?

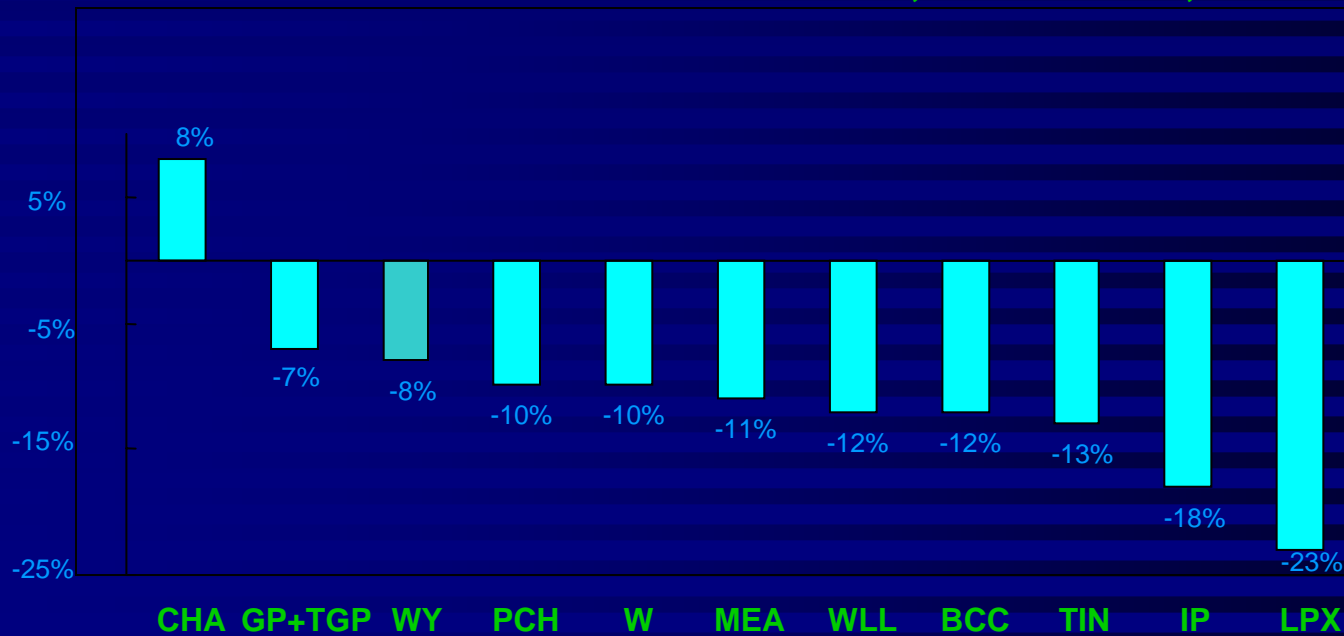
- Performance issues in the forest products industry
 - Abysmal shareholder returns. Private placement returns on timberlands have been far better
 - Consolidation among companies in the industry has left substantial debt on many balance sheets
- A recognition that timberland may not be a required asset to be in the forest products manufacturing business.
- Deep and mature markets for most raw materials in most regions of the country
- More efficient tax structures for owning timberland have evolved (not C-corporations)



Strategic Context...

S&P500 Return for same period: 18%

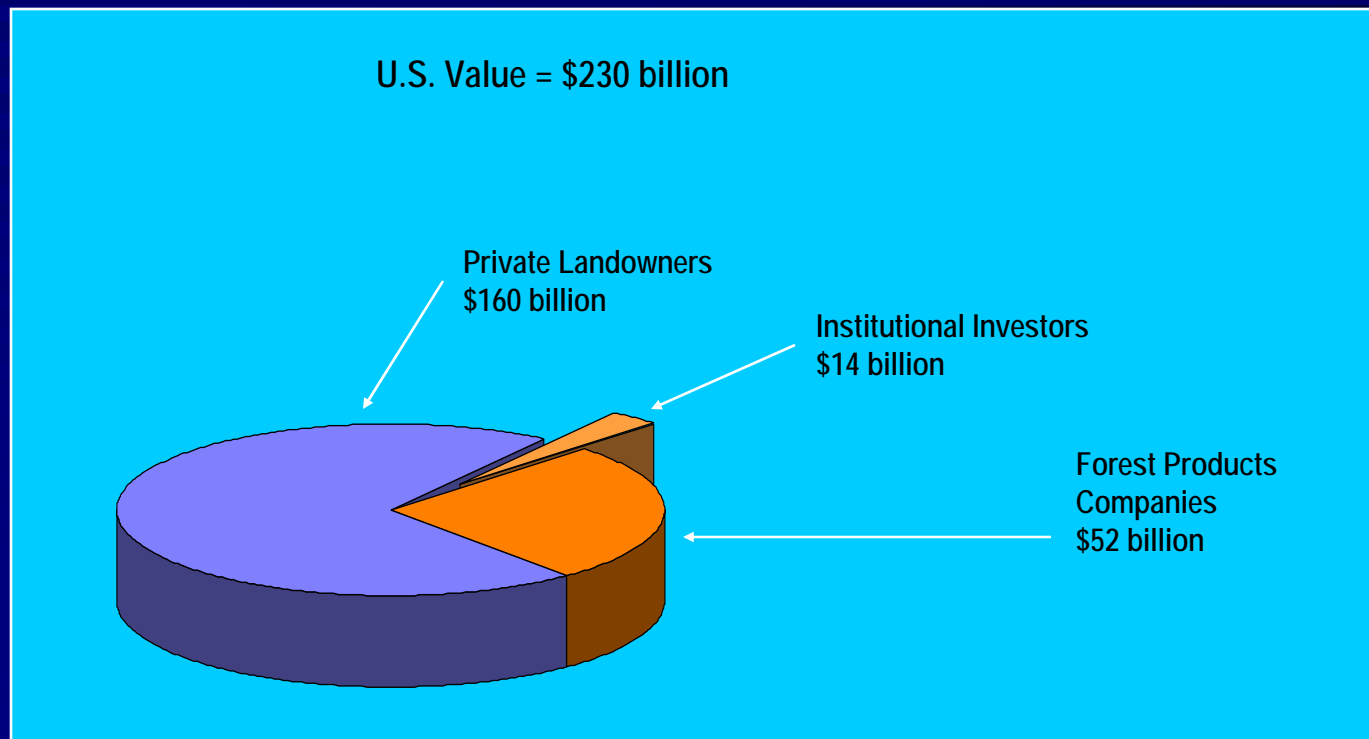
Total Shareholder Return: December 17, 1997 - June 30, 2000





Timberland Investment Universe

Global Timberland Market = \$400 billion



Source: UGA Center for Forest Business



TIMOs

- What are Timberland Investment Management Organizations?
 - Entities that take other “peoples” money and invest it in Timberland.
 - Purchase, manage, and ultimately sell timberlands for investors
 - Two major types of investments – private funds and comingled funds.
 - Some manage the properties they purchase while other TIMOs use local forestry consultants.
- **Important** – TIMOs do not own the timberlands they manage! They are an investment vehicle like a mutual fund



Investors in Timberland

- Institutional Investors
 - Pension Funds – CALPERS, Ohio Teachers, etc.
 - University Endowments – Harvard, UGA
 - Family Trusts

- Individual Investors
 - High net wealth individuals
 - Individuals that purchase small parcels for a variety of reasons



Deal Structure

- The “standard” TIMO investment is
 - Private placement closed-end fund of 100 to 200 million dollars
 - Usually 15 years in length
 - Fees are based upon both acres and returns after fees
- Currently, about 2 billion a year of investment capital is flowing into timber and timberland

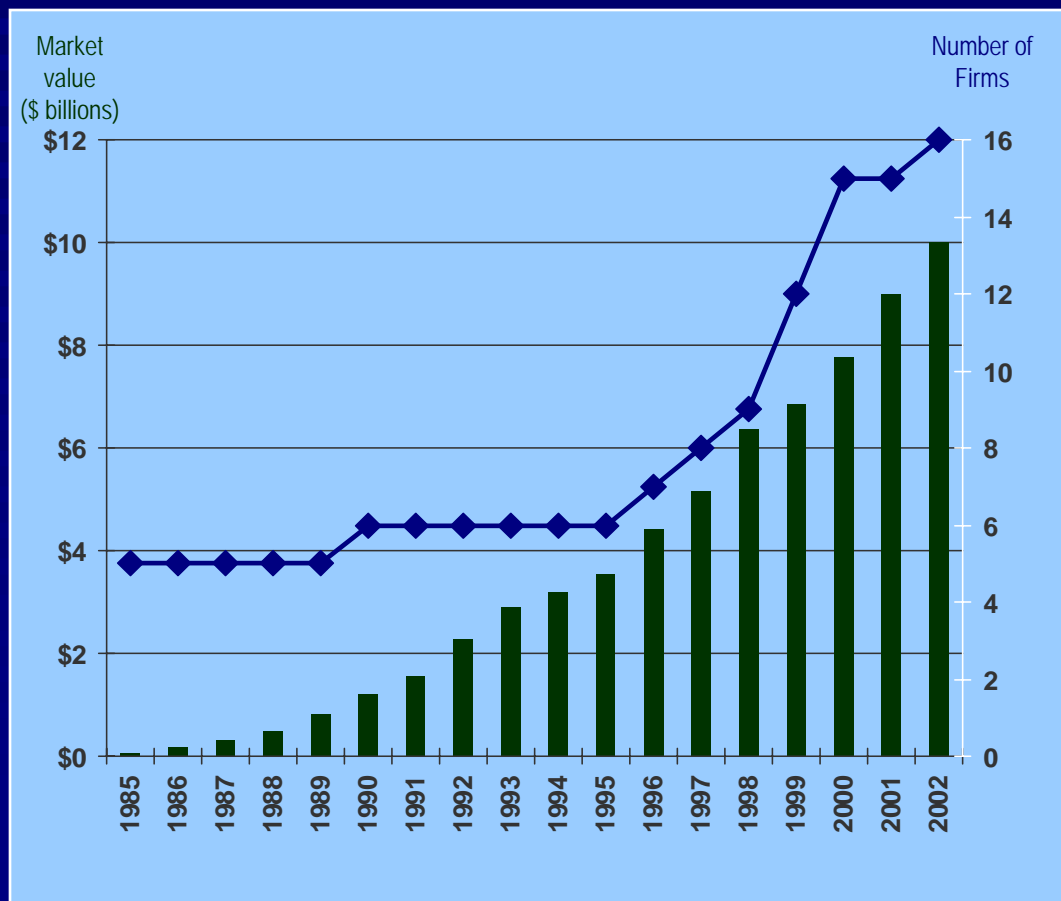


Do TIMOs Manage Differently?

- What differences exist between the vertically integrated forest products companies and TIMOs?
 - Shorter investment horizon for the TIMOs
 - Similar timber management objectives and prescriptions (maybe)
 - Generally lower levels of investment in timber management (maybe)
 - Much lower levels of research and development investment.



Growth in Institutional Ownership of U.S. Timberland



- U.S. GAAP accounting consistently understates timberland returns for forest products companies
- LBOs of early 1980s caused forest products companies to re-think timberland strategies
- Timberland dispositions to other forest products companies were neither feasible nor desirable
- ERISA and similar legislation drove pension funds toward diversification
- Institutional investors emerged as desirable owners for 'surplus' timberland



Largest Timberland Owners

Largest Owners / Managers of U.S. Timberland

	Acres
Company	Under Mgt (MM)
International Paper	10.7
Plum Creek	8.3
Weyerhaeuser	7.1
MeadWestvaco	2.9
Hancock	2.3
Rayonier	2.2
Temple-Inland	2.2



Rationale for Timberland Investments

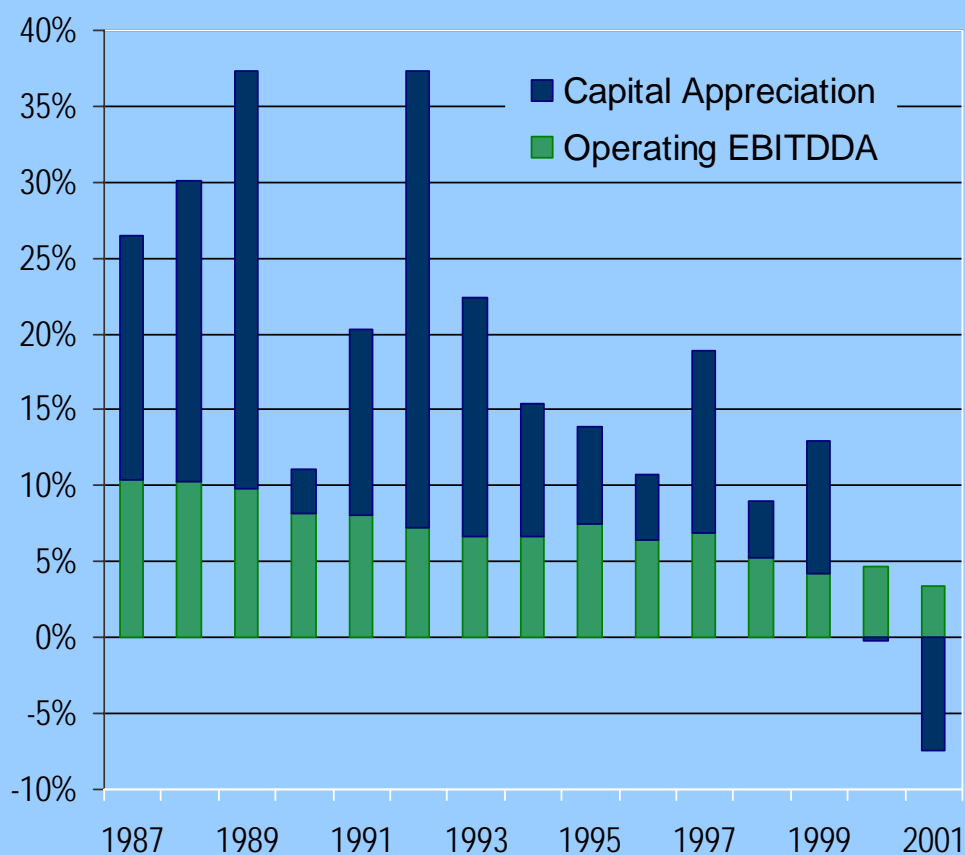
Inherent Characteristics of Timberland

- Strong Risk Adjusted Returns
- Portfolio diversification: negative correlation with other assets
- Capital preservation/inflation hedge
- Low to moderate risk



II. Rationale for Timberland Investments

NCREIF Timberland Index Returns--All U.S. Regions (% per year)



- Actual reported performance of U.S. institutional properties
- 163 properties valued at \$3.6 billion (as of 12/31/01)
- Large majority of timberland investment advisors--8 firms with about a 90% combined market share--are now NCREIF members

Source: National Council of Real Estate Investment Fiduciaries



What is Portfolio Diversification

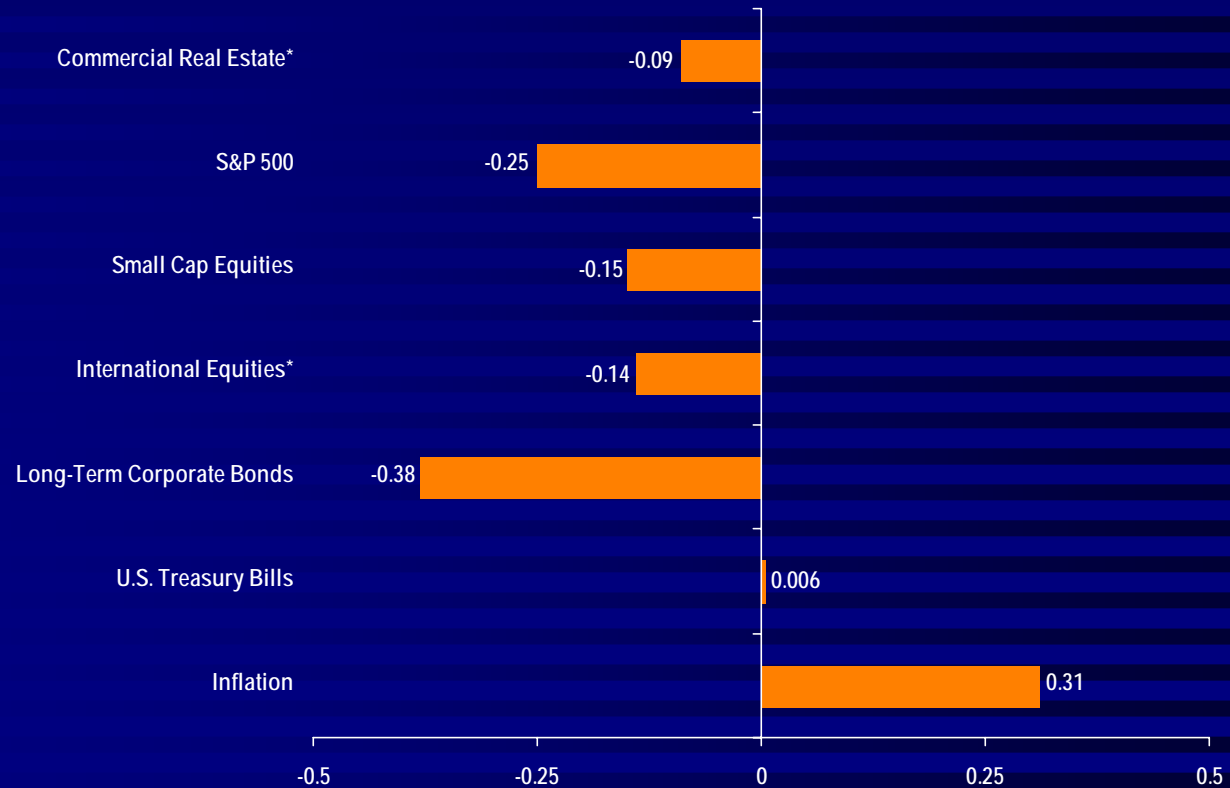
- Diversification is a concept used to reduce the risk associated with holding a group of investment assets - a portfolio.
- Assets that are highly positively correlated do little to reduce portfolio risk (increase diversification). Similarly, assets that are highly negatively correlated contribute to diversification - reducing portfolio risk



II. Rationale for Timberland Investments

Historical Correlations with Timberland (1960-2001)*

Portfolio Diversification





Corporate Timberland Ownership Beliefs

- A segregation of beliefs among industrial timberland owners has occurred:
 - Need timberland as a raw materials source for a variety of reasons – insurance, earnings stability, procurement strategy, integrated value, etc.
- Do not need Timberlands as a raw materials source – timber markets have matured to the point that prices will be dictated by market-based phenomena
 - Most mills receive about 15 to 25 % of their furnish from internal sources for the integrated forest products firms – how can that justify integrated value ?



Comments on the value of firm integration

- A number of analyses were performed to try and quantify this value - one interesting one was:
- If land contributed to mill profitability then mills with a high degree of raw materials self sufficiency should be more profitable

Conclusion

- The correlation between mill profitability and self sufficiency for GPs building products facilities was slightly negative and not significantly different from 0.
- Alternative hypothesis is that below market transfer prices contributed to mill inefficiencies.



Impact of Assets Owned on Financial Risk

- Integrated forest products firms are involved in different businesses with vastly different risk structures.

	S&P	Weyc	GP	IP	Deltic	PCL	TTC
	500						
CV	12.6	15.5	23.3	15.6	12.9	10.6	10.1
% increase		23	85	24	3	-16	-20

- Separation in risk based on the assets of the corporation



Multiple Sectors

- With the continued consolidation of the forest products sector several trends are evident
 - A move away from the traditional integrated view of our business by many traditional, vertically integrated forest products companies
 - A recognition of the differences in risk between timber and timberland and manufacturing (and also differences among product lines in manufacturing)
 - Movement toward tax efficient ownership of timberland assets



Impact of tax status on corporate structure

- With a variety of tax structures available for timberland ownership, there has developed a hierarchy of efficient owners
 - Highest valuations – Privately owned tax-exempt entities (TIMOs, MLPs, REITs)
 - Intermediate valuations – privately owned double taxed entities or publicly owned single-taxed entities (REITs or MLPs)
 - Lowest valuations – Publicly owned double-taxed entities (C-corporations)



Impact of tax status on corporate structure

- This hierarchy is useful in considering value adding strategies for timberland sales, acquisitions and mergers, etc.
 - Most of the recent sales have upgraded the tax efficiency for the new owner
 - Depending on deal structure, most transactions are tax free or tax deferred – a requirement for most integrated forest products companies



Impact of tax status on corporate structure

	Double Tax	Single Tax
Pretax Income	246	246
Corporate Pretax Cash Flow	280	280
Corporate Income Tax @ 39%	96	0
<hr/>		
Cash Flow after Corporate Tax	184	280
Personal Income Tax @ 30 %	55	84
<hr/>		
Cash Flow after all Taxes	129	196
Enterprise Value @ 6.5%	2831	4308
Net Debt	650	650
<hr/>		
Value of Stock	2181	3658
Value per share of Stock (80.1 MM shares)	27.23	45.67



Conclusions

- An increased recognition of the risks and expected returns for assets within the forest products sector
- Timberland ownership patterns will continue to favor tax efficient structures. Traditional vertically integrated forest products companies will be the net sellers and Institutional investors will be the net purchasers.



Questions ??

