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# Timberland Investing Basics

**A Primer for Prospective Southern  
Timberland Investors**



Bringing Good Business to the Forest

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## Introduction

Southern timberland has been a source of diversification and wealth for families and businesses for generations. Yet only in the last two decades has it become attractive to return-driven investors as well – both tax-exempt and taxable. The reasons are simple: Forest investments produce equity-like returns with bond-like risk, among a host of other advantages. Indeed, from 1973 to 2002, risk-adjusted performance of southern forestland investments exceeded core assets in a typical portfolio – treasury bills, corporate bonds, commercial real estate – and the S&P 500. During this period, unleveraged, pretax returns on forestland averaged 11.1 percent annually, with a standard deviation of 10.1 percent.

In addition to favorable return and risk characteristics, timberland investments deliver powerful portfolio diversification because of timberland's weak to negative correlation to traditional financial assets. Investments in timberland also have a historical record of capital preservation owing to its "biological hedge." And timberland investments provide unique tax advantages, stemming from the capital gains treatment of timber revenue and passive loss generation from operating expenses.

For prospective timberland investors – especially taxable investors – and their financial advisors, developing a basic understanding of the timberland investment landscape is a key first step in the education process. In order to effectively evaluate timberland's potential as an investment, several top-level issues must be explored:

- The history of timberland as an asset class, with a focus on Southern timberland and current supply, demand and price trends;

- Timberland's investment characteristics, including returns, diversification, capital preservation, tax advantages, risk characteristics, and non-timber value;
- Timberland's primary ownership and investment structures; and
- The timberland investment process, including building a portfolio, adding value through active management and exiting the investment.

## Timberland as an Asset Class

### The History of Southern Timberland

Prior to World War II, most Southern timberland was held by private, non-industrial owners and passively managed, although some larger industrial owners practiced modern forest management. After World War II, major forest products companies – Weyerhaeuser, International Paper, Champion International, MacMillan Bloedel, among others – expanded in the South. In the '50s, '60s, and '70s, these companies bought vast amounts of timberland and managed it intensively for wood production. With investments in tree-growing science and technology, the forest products industry (FPI) created the first high-yield pine forests in the South.

In the mid 1980s, U.S. pension funds, including some of the world's largest, began investing in timberland for purposes of portfolio diversification. Tax-exempt investors took advantage of opportunities created by "distressed sales," or lands deemed "non-strategic" by changing industrial owners. Investors hired professional asset managers to pioneer more cost-effective and efficient ways of management, while adhering to sustainable forestry practices. With investments in forest



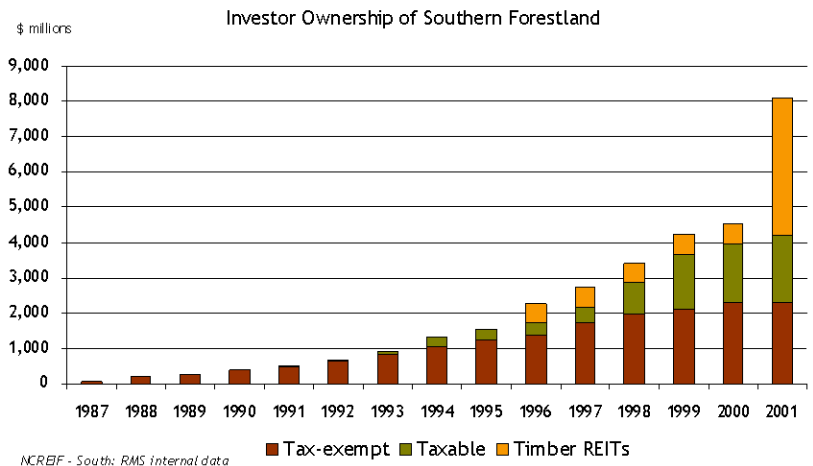
systems, timber and land marketing, they managed forests for superior, risk-adjusted returns and capital preservation, generating annual returns in the South of 11.1 percent from 1987 through 2002.

In the mid-1990s, private taxable investors entered the asset class during a time of fundamental changes in the ownership strategy of integrated forest products companies and of the maturation of early pure timberland investments. Since 1999, annual Southern timberland transaction volumes have tripled from historical levels. By 2002, high-net-worth individuals had placed almost \$2 billion in Southern timberland. Analysts expect this trend to continue, given historic buying opportunities in the region, new timberland investment vehicles, and the desire of many investors to hedge their equity market exposure with non-traditional investments.

We are in the early to middle stages of a recapitalization of forest products industry timberlands. In the last four years, approximately 10 million acres, representing 25 percent of FPI ownership, have been sold to investors. Several forces are driving this trend.

Foremost among them is the development of timberland as an investment-grade asset with a proven track record. With growing acceptance by tax-exempt institutions and affluent individuals, a market of buyers now exists with the capital strength to make large purchases. Also, these buyers don't represent a competitive threat to the FPI – they don't own competing manufacturing operations, and they do need open market outlets for wood products produced from their timberland.

Another significant factor behind the forest products industry's timberland divestitures is



that, after a decade of strong timberland investment returns, it became apparent that the true value of FPI timberland assets was largely unrecognized by the financial markets. Timberland performance was hidden beneath the cyclical results of manufacturing operations. Faced with poor financial performance, the need to reallocate capital to more strategic uses, and mounting pressure from Wall Street analysts, FPIs began in 1998 to separate timberland assets from core manufacturing assets. These sales are providing capital for industry consolidation, helping to reduce M&A-related debt and improve the competitiveness of core manufacturing businesses.

### The South in relation to the U.S., World

A number of factors make it clear why the United States has evolved into the world's largest timber producer, responsible for nearly a third of the total global volume. And why the South has become the dominant U.S. timber region.

About 43 percent of the world's timberland area is softwood trees, far and away the most commercially viable timber type. In fact, softwood trees are used for nearly two-thirds of industrial wood production worldwide. Most of



the world's softwood trees are found in the Northern Hemisphere. And most of the softwood trees in the Northern Hemisphere are found in the Southern United States. Southern forests total more than 200 million acres in size, more than 40 percent of U.S. timberland.

In short, the South has the world's highest concentration of the most commercially suitable trees. Slightly less than 50 percent of southern timber is used to produce building products (lumber and plywood), while slightly more than 33 percent is used to produce pulp and paper products. Timber harvested for building products fetches substantially higher prices than that used for pulp and paper production.

The South is an excellent place to buy timberland for four reasons: 1) Climate, soils, and tree species result in high productivity; 2) Strong timber market fundamentals; 3) Active land markets; 4) Low-risk operating environment.

**High productivity.** The South produces more timber than any other region in the world. By combining leading-edge science with naturally high tree growth rates, timberland managers

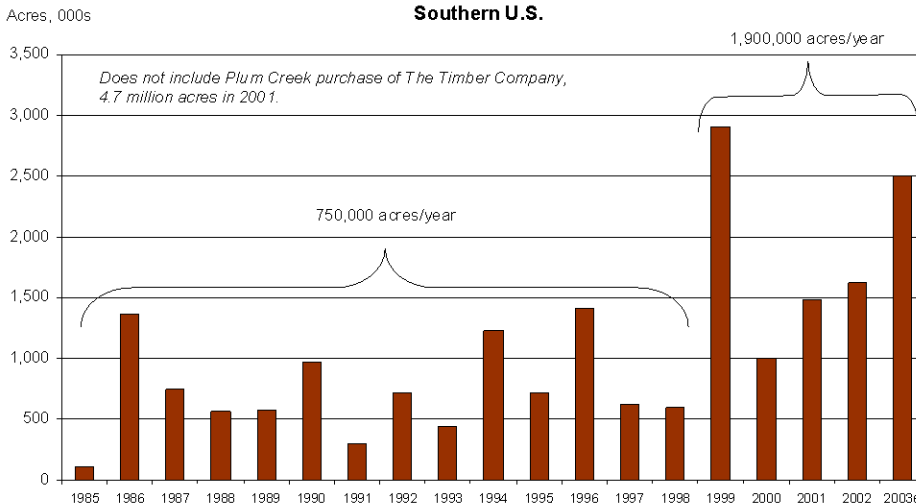
can easily double per-acre yields. Each year, Southern landowners plant 1.2 billion trees. Between 1995 and 2040, the USDA Forest Service predicts timber production in the U.S. will increase by about one third. Nearly all of this increased yield is expected to come from the South.

**Strong timber market fundamentals.** Southern forests produce a diverse mix of products, including softwood saw logs (28 percent), softwood pulpwood (25 percent), and hardwood pulpwood (16 percent) with the remainder grown for veneer logs, poles, pilings, fuel wood, and other products. The latest U.S. Forest Service assessment indicates that the South harvests 63 percent of the timber in the United States. The region is home to nearly 600 softwood mills and more than 150 hardwood mills, with a presence by most major forest products companies from Virginia to Texas.

**Active land markets.** With growing recognition of Southern timberland as a financial asset class, markets are now three times as active as they were in the early 1990s. Sellers are double-taxed C-corporations, paper companies, public equity investors and, to a smaller extent, private families. Buyers are pure timber investors, single-taxed or tax-exempt, private equity or REITs, and affluent private individuals.

**Low-risk operating environment.** Private individuals or businesses own 89 percent of the Southern forest, or more than 190 million acres. This, combined with the region's history of timber and agricultural production, creates a culture of acceptance for forestry activities. The industry

**Commercial Grade Forestland Sales  
Southern U.S.**





ranks number one or two in many Southern states in terms of economic contributions. This stands in sharp contrast to the Pacific Northwest, where more than 60 percent of the forestland is owned by the federal government. Historically, in that region, timber prices have had double the volatility as those in the South, as timber markets there are more influenced by changes in public policy.

### Current Supply, Demand, Price Trends

For the past few years, the timber industry has been changing from its historical strong vertical integration, in which forest products companies owned both timberland and sawmills, in addition to manufacturing facilities.

Since 1999, there has been a return to the “buyer’s market” throughout the South. Transactions of investment-grade properties now routinely exceed \$1 billion per year in the region. The near-term (3- to 5-year) forecast is for continued favorable conditions for investment-grade timberland purchases. Market intelligence indicates almost 3 million acres of southern timberland will come onto the market in 2003. Forest products companies still own

more than 30 million acres in the South and will be the primary source of timberland sales, but maturing Timberland Investment Management Organization (TIMO) assets will also provide significant sales volume.

Our view is that sufficient capital will be present to clear the expected transaction volume. Tax-exempt institutions will be net purchasers via the traditional TIMO structure. And affluent private investors are showing increasing interest in timberland, with many taking advantage of current interest rates to extend their buying power. Overall, we view timberland price levels holding at current levels through the remainder of 2003.

### Investment Characteristics

For investors with a long-term horizon, timberland offers six primary benefits:

- Superior risk-adjusted returns;
- Portfolio diversification;
- Capital preservation;
- Tax efficiencies;
- Manageable risk characteristics; and
- Non-timber value.

#### Superior risk-adjusted returns

The National Council of Real Estate Investment Fiduciaries (NCREIF) produces an independent, comprehensive measure of timberland returns. The NCREIF Timberland Index is based on the actual performance of managed timberland properties since 1987. Patterned after the NCREIF Property Index for commercial real estate, the timberland index aggregates property-level information to produce

Year	South	Pacific Northwest	Northeast	Total Timberland
1987	14.1%	36.3%	n/a	26.5%
1988	14.0%	71.1%	n/a	30.1%
1989	12.6%	74.4%	n/a	37.4%
1990	13.6%	7.8%	n/a	11.1%
1991	10.8%	29.9%	n/a	20.3%
1992	13.1%	60.5%	n/a	37.3%
1993	15.1%	27.3%	n/a	22.4%
1994	20.0%	10.7%	14.0%	15.4%
1995	13.7%	15.3%	3.3%	13.8%
1996	11.5%	8.9%	17.6%	10.7%
1997	24.3%	11.6%	18.1%	18.9%
1998	10.7%	-2.7%	34.9%	9.0%
1999	7.1%	13.7%	34.3%	12.9%
2000	2.3%	8.3%	7.5%	4.4%
2001	-4.1%	-8.4%	-6.2%	-5.2%
2002	2.1%	-1.1%	2.8%	1.7%
NCREIF Returns - Since Inception	11.1%	20.4%	13.3%	16.1%
NCREIF Returns - Last 10 Years	10.0%	7.9%	13.3%	10.1%

quarterly rates of return for the asset class. It also separates the total return into income and capital components and has weightings to all three major U.S. timber regions (the North, Northwest and South). Members who contribute data are investment managers and plan sponsors who own or manage real estate as fiduciaries.

Timberland returns in the Northwest have been strong but extremely volatile in the past 10-13 years. However, Southern timberland returns have shown steady, healthy growth with little volatility. Because of this, most experts think Southern timberland markets provide a better barometer of future industry returns.

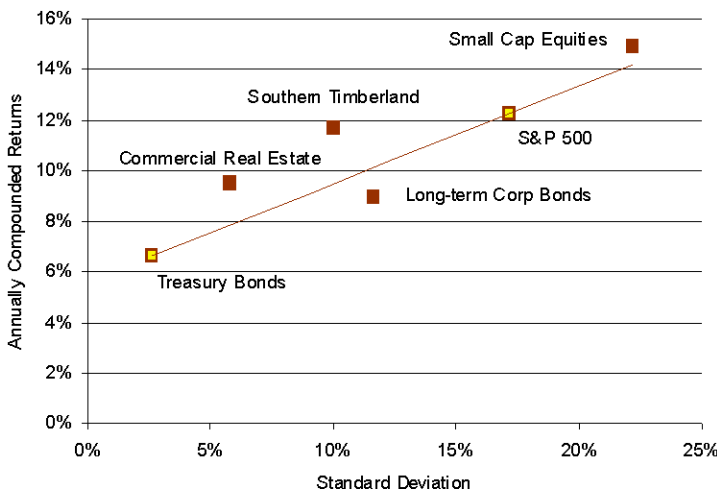
Since 1987, Southern timberland has earned more than 11 percent annually in unleveraged, pre-tax returns. Diverse timber uses and markets defray volatility, resulting in equity-like returns with the same level of risk associated with bonds. On a risk-adjusted basis, Southern timberland has compared favorably with most core assets in a typical portfolio – commercial real estate, corporate bonds, and the S&P 500.

As an illiquid, private investment, timberland trades in relatively imperfect markets. Inefficiencies in pricing allow managers with experience and expertise to produce superior returns. Moreover, as an agricultural crop, application of technology to profitably increase production can substantially affect returns. In fact, active management of forest assets can boost long-term total returns by as much as 400 basis points.

To be sure, maximizing timberland investment returns requires a strategic combination of both business and scientific acumen:

- **Disciplined acquisitions.** The purchase price can make or break a timberland investment. Successful acquisitions call for disciplined evaluations, superior knowledge of the asset class, deep relationships with buyers, a regional network of sellers, market-tested systems that allow for timely closings of complex transactions, and experience in negotiating and making opportunities happen.
- **Active forest management.** This is an asset where more than 95 percent of the revenue is produced from the sale of timber, and timber is produced via state-of-the-science forest management models. In the South, with its mild climate, high rainfall and fertile soils, advanced tree growing techniques can double yields, enhance forest values and increase net returns from 20 to 25 percent over a decade.
- **Targeted marketing.** Within a one-year cycle, timber prices may vary up to 30 percent. Detailed knowledge of local market dynamics, market timing and customer-specific marketing and sales strategies are required to consistently capture premium prices.

**Capital Market Line 1972-2001**



Source: Ibbotson Associates, NCREIF, RMS

- **Skilled timberland selling.** Opportunistic and strategic land sales can substantially affect total return. Tapping proprietary local-market intelligence allows an investment manager to continually evaluate changing land values and creates conditions for realizing each property’s full potential. In addition, specific exit strategies can be designed that maximize total land values by diversifying sales to the varied markets of investment, recreation and conservation buyers.

Historically, timber price appreciation has been a meaningful contributor to overall timberland returns as well. However, in our estimation, it is unlikely to be nearly as significant in the future. Because of this trend, investors should not rely on appreciation to meet target returns, especially since it is a passive benefit that cannot be influenced through either business or scientific practices.

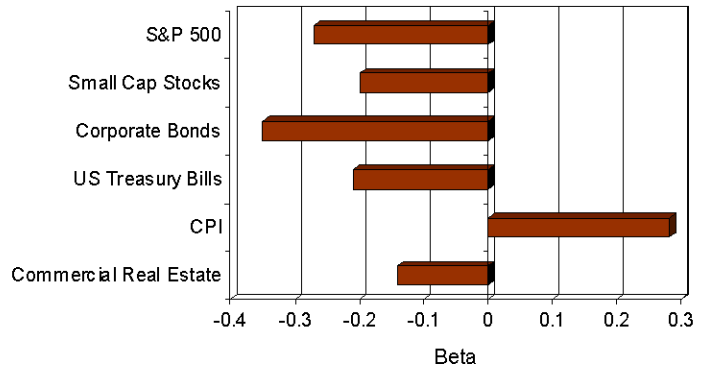
**Portfolio diversification**

Timberland returns move independently from other major asset classes. This independence and the asset’s unique biological hedge – trees keep growing in volume and value, regardless of market conditions – make timberland a powerful diversifier.

Research shows timberland to have weak or negative correlation with traditional assets, such as stocks, bonds and commercial real estate. In addition, timberland’s positive correlation to the Consumer Price Index (CPI) indicates that it provides protection against capital erosion during periods of high inflation.

To achieve diversification in a balanced portfolio, the amount of a timberland investment varies with the investors’ ownership objectives and familiarity with the asset class. Generally, institutional investors place from 1 percent to 2 percent of their portfolio in the

**Correlation of Southern Timberland Returns With Other Asset Classes: 1972 - 2001**



Source: *Ibbotson Associates, NCREIF, RMS*

asset class. However, timberland is considered a low-risk investment, and some private investors are comfortable with much greater exposure.

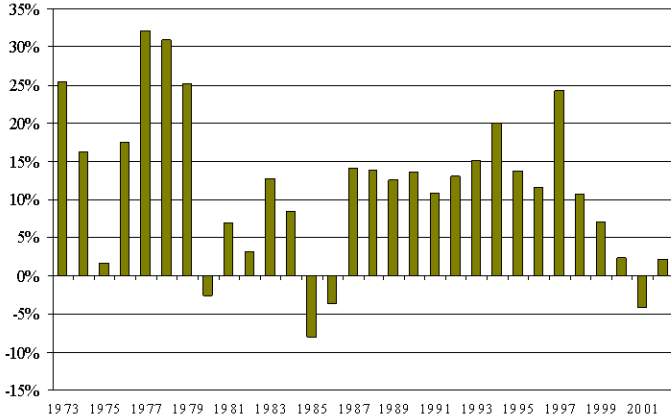
Timberland investors typically diversify geographically as well, spreading ownership of property over at least three geographic areas. This may mean buying properties in different counties, regions or states, depending upon the investor’s objectives. Geographic diversification has the added benefit of helping to mitigate operational risk as well.

From beginning to end, the timberland sales process – valuation, negotiation and closing – typically requires three to six months. If high timberland returns (or poor performance in other parts of the portfolio) push the allocation too high, investors have several options for reallocation. They might consider selling a portion of their holdings, harvesting the timber, or trading a higher-valued property (with merchantable timber) for a lower-valued one (with young, pre-merchantable trees on it).

**Capital preservation**

Southern timberland is one of the few production “factories” that has not lost value over time, making it an excellent capital-

**Southern Timberland Returns  
1973 - 2002**



Source: 1973 - 1986: RMS reconstructed returns; 1987 - present: NCRBIF Timberland Index

preservation investment. In fact, Southern timberland returns have been negative in only four of the last 30 years. In three of those years, declines were less than 5 percent. In many respects, timberland behaves as do absolute return strategies – where investment managers seek to produce consistently positive returns.

The basis for this absolute return element in timberland investments – and what makes timberland truly unique from other financial investments – is its “biological market hedge.”

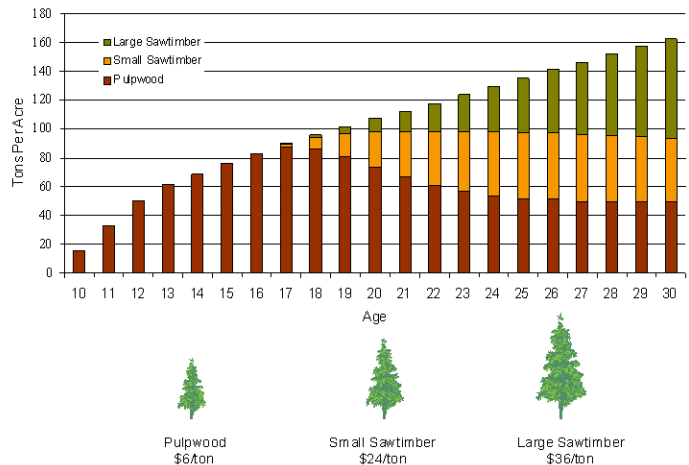
A working forest grows in both volume and value over time, regardless of whether financial markets go up or down. As long as rains come and the sun shines, trees grow larger, producing more wood. Timber markets place higher value on wood from trees of greater size and quality, so periodic jumps in value occur as trees grow into new product classes. In the fourth quarter of 2002, Southern pine trees that were five to eight inches in diameter sold for pulpwood, used to make paper, at \$6 per ton. Trees that were nine to 11 inches in diameter went for small sawtimber (lumber) at \$24 per ton. Still larger trees became higher value sawtimber, which averaged \$36 per ton.

Another aspect of timberland’s biological hedge is the lifespan of trees: they live for decades. Trees are not annual crops, like wheat or corn, that must be harvested each season. Instead, they “store on the stump.” This means that investors don’t have to sacrifice returns by harvesting when timber prices are low. They can be opportunistic timber sellers, halting harvests during depressed markets and accelerating harvests during stronger markets.

### Tax efficiencies

Tax efficiencies come through the treatment of timber and timberland sales, which comprise more than 95 percent of the revenue and return from a typical timberland investment. Revenue from these sales generally qualifies as long-term capital gains, which are taxed at a more favorable rate than short-term capital gains. In addition, timber depletion – similar to the depreciation of tangible assets – shelters a substantial portion of timber harvest revenues, particularly in the early years of a newly acquired property. Furthermore, operating expenses and interest costs, if leverage is utilized, create significant ordinary income losses, which can be used to offset income at a favorable rate differential.

**Volume and value growth of one acre of southern pine plantation**





### Timber Revenues Qualify As Capital Gains.

Revenue from the sale of timber on property held over one year can qualify as a long-term capital gain, provided the sale is conducted in compliance with certain Internal Revenue Service guidelines.

In essence, timberland investors are allowed to “sell their inventory” as a 1231 capital asset. Revenue is reduced by the costs of sales and timber depletion – the basis of the timber sold. This non-cash expense shelters a substantial portion of timber harvest revenues, particularly in the early years of a newly acquired property. In the first five years of a typical timberland purchase, depletion can equal 50 to 70 percent of timber sales revenues, then gradually declines to 20 to 30 percent after 10 years. The front-loaded nature of depletion enhances the after-tax present value of timberland investments.

### Operating Expenses Create Passive Losses.

Passive ordinary income losses generated by the typical timberland investment create another tax advantage. Operating expenses and interest

costs, if leverage is utilized, may be applied to any current-year income to the extent of income produced by the timber investment or other passive activities. If passive losses exceed passive activity income in a given year, the excess can be carried forward to offset passive activity income in later years.

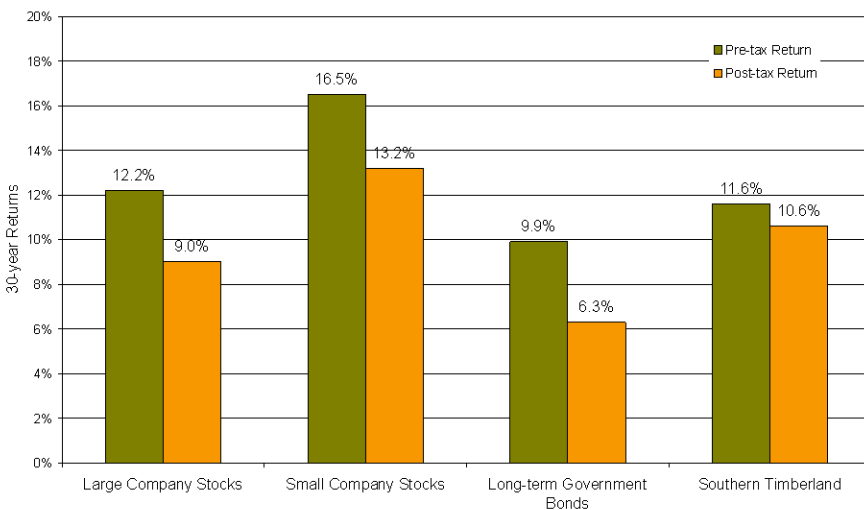
These two features combine to produce robust tax efficiency for timberland investments. Pro forma analysis of several timberland properties, with and without leverage, indicate effective tax rates ranging from 8 to 12 percent. This efficiency positions timberland returns even more favorably against traditional financial assets when compared on an after-tax basis.

### Manageable Risk Characteristics

As with all financial investments, timberland investments are not without risk. In the case of timberland, risk reflects uncertainty that projected harvests and cash flows will be realized. However, to a higher degree than with most other financial investments, sophisticated and diligent forest managers – and savvy asset managers – can help mitigate risk across several general categories:

**Liquidity risk.** Typically, the timberland sales process – from valuation to negotiation to closing – requires three to six months. This sales cycle is much shorter than it was a decade ago, thanks to a more mature market with a larger pool of buyers and sellers. In today’s active timberland markets, more than \$1 billion of prime southern timberland changes hands annually. Investors can minimize liquidity risk by acquiring timberland investments that are designed to meet their specific needs and risk profile. This requires due

Tax Efficiency of Timberland vs Core Assets



Data Source: Ibbotson Associates, "2002 Stocks, Bonds, Bills, and Inflation Classic Yearbook"; RMS Internal Data  
Assumptions: Ordinary income tax rate = 39.6%; Capital gains tax rate = 20%



diligence of property size, shape, quality, timber and land markets, use restrictions and geographic location, plus the development of an exit strategy. Still, timberland is essentially an illiquid asset and best suited for the long-term investor.

**Production risk.** On average, physical losses due to events such as ice storms, hurricanes, wildfire, insect damage and theft exceed natural tree death by about .5 percent of timber volume annually. In most cases, however, forest managers salvage between 50 and 80 percent of the salable timber volume from physical damage, mitigating loss. Moreover, leading-edge preventive forestry practices minimize the occurrence of insect damage and fire, as does constant vigilance on the part of all groups who use the forest.

**Market risk.** Inevitable price swings are caused by uncertainties in supply and demand. Asset managers can minimize this risk in a variety of ways, including: buying properties in areas with strong, diverse markets; storing timber on the stump during price slumps; altering management regimes – regarding specific tree species or age classes – to favor market upsides and product shifts; and developing “preferred provider” relationships and supply agreements with wood buyers.

**Regulatory risk.** Unlike in the Pacific Northwest, where most forestland is federally owned, in the rural South, most timberland is privately owned. In the South, there is a tradition of free-enterprise forestry. Professional forest asset managers seek to maintain that stable operating environment by enforcing high stewardship standards that meet or exceed local, state and federal guidelines for water quality, biodiversity and forest sustainability. Another aspect of regulatory risk – harvesting restrictions mandated by endangered species protection – is

significantly lower in the South, in part because of the lack of “old growth” forests that are the natural habitat of many protected species.

### **Non-Timber Value**

While up to 95 percent of the income on core properties comes from the sale of timber, many working forests enjoy additional income streams, including non-timber value derived from commercial development, recreational, and conservation use.

Timber tracts near large urban areas or along major interstate highways occasionally become prime land for commercial development as a result of continuing urban sprawl.

And timberland often is purchased or leased by hunting clubs, individuals seeking recreational use, and conservation groups who simply want access to pristine forest land.

### **Ownership, Investment Structures**

There are three basic ways to invest in timberland: Forest products industry stock, publicly-traded timberland vehicles, or various forms of direct private investment.

#### **Forest Products Industry Stocks**

For years, investors in stocks of integrated forest products companies have been *indirect* timberland owners. For these investors, stock ownership ensured liquidity, yet it did not offer the same benefits – in risk-adjusted rates of return, portfolio diversification and tax efficiencies – as *direct* investment. This is true for several reasons.

While many companies possessed substantial forest holdings, they based their financial performance – and forest management models – on revenues from manufacturing assets (mills, equipment, product), not the timberland assets.



As publicly traded stocks, these investments were highly correlated to the overall market, so they didn't offer the same potential for portfolio diversification as direct private investment. Finally, as C-corporations, these companies could not take advantage of the tax efficiencies enjoyed by private investors in direct timberland ownership structures.

### **Publicly traded timberland vehicles**

Currently there is just one publicly traded timberland option – a Real Estate Investment Trust (REIT) – for investors seeking a pure timberland play. Investments in a REIT provide liquidity and single-tax treatment for most income. Investors also capture the favorable tax rate for individual capital gains.

However, this type of investment vehicle is under intense pressure to maintain quarterly distributions. When timber prices are down, harvest levels must be maintained – or even increased – to sustain distributions, reducing long-term total returns compared to direct private investments. Another drawback to timberland REITs is that they lose the market hedge provided by private timberland investments. Historical data indicate that publicly traded timberland securities generally are positively correlated to the market at large, or to the performance of similar sectors within the market.

### **Direct private investments**

Increasingly popular over the last two decades, direct private investments in timberland are long-term, or relatively illiquid, since they are held as private assets instead of publicly-traded securities. Yet they are flexible and responsive to a variety of financial needs. For example, direct investors can maximize the diversification benefits of timberland by taking advantage of its

low to negative correlation to major financial assets.

They can also maximize total return, since they have less pressure to generate quarterly income. Owners can be more opportunistic timber sellers, utilizing timber's unique ability to store on the stump during depressed markets and be at the ready for accelerated harvests during stronger markets.

Direct investors also enjoy favorable tax treatment since they are taxed only once (unlike stock investors), with most income treated as individual capital gains. And they can pursue more active real estate or land sales strategies that upgrade their holdings and take advantage of opportunities that match their risk-return profiles.

## **The Investment Process**

### **Building a Portfolio – Property Acquisition**

Typically, from beginning to end, the timberland purchasing process—valuation, negotiation, and closing – requires three to six months. This cycle is much shorter than it was a decade ago, thanks to a more mature market with a larger pool of buyers and sellers.

In today's active timberland markets, more than \$1 billion of prime Southern timberland changes hands annually. Investors can minimize liquidity risk by acquiring timberland investments that are designed to meet their needs and risk profile. This means initial consideration of property size, shape, quality, timber and land markets, use restrictions and geographic location, plus the development of an exit strategy. Still, when compared with stocks, timberland is essentially an illiquid asset and best suited for the long-term investor.

Since the timberland purchase price is critical to long-term total return, most investors seek to buy at discounts. In general, discounts on purchases of timberland are a continuous function of scale. “Wholesale” prices for large purchases begin at about \$25 million, while “retail” prices dominate smaller deals in the \$1 million to \$5 million range. There are two primary mechanisms for timberland investments in the retail to wholesale range.

**Commingled funds.** The advantage of a commingled fund is that it pools the resources of more than one investor so each individual does not have to meet the total capital commitment. These funds are closed-end. With a targeted time frame for disposition of the property, the investments have less flexibility than direct separate accounts. Nevertheless, exit strategies are timed several years in advance to capture opportunistic sales and market upside.

**Direct separate accounts.** By their nature, direct separate accounts are more flexible. They can be customized from the outset to meet specific investor objectives. Once investments are in place, the investor retains total discretion

to change strategy as desired or dictated by personal circumstance. From acquisition through management and disposition, owners can make adjustments for cash flow, tax strategies, real estate opportunities, exit timing and estate issues.

### Adding Value Through Active Management

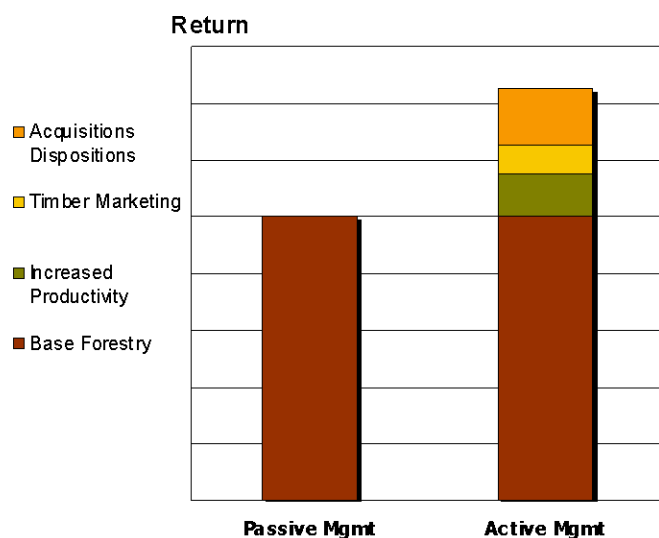
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In general, the percentage of annual rate of return from various timberland drivers breaks down like this:

- Timber growth 7 to 9%
- Timber price appreciation 0 to 1%
- Land price appreciation 0 to 1%
- Acquisition/Dispositions 3 to 5%
- **Total Return 10 to 16%**

It’s clear from this breakdown that applying state-of-the-science forest management techniques to promote timber growth – a practice known as silviculture – is the most important form of active management.

**Applied silvicultural systems.** Thanks to a combination of an advantageous climate, soil and silviculture, the South is the most productive wood-growing region in the world, according to the USDA Forest Service. Actively managed Southern timberland produces two to





four times as much wood as naturally growing Southern forests.

In general and non-technical terms, many forest management practices mimic components of naturally occurring events in the forest. There are several methods of increasing nutrients available for growing target trees (crop trees). Controlling competition or eliminating unwanted vegetation ensures all of the resources of the site are available for crop trees. In addition, thinning stands of crop trees reduces competition among those crop trees. Finally, forest managers manipulate resource availability by increasing the nutrients available to crop trees through fertilization.

Other forms of active management include:

- **Strategic timber marketing.** Within a one-year cycle, timber prices may vary up to 30 percent. Detailed knowledge of local market dynamics, market timing and customer-specific marketing and sales strategies are required to consistently capture premium prices.
- **Optimizing timber harvests.** By halting harvests during depressed markets and accelerating harvests during stronger markets, timberland managers make the most of market peaks.
- **Risk reduction.** Diligent forest managers – and savvy asset managers – can help mitigate liquidity, production and market risk, respectively, by tailoring timberland investments to meet specific portfolio requirements, through practices that prevent physical loss of forest land, and through customized asset management regimes and cultivating industry relationships.

## Exiting the Investment

Most tax-exempt and many private investors are long-term timberland owners and not in the business of real-estate speculation. They routinely sell timberland, but for strategic reasons. These include higher-and-better use, poor performance, or environmental sensitivity, which poses additional risk for investors. As such, they constantly upgrade holdings and maximize long-term returns.

On average, long-term timberland investors dispose of 1 to 2 percent of the overall portfolio annually in land sales. Recently, some investors have seen additional gains from timberland located in areas of the South undergoing rapid development, but these are exceptional market conditions.

Still, most investors have an exit strategy as part of their long-term management plan. Asset managers update this strategy as necessary and utilize it to effectively exit the investment as part of a planned, or unplanned, divestiture. Most begin work on this strategy three to four years prior to any planned divestiture.



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