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IWC NEWS

NCREIF INTRODUCES A NEW TIMBERLAND INDEX

The National Council of Real Estate Investment Fiduciaries (NCREIF) Timberland Committee unveiled the NCREIF Timber Fund and Separate Account Index (TFSAI) in the first quarter of 2012, offering a new way to measure timberland performance. The TPI measures returns derived from individual properties, while the TFSAI measures returns from timber funds and separate accounts. Timber funds may consist of one property or several, and can include leases and timber deeds. The TFSAI will be a welcome compliment to the TPI because manager fees, cash held by the fund, and fund level expenses are included in the return calculation and therefore offer a more comparable return to those seen by investors.

Key attributes of TFSAI

Some key attributes of the TFSAI are that it will incorporate fund level expenses such as legal, auditing, and other costs, cash, and advisory fees. Debt is also unrestricted for the TFSAI. One potential limitation of the TFSAI is data may change from now until the first quarter of 2013 due to adjustments and whether or not new fund managers choose to report.

Key differences between the TPI and TFSAI

IWC has identified several differences between the TPI and TFSAI, highlighted in Table 1. Of interest is the size difference between the indices. The TPI represents 52% of US TIMO owned timberland, 8% higher than the TFSAI. This is largely because the TFSAI requires 95% of fund assets on a net value basis to be located in the US. Since several timberland funds hold more than 5% of their assets outside the US, they are excluded from the TFSAI. Conversely, any properties located in the US in such a fund would be included in the TPI.

Another difference between the two indices is the level of debt and ownership of assets. Return on debt is not measured in the TPI as returns are calculated on a property's fair market value, exclusive of debt. In the TFSAI the performance of the portion of a fund that is leveraged is inherently measured in the return for the fund and therefore is measured by the TFSAI.

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Table 1: Comparison of selected aspects of the TPI versus the TFSAI

NCREIF TPI and TFSAI as of Q1 2012	Timberland Property Index (TPI)	Timber Fund and Separate Account Index (TFSAI)
Gross Market Value (billion USD)	22.9	19.9
Area (million acres)	13.3	11.9
Number of Properties / Funds	393	101
% of Global Investable Timberland (assume USD 130 billion investable universe - source: RMS 2010)	17 %	16 %
% of TIMO Owned US Investable Timberland	35 %	31 %
Use of Leverage	Unleveraged basis	21.6 % debt in funds at Q1 2012
Advisory Fee	Gross of investment advisory fees	Net of fees
Geography	100 % US	95 % of NAV must be in US
Make-up	Timberland properties with 80 % fee simple ownership	90 % of NAV must be timber, timberland, or cash equivalent
Ownership	Must own 80 % or more of fee simple - no debt greater than 20 % - performance of debt is not measured	Allow any level of debt (Debt in index is 21.6 %)

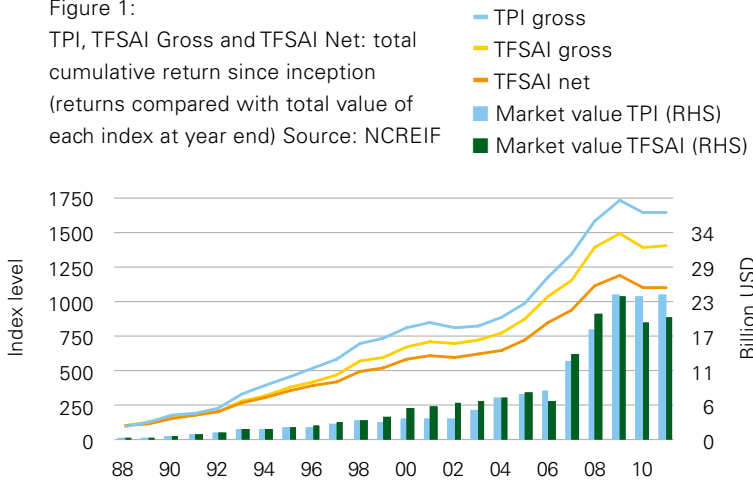
Returns: TPI versus TFSAI Gross and Net Total Return

The TFSAI can be further separated to account for different fee layers. IWC has been able to compare the quarterly returns for the TPI, TFSAI Gross, and TFSAI Net from 1987, when contributing members first started reporting the data, marking the base year for the TPI. As shown in Figure 1, the TPI provides a higher accumulated return than both TFSAI return indices. In a world without debt, the differences between the three indices represent different fee layers as introduced above. The TPI is calculated net of asset management fees, and asset level expenses, but gross of all fund level expenses, excluding fund management fees, fund level expenses, and cash drag on return (remember we are in a debt free world). The TFSAI gross includes all fees except fund management fees, and is net of asset management fees and asset level expenses. Thus,

the difference in the TPI and TFSAI gross is fund level expenses. The historical difference between these two indices is 0.80 %, corresponding to the average costs associated with fund management. The difference between the TFSAI gross and TFSAI net is fund level management fees. Logically speaking, the TFSAI net is the most comparable to the return an investor would see on their timberland portfolio. The TFSAI net is also net of any performance incentives if those exist.

The historical difference between the gross and net TFSAI is 1.10% corresponding to the average fund level management fee. Debt could increase or reduce the difference between the indices depending on the performance of the debt, but does not change the inherent message. Average annual returns over a 25 year period are 12.2 %, 11.4 % and 10.3 % respectively, illustrating various fees and returns with or without those fees.

Figure 1: TPI, TFSAI Gross and TFSAI Net: total cumulative return since inception (returns compared with total value of each index at year end) Source: NCREIF

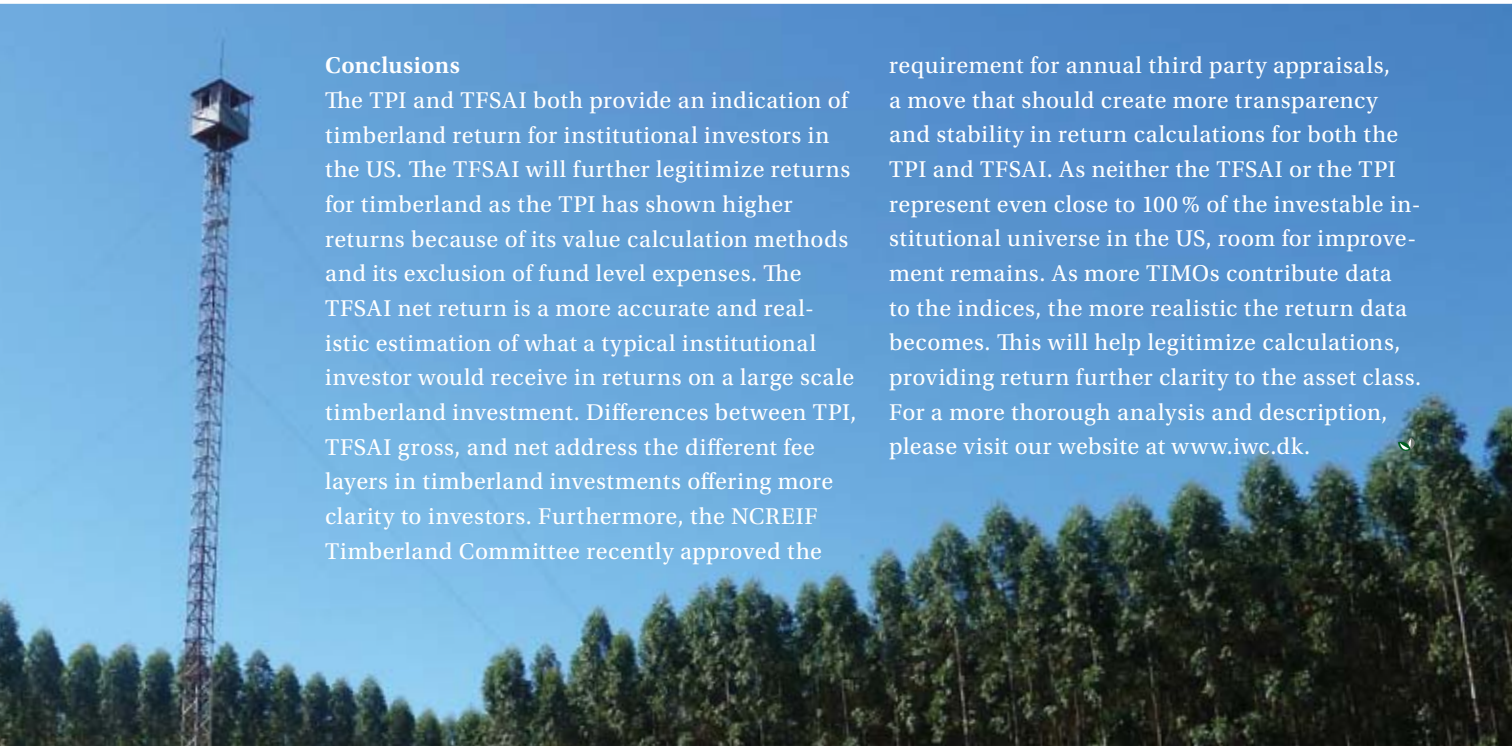


An assessment of key risk figures shows a slight difference between the TPI and TFSAI gross and net indices. Throughout the reporting period, average annual volatility has been 8.2%, 7.3% and 7.2%, respectively. Although the TPI exhibits the highest rate of return over the period, it appears that the risk-adjusted rate of return is actually equal the TFSAI gross index, expressed by a Sharpe Ratio of approximately 0.98 for the TPI versus 0.97 for the TFSAI - with an average 4.25% risk free rate applied. While the TFSAI net exhibits similar volatility, a somewhat lower annualized return brings the Sharpe Ratio down to 0.84.

Conclusions

The TPI and TFSAI both provide an indication of timberland return for institutional investors in the US. The TFSAI will further legitimize returns for timberland as the TPI has shown higher returns because of its value calculation methods and its exclusion of fund level expenses. The TFSAI net return is a more accurate and realistic estimation of what a typical institutional investor would receive in returns on a large scale timberland investment. Differences between TPI, TFSAI gross, and net address the different fee layers in timberland investments offering more clarity to investors. Furthermore, the NCREIF Timberland Committee recently approved the

requirement for annual third party appraisals, a move that should create more transparency and stability in return calculations for both the TPI and TFSAI. As neither the TFSAI or the TPI represent even close to 100 % of the investable institutional universe in the US, room for improvement remains. As more TIMOs contribute data to the indices, the more realistic the return data becomes. This will help legitimize calculations, providing return further clarity to the asset class. For a more thorough analysis and description, please visit our website at www.iwc.dk.



AFRICA - EXPANDING THE FOREST INVESTMENT UNIVERSE

Over the past 30 years, the forest investment universe has grown, both in value and in geographic spread. As institutional investors seek out ways to diversify their investments, hedge inflation, and attenuate risks in this turbulent economic environment, emerging economies need to utilize their natural resources to support domestic growth as well as boost their position for international trade. This article illustrates how both investor demand for suitable forest investments and emerging economy demand for growth can be achieved through the establishment of forest plantations on underutilized land in Africa.

Africa is growing

GDP is forecast to grow more than 5.4% in 2012; export industries are booming; government is stabilizing. So, are these headlines from an emerging Asian country? Definitely not! These economic realities relate to Sub-Saharan Africa. While the rest of the world has seen a lull in growth rates, Sub-Saharan growth has continued. To a large extent, growth has been fueled by significant interest in Africa's vast resource richness, but can also be attributed to the rise of the African middle-class, which has grown more than 60% over the past decade. Forward thinking international companies have acknowledged this potential, as seen in the doubling of foreign direct investments in the past ten years. That being said, many investors remain guarded.

Africans need more wood

With almost no commercial timberlands or productive natural forests to speak of, a supply gap is surfacing for the booming African construction industry, which has been sparked by rapid urbanization and the growing middle-class. This deficit will see Africans relying more heavily on imported forest products (Figure 1). Testament to this, Africa has seen the highest growth in sawn wood consumption over the past 50 years compared to all other continents (Figure 2), and in the last decade has grown as quickly as Asia. Even with these impressive numbers, per capita consumption remains the lowest in the world. This baseline is likely to grow as the expanding African middle-class becomes more affluent, continuing the trend to surpass all other regions in their appetite for wood products. When considering demand outside of Africa's borders, the continent is also well positioned (Figure 3) to benefit from growth in Asia as well as biomass hungry Europe – putting further pressure on Africa's limited forest resources.

Good growing conditions for plantation forestry

Africa inarguably has the largest area of underutilized, arable land in the world. While land is commonly used in low intensity agriculture systems, very little is intensively farmed. Based on FAO data (2010), there is approximately one billion hectares of underutilized or vacant arable land in Africa. While in many of these areas the soils are too depleted for agriculture purposes, they would be well suited for forestry, and in particular, plantation forestry. Though common perception dictates that Africa is dry and drought prone, the reality is that south of the Sahara and the Sahel belt there is sufficient rain for forestry.

The costs of plantation establishment

In most of Africa, land is owned by the state. This makes investments more complicated but also creates significant cost advantages for investing in the region. Governments are, in many African countries, eager to attract investment and together with local leaders and communities make large tracts of land available to investors at nominal per hectare costs, in exchange for jobs and development. It should however be noted

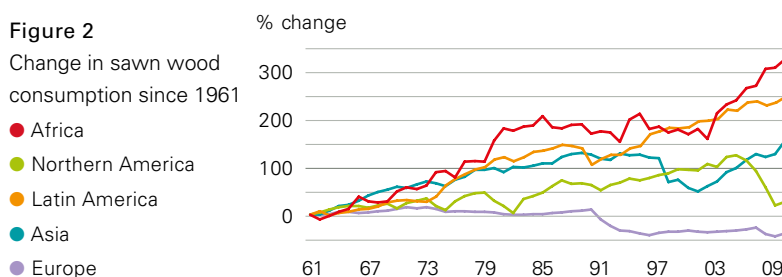
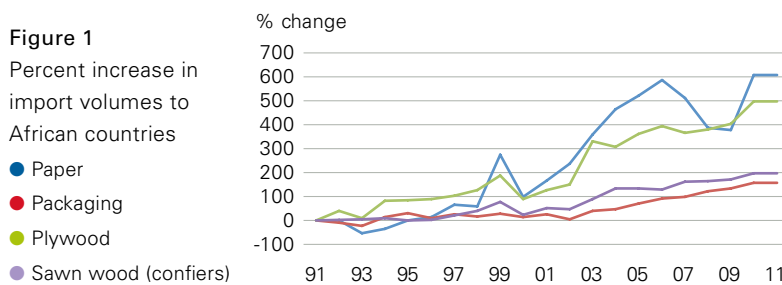




Figure 3
Distance to major
markets in miles

that while the direct cost of the land is low, indirect social costs often need to be absorbed by investors to secure local community buy-in. This could involve initiatives that shift attention away from unproductive agriculture, employment or development activities that improve the local communities' strength and reliance.

Best countries for forestry plantation development in Africa

While some African countries are large in size with a wealth of natural resources, others are small, landlocked and possess no natural riches to support their growth. Governance and political regimes are also extremely diverse, ranging from democracies in Ghana to kleptocracies in Zimbabwe. A recent report on forest investment in emerging economies points out that suitable investment opportunities are dependent on political, social and legal stability; sizeable investment area; good management history; and expected returns, liquidity and cash flow potential¹. To secure confidence in these factors, thorough due diligence is required in selecting the investment destination. To demystify the process and provide a sound base to evaluate new investment opportunities, IWC has developed an index (figure 4) that ranks the attractiveness of different African countries for green field plantation forestry investment. The index considers five criteria: land, cost, business environment, growth and stability, and forestry sector size and strength. Each of these is further divided into regionally significant indicators that contribute to the final score. While the index reveals that Tanzania, Mozambique, Ghana and South Africa currently top the list, it also brings new opportunities to light that may emerge in the coming years, such as Zambia, Rep. of Congo, Angola and Madagascar.

But all that glitters is not gold

We believe that Africa is poised for significant growth in forest plantation expansion and development. That being said, following on the "suitable investment criteria" listed above are other indirect costs and challenges that can not be neglected. One of these is the certification of the operation from a well recognized forest management certification scheme. In an African context, the Forest Stewardship Council (FSC) standard is the only viable solution. Still, very few plantation operations in Africa are FSC certified and local conditions can challenge managers in their efforts to align operations with the high number of certification criteria, especially when enforcement of basic law and order is not guaranteed. However, certification has clear advantages, such as price premiums on forest products, access to markets and the provision of a framework for improved communication with local as well as international stakeholders. Obtaining FSC certification will at the same time ensure periodical assessments of and reporting on environmental and social issues. In addition to achieving FSC certification and assessing country risk, a thorough and well developed strategic CSR plan is required upon decision to invest. This involves investment in the communities surrounding the plantations. Activities under such investment must improve local livelihoods while at the same time reduce operational risks. For instance, tenure security, labor shortage or lack of infrastructure. Furthermore, with limited availability of management and forestry expertise in the regions, additional costs should be expected – as both recruiting and retaining highly skilled personnel requires thorough consideration and time. It is here that investor in-country experience and an established network of relevant professionals are invaluable.

¹ FAO. 2012. Timberland in Institutional Investment Portfolios: Can Significant Investment Reach Emerging Markets?, by R. Glauner, J.A. Rinehart, P.D'Anieri, M. Boscolo, H.Savenije. Forestry Policy and Institutions Working Paper No. 31. Rome.



With the African index designed to address issues with respect to country stability, plantation suitability and investment performance potential; a solid plan to address social issues and operational risks; and the experience and network to secure qualified management – great opportunities exist – for local people on the ground, for development of the country as a whole, and for investment performance.

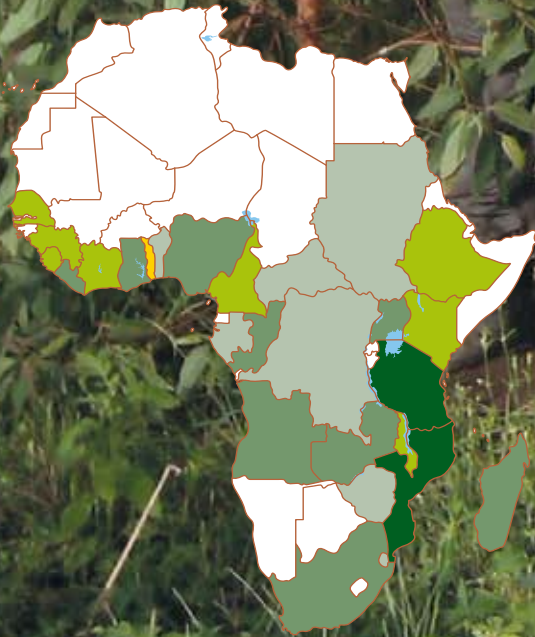


Figure 4
African index for greenfield
forest plantation investment

CRITERIA	COUNTRY	SCORE
LAND	● Tanzania	6,2
Availability	● Mozambique	6,0
Accessible	● South Africa	5,9
Suitability	● Ghana	5,9
COST	● Madagascar	5,8
Wages	● Zambia	5,7
Expats	● Nigeria	5,6
PPP	● Congo Republic	5,5
EASE OF BUSINESS	● Uganda	5,5
WB index	● Liberia	5,5
Security risk	● Angola	5,5
Infrastructure	● Malawi	5,4
GROWTH AND STABILITY	● Ethiopia	5,4
Market size	● Guinea	5,4
Growth	● Kenya	5,3
Inflation	● Cameroon	5,2
Debt rank	● Senegal	5,1
Euromoney risk	● Cote d'Ivoire	5,1
FORESTRY / HUMAN CAPITAL	● Sierra Leone	5,0
General education	● Benin	4,9
Importance of forestry	● Swaziland	4,8
People employed	● Sudan (south)	4,7
Industry: sawn wood	● Congo D. R.	4,7
Production: round wood	● Zimbabwe	4,6
Government forestry employee	● Gabon	4,5
Existing plantations	● CAR	4,5
	● Togo	4,1

IWC WELCOMES THREE NEW EMPLOYEES

Claus Adelhardt joined the Fund Investments team in August 2012 as Senior Portfolio Manager and is responsible for the follow-up of a number of fund investments and client portfolios.

Claus has 27 years experience from the Investment Management industry, holds a B.Sc. in Economics from Copenhagen Business School in Copenhagen, and is a CFA Charter holder. Prior to joining IWC, Claus worked for ATP Alpha running a number of absolute return strategies across asset classes. Prior to this, Claus held positions at ATP, Danske Capital and Danica

Pension as a Portfolio Manager of Danish, European and Global Equity portfolios; combined with responsibilities for external manager selection and alternative investments. Claus was also responsible for the implementation of one of the first foreign forest investments made by a Danish institutional investor back in the early 1990s.



"It gives me great satisfaction to be able to help promote green investments as part of an institutional investment portfolio. Given my background and long experience on the "buy side", I will aim to contribute to a continuing increase in value on our customers' timberland investments"

Edvard Fång joined IWC's Fund Investments team in July 2012, bringing over 13 years of investment experience from public and private equity markets. As a Due Diligence Manager, Edvard's role is to identify and screen potential timberland investment managers, as well as, to evaluate and select proposed fund investment opportunities. In this relation, Edvard participates in the entire due diligence process which includes sourcing, evaluation, negotiation, and closing of fund opportunities which are ultimately recommended. Edvard holds a Master of Law from Lund University in Sweden. Prior to

joining IWC, Edvard held a position at Vækstfonden (Denmark) as an Investment Manager focusing on investments in venture and buyout funds. Before that, Edvard worked for DONG Energy and TDC (both in Denmark) with M&A transactions. Edvard started his career within portfolio management at Svenska Handelsbanken (Sweden) with a focus on public equity.



"The idea of investing in a long-term growing tangible asset like forest, with the potential for attractive returns, is very appealing to me. From an investor's point of view, I believe the services and professional advice provided by IWC are very beneficial and important when allocating capital into this asset class."

Shauna Matkovich joined IWC in April 2012 as an analyst for the Investment Development team. Shauna tracks and analyzes market trends in the investment regions, edits IWC publications, such as the newsletter and quarterly timber market update, coordinates IWC's research efforts and monitors in-house compliance with fund and asset management standards. Shauna recently completed a Masters in sustainable tropical forestry through the University of Copenhagen and Technical University of Dresden. Previously, Shauna has worked as an opera-

tional forester in Canada and New Zealand. Her combined experience in commercial forestry and advanced education in emerging countries contribute to IWC's holistic approach to forest investment analysis and development.



"IWC represents the perfect combination of expert professionals, on-the-ground diligence, and forward thinking attitude, resulting in the delivery of unmatched forest investment services to our clients, for which I am proud to be apart of".

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