Investing in natural tropical forest industries

The low level of investment in natural tropical forest-based enterprises is a major limiting factor in the spread of sustainable forest management. Can it be raised?

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THE FORESTRY SECTOR offers an unusual opportunity to demonstrate how strongly commercial interests (the marketplace) and development and conservation objectives (the public good) can be aligned. Over the past decade, a small but growing number of companies in the forest products sector have emerged as innovators in the movement towards sustainable forestry. Low-impact forestry methods, local community involvement, forest management certification, green buyers' groups and affirmative government procurement programs have all become prominent. The idea that managing forests for multiple uses within the bounds of ecological limits makes solid economic sense in both the short and long terms is gaining momentum.

Clearly, one of the largest and least-addressed obstacles constraining the expansion of the sustainable forestry sector worldwide is the industry's lack of integration into the capital markets and, consequently, its poor access to mainstream private capital—especially in developing countries, where most of the world's remaining natural tropical forests are located. Today, private capital is a particularly critical issue, given the extent to which private capital flows to developing countries are rapidly outpacing public-sector financing.

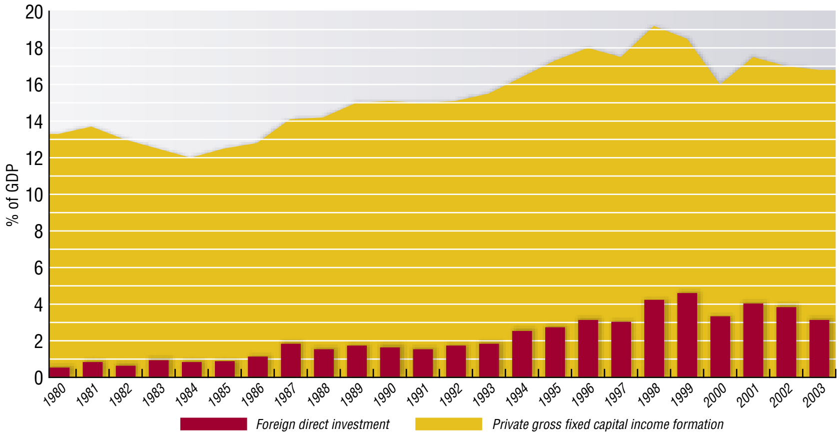
The global economy is worth about US$55 trillion (US$55,000,000,000,000) per year (gross world product) and continues to grow. In the United States alone, US$2.16 trillion in assets sit in professionally managed portfolios using some form of socially responsible investment screen. Harnessing the financial power of private investments is essential if the potential of well-managed forests to contribute to poverty alleviation, the protection of environmental services and sustainable economic growth in developing and transition countries is to be maximized.

The importance of domestic investment

When discussing the need to attract investment to the forest sector in developing countries, many organizations and governments tend to focus on large-scale international investors. However, the majority of the markets are domestic: for example, as much as 86% of the wood harvested in the Brazilian Amazon is consumed within Brazil, while log exports from West and Central Africa account for only 20% of the 25 million m³ harvested per year. Although developed countries now consume approximately 70% of industrial roundwood, the growth of consumption in developing countries is narrowing the gap: the consumption of industrial roundwood in developing countries grew by 3.2% per year in 1961–1997, in contrast to developed countries, where it grew by only 0.6% per year (Victor & Ausubel 2000). In the forest sector, it would be logical for much of the new global private investment to try to capture the financial gains from these rising domestic markets in developing countries, where the majority of the world's natural tropical forests are located. This aligns with global trends that show that while foreign direct investment (FDI) remains important in developing countries for foreign exchange earnings, skills and technology transfer, the bulk of private investment remains domestic across all sectors *(Figure 1)*.

Foreign vs domestic

Figure 1: Global private gross fixed capital income/foreign direct investment as percentage of GDP



Source: World Bank 2004

The diversity of the industry and the importance of small and medium-sized enterprises

Particularly in ITTO tropical producer countries, the forest products-related industry is quite diverse. It spans a broad range of products, services, firms and entrepreneurs, from individuals working informally, to small and medium-sized forest enterprises (SMFEs—see article page 10 for a working definition of these and a general discussion of them), to local manufacturing companies and multinationals. Primary manufacturers might include chainsaw operators or small sawmills, as well as large corporations, the annual sales of which might be larger than the GDP of many developing countries. All have the potential to invest productively, create jobs and expand—thereby contributing to economic growth and poverty reduction. Each type of business (or investment opportunity) can be affected differently by changes in international and domestic markets, as well as by changes in governmental policies and the general in-country business and investment environments.

Reflecting the fact that the overwhelming majority of global wood products are sold domestically, most forest operations (excluding pulp and paper) are small to medium in scale. Globally, small and medium-sized enterprises represent one of the faster-growing industrial sectors in the world. Brazilian small and medium-sized enterprises have grown annually by 2.8% and 4.7%, respectively, since 1995—much faster than have larger enterprises. This is despite the fact that they have a higher turnover failure rate than do larger companies, with 39% failing in Brazil within the first year (a reasonably average failure rate globally for small and medium-sized enterprises; May et al. 2003). Logging by SMFEs in Guyana contributes an almost equal amount to the revenue of the Guyana Forestry Commission as do large enterprises (Thomas et al. 2003). In China, more than 90%

of the total value of wood products is generated by SMFEs (Sun & Chen 2003). Because of their abundance, SMFEs employ large numbers of rural people: an estimated 17.4 million people (full-time equivalents) worldwide earned their living in the 1990s from formal-sector employment in forestry, wood industries, furniture and pulp and paper, but another 30 million were estimated to be employed in the informal sector (International Labour Organization 2001), where the size of enterprise is generally very small.

While SMFEs can potentially make a huge contribution to a country's overall economic development and poverty reduction objectives, they also face many more constraints to growth than do larger or multinational firms. Large firms share many of the characteristics of international firms—with more business and assets they have better access to capital and can better absorb fixed administrative costs such as permits, licences, certification costs and even bribes. Smaller operations, however, suffer from:

- **social isolation:** local ownership and management without access to a larger body of corporate protocols, expertise and advice;
- **financial vulnerability:** heavy reliance on owners' immediate financial resources, usually without substantial financial reserves *(see Figure 2)*;
- **political marginalization:** little influence over the market (due to low market share) and those who govern the market; and
- **corporate expediency:** driven by immediate needs without the reserves or scale efficiencies to implement long-term sustainability (Thomas et al. 2003).

Many smaller enterprises—in particular those that are community-based—have only recently been able to register and move from the informal sector to more formal arrangements. As new enterprises, they must quickly gain experience and resources in order to comply with existing regulations—and with quality criteria for export markets. Smaller firms face higher constraints to entering the certified timber market due to certification costs, the difficulty in marketing small volumes of certified wood, access to buyers, and product quality issues.

Temporary working capital: the forgotten finance need

Much of the attention on investment needs in forestry has focused on the acquisition of major assets, with little attention going to the short-term financing needed to overcome temporary working-capital problems. In an ideal setting, firms would use cash reserves in bank accounts to cover periods in which their costs temporarily exceed revenues or when shortfalls are created by delays in the receipt of sales revenues. Firms with cash shortfalls find their liquidity problems turning into solvency problems when they cannot pay expenses or take on new orders while they wait to collect on the last sale. The inability to take on

Types of private investment and investors

Developed financial markets have many types of lenders and investors with a large variety of credit and equity products and financial services. In the tropical emerging markets, however, only a few types of investors and lenders appear relevant at this time.

Industrial investors invest strategically in forestry operations to use the wood as raw material inputs in their manufacturing operations. Industrial investors may set up listed companies where stock exchanges allow companies to include concession rights as qualified assets, thus giving the corporation access to large capital markets. The operations can be highly leveraged[1], permitting the corporation to control significant forestry assets with very little of its own capital at risk.

Investment funds generally take minority stakes in the marketable securities (stock and bonds) of qualified forestry and forest product companies. They market shares in the fund to retail and institutional investors. This excludes their direct participation in non-listed private companies (such as middle-market companies and informal forestry operations).

Timber investment management organizations (TIMOs) are investment funds that actively manage forestland assets on behalf of other investors, such as pension funds and wealthy private investors (see article page 9).

Pension funds provide coverage of future retirement liabilities and therefore seek long-term assets to match the timing of cash inflows against long-term liabilities to retirees. Pension funds are good candidates for forestland investment, but not in high-risk, emerging markets. Some are constrained by their guidelines from owning any foreign equities.

Like pension funds, **foundations and endowments** have long-term or perpetual investment horizons. They are conservative and seek to maintain the purchasing power of their portfolios and generate current income to support their grants and mission objectives of a charitable or educational organization.

Private equity investors provide equity and debt to enterprises, earning capital gains from the appreciation in value of their investments. They might buy a company, grow a company, sell it or take it public, recouping their principal and releasing their gains.

Venture capitalists provide equity and debt to enterprises, particularly young firms that have significant growth prospects and little or no access to regular capital markets. They may be general partners in forest management companies, majority shareholders, joint-venture strategic partners, private equity investors or hedge funds. Like private equity investors, their strategy is usually to grow a company, sell it or take it public and make returns from capital gains.

The socially responsible investment (SRI) market, which screens for socially responsible objectives, controls US$2.16 trillion in assets in the United States alone. In most cases, SRI investors screen out companies that violate good governance, environmental and social standards. One of the inclusive screens used for forestry-related assets is certification.

Lenders: equity provides a capital borrowing base, but most operations mainly need simple, affordable working capital and equipment finance.

Project funding and commercial banks: banks provide credit, working capital lines of credit and equipment leasing. Commercial banks and other debt providers expect to be repaid their principal and interest from the earnings and cash flow of the company, and therefore their analyses focus on the enterprise's cash flow to measure debt service capacity and the probability of repayment. They require collateral and security as secondary sources of repayment.

Revolving credit facilities serve to bridge cash-flow shortfalls and timing delays for customers. As a rule of thumb, asset-based lines of bank credit will provide up to 70% of the value of uncollected customer invoices (accounts receivable) and 30% of the value of unsold inventories.

In tropical countries, banks often shun all but the largest corporate players in the forestry industry. With credit guarantees in place, banks may be willing to relax some of their requirements. Local loans backed by bank guarantees are the first window of commercial finance open to forestry enterprises in most developing countries.

Equipment manufacturing and distribution companies: in a lease, the customer has rights to the use of the assets, but the ownership of the assets resides with the lessor. In many places, equipment leases finance about 85% of the equipment value, with 15% put up by the firm as its equity stake. Equipment leases are particularly valuable to new forest operations or expansions as they give asset-based access to medium-term financing (which banks rarely provide in developing countries).

[1]Leverage is the proportion of debt-to-equity in a business. The result you get after dividing debt by equity is the percentage of the company that is indebted (or 'leveraged'). Where debt funds a large proportion of assets, the company becomes exposed to fixed-debt service obligations.

new or larger-than-usual orders places a severe constraint on a firm's ability to expand.

In economies with more developed and competitive banking sectors, commercial banks are used to bridge cash shortfalls or to fill a large order that would otherwise have to be declined for lack of liquidity or working capital. But in lesser-developed financial sectors, banks tend to avoid retail credit risks and usually do not provide producers—particularly SMFEs—with such working capital. Many banks will only provide cash-flow support if the company has real-estate assets or other solid collateral; it is rare to find developing-country banks providing lines of working capital based on the sales and inventory of a company. Many smaller enterprises may gain access to finance through informal money-lenders but face high interest rates when they do so.

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Who are the international investors and what are they looking for?

Using analyses of varying degrees of sophistication, all investors systematically assess the nature of investment prospects and their perceived benefits and risks. They identify the sources of value in the investment and the factors that pose risk to profitability and asset value. Different investors emphasize different aspects of the investment, and their assessments reflect this. Direct investors such as industrial groups and pulp-and-paper companies value natural forests as a source of low-cost raw material. They are looking not so much for profits on the forest management side but for cheap fibre, which gives them higher margins downstream and low prices that allow them to conserve cash flow. Forest product companies issuing securities have large capitalization, good market liquidity, investment research coverage, and a long cycle of market history. Liquidity in investments is a key factor for most investors, particularly in cyclical investments. The *box* lists the main types of investors and their interests.

Risk ranking

Number of ITTO producer countries appearing in each of the four quartiles of two global investment climate indices (2005)

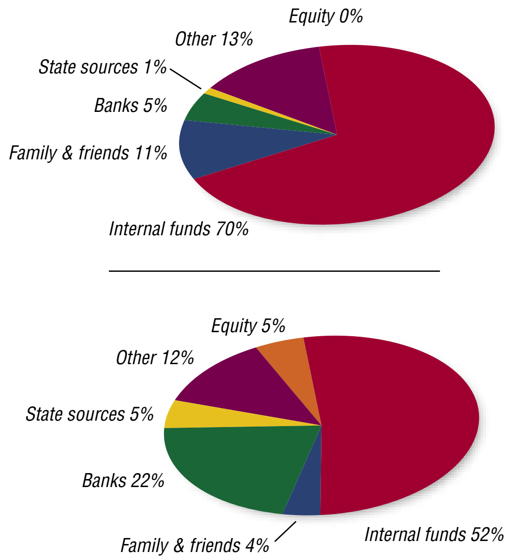
PERCENTILE OF ALL COUNTRIES	*EUROMONEY* COUNTRY RISK INDICATOR *(ORIGINAL SCORES)*	TRANSPARENCY INTERNATIONAL CORRUPTION PERCEPTION INDEX *(ADJUSTED SCORES*)*
Top 25%	0	1 *(Malaysia)*
2nd Quartile	14	12
3rd Quartile	9	9
Bottom 25%	10	10

**Adjusted score missing for Vanuatu*

Adapted from Euromoney Country Risk Indicators (2005) and Transparency International Corruption Perception Index (2004)

Money-lenders

Figure 2: Sources of financing: small firms *(top)* versus large firms *(bottom)*



Source: World Bank 2004

Professional investors usually have a systematic process for screening large numbers of prospects before progressively narrowing down the qualified selection pool ('deal flow'). They weigh the risk versus the likely return: in this terminology, risk is just the inverse of return and therefore risk/return can be thought of as opportunity versus constraint. The first screens are fast and inexpensive, but screening becomes progressively more detailed and expensive as prospective 'ideas' emerge from the pool. Tropical forestry investment in developing countries is often eliminated in the first screen simply on the grounds that the prospects are in countries with poor investment climates (governance problems, political instability, etc).

Factors that influence investment can be broken down into three differing levels of risk/return.

1) **Country investment climate factors ('country risk' or 'general business environment'):** here, investors consider the broad economic, legal, regulatory, political and social factors that could affect an investment. *Figure 3* shows the major factors affecting overall private investment, of which political uncertainty and macroeconomic instability are generally the most important.

   The benefits of lower costs in labour and raw materials in many tropical forested countries have been countered by factors related to an overall poor investment climate at the country level: the added costs of poor infrastructure and telecommunications and the high cost of capital, power outages, bribes and other inefficiencies. The World Bank's investment climate surveys and other expert polls attempt to quantify the cost of country-level governance failures to the firm-level bottom line. Surveys of Cambodian businesses across all sectors, for example, report that 18.9% of their annual sales are lost due to three sub-indicators alone: percentage of sales lost to bribes, crime, and electricity outages. For these same indicators, Brazilian surveys report losses of up to 6.6% of sales, and in Ecuador 14.4% of sales. In expert polls, it is reported that the number of days required to enforce a contract in Brazil was 566 in 2004. In Guatemala and the Democratic Republic of Congo, these numbers soar to 1459 and 909 days, respectively. This is compared to the average 280.2 days reported in high-income countries, and the world average of 388.3 days (World Bank 2004).

International investors might consult several of the many investment climate indicator analyses published by international organizations and specialized research organizations, or industry publications such as *Euromoney*'s country credit ratings and *The Economist Intelligence Unit*'s country risk service. These indices all consider criteria such as government and currency stability, infrastructure provision, levels of corruption, crime and law enforcement, and the adequacy of legal systems as major factors affecting the investment climate in a particular country. Many ITTO producer countries do not fare well according to these aggregated rankings *(see table)*.

2) **Forest industry factors ('industry risk'):** these factors include the commercial viability and behaviour of an industry, supply and demand conditions, the level of industry maturity and growth, the degree of competition, technology change, and other factors that could affect sales and margins for a business in the industry. They can be broken down into global industry risk and country industry risk. The structure of the industry in the country, rather than the types of trees or products, often determines whether a forestry portfolio will develop. Key factors include a clear (probably private) ownership structure, a close link between forest management and market penetration, clear legal liability for the effects of forest management strategies (damage to the environment and the impact on local communities), and a realistic pricing of the forestry asset for the companies concerned. It is important to understand the federal, provincial and state roles in regional economic development plans as well as the outlook for pending legislative changes and renewals regarding import or export restraints.

3) **Company (firm-level) factors (company risk):** these assess the asset quality, competitive strategy, products, growth prospects, production, marketing, management, operating and financial performance and funding capabilities of an investment prospect. One of the key elements of successful venture capital investments is the ability of the entrepreneurs to manage their businesses successfully (Moles 2003). To gain mainstream investor attention, prospective companies must have a history of successful operations, at least in the areas of operations and sales. Good management is scarce.

China and India provide compelling examples of investment climate improvements at the country level that have driven economy-wide growth and fuelled poverty reduction.

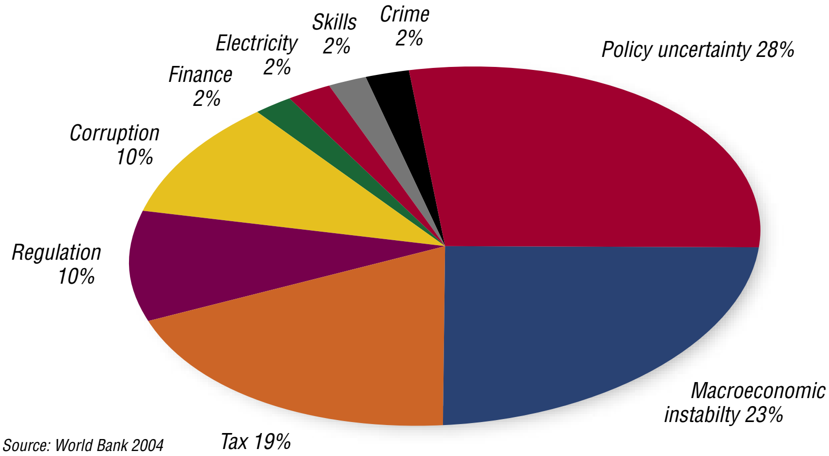
Conclusion

Governments have an important role to play in creating a climate in which forest product-related firms and entrepreneurs of all types—from micro-enterprises to local manufacturing companies and multinationals—have opportunities to invest productively, create jobs and expand, and thereby contribute to growth and poverty reduction. While governments cannot change the geography or natural resource base of a country, they have significant influence over important factors such as the security of property rights, the approaches taken to regulation and taxation (both within and at the border), the provision of infrastructure, the functioning of finance and labour markets, and broader governance issues such as corruption. Governments are increasingly recognizing that their policies and behaviour play a critical role in shaping the investment climates of their countries. China and India provide compelling examples of investment climate improvements at the country level that have driven economy-wide growth and fuelled poverty reduction. Governments, industry and other members of the international community can encourage investment in natural tropical forest-based enterprises in a number of ways, as described below.

More attention needs to be paid to supporting the growth of small and

Money worries

Figure 3: Major concerns determining private investment, global



Source: World Bank 2004

medium-sized enterprises: development agencies such as the World Bank and the International Finance Corporation should create mechanisms to address barriers to growth in SMFEs.

There is no substitute for good governance: governments must balance measures to encourage private investment with other broader societal interests, such as ensuring an adequate tax base for financing governmental programs—which bring positive benefits back to companies in the form of infrastructure development or educational programs that produce skilled labour—and safeguarding environmental and social rights. International firms can work more proactively with governments to make them aware of the negative impacts of poor governance. Retailers and private financial institutions could require certified sustainable or legal wood products, thereby helping governments to eliminate the problem of illegal logging, which undercuts the profits of legal operations.

Several investment institutions now recognize the importance of independent verification to ensure that forest products from developing countries maintain their credibility in environmentally sensitive markets, especially parts of Europe.

Skilled worker and labour markets are needed: increased funds and modern technology will not improve an enterprise that lacks sound management, good products, sales channels and successful buyer relationships. Governments can foster a skilled workforce through basic education programs and labour market interventions that promote higher skills and help workers cope with change.

Investment and risk guarantee mechanisms which work in developed countries need to be adapted to the natural tropical forest context: many investment mechanisms in use in developed countries today are simply not useful in the tropical natural forest-based industry because of long-term country risk. Security programs for responsible private investors could be supported. The Multilateral Investment Guarantee Agency and the World Bank Group could create funds that recognize the role of responsible private investment in economic and social development in its client countries and help reduce insurance premiums for sustainable forest operations.

Stimulate demand for products made from responsibly-produced wood: in the corporate world, sustainable management methods must pass a basic value test of reducing risk, improving margins and increasing growth. Several investment institutions now recognize the importance of independent verification to ensure that forest products from developing countries maintain their credibility in environmentally sensitive markets, especially parts of Europe. The objective is to stimulate demand for products made from responsibly produced wood, improve the business management and production of project partners, and promote financing and investment opportunities within supply chain.

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