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CONSERVATION PARTNERSHIP ECONOMICS

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(The following discussion is clarified by the accompanying simplified spreadsheet model.)

PREMISE

The historical model for the relationship between Conservation and private investors is inefficient for Conservation and deprives private investors of certain benefits available from partnership. The partnership model is based on the following:

1. Advantage of the partnership model to Conservation derives from its ability to increase Conservation's scale, providing programmatic access to wholesale transactions.

2. Conservation has a competitive advantage resulting from its relatively low cost of capital and the fact that it values attributes that financial investors do not value. Where conservation value is high, this competitive advantage will benefit Conservation's financial partners through increased buying power and lower bidding risk.

DEPICTING CONSERVATION COST OF CAPITAL

Because much of Conservation's capital comes from philanthropic sources, their funds are frequently misinterpreted as having zero or negative cost. However, owing to its scarcity, competition for its attention from myriad uses, and its need to be replenished, like other capital, it has real cost. Because conservation projects generate social rather than economic return, their cost is difficult to characterize and cannot be measured through traditional application of the Capital Asset Pricing Model and related tools. A logical proxy can be found in Program Related Investments (PRIs) made by foundations. PRIs are loans made to conservation organizations with a term of 2 to 4 years at an interest rate approximating the rate of inflation, roughly 2.0% (0% "real", i.e., net of inflation). In some form, interest must be paid and capital returned to the lender through philanthropic fundraising, public funds, bonds, or financial investments.

If one assumes that social returns have a financial cost of 2.0%, where conservation projects have financial corollaries, as with working forest easements, return of investment plus interest can be depicted as achieved through simultaneous investment in the parallel financial project. Whether or not this actually occurs is not germane, since, if not, it must be achieved through some other costly parallel effort. The opportunity to return capital through a closely related financial project is merely convenient.

In the case of working forest easements, with each investment in forest conservation, there is a corresponding and complementary financial timberland investment. Here, Conservation is depicted as making (1) an investment in an easement in which return of capital and interest is foregone and (2) a corresponding investment in the related financial project that generates the same return to Conservation as to any other financial investor.

So long as the weighted average return from these two investments is 2.0% or greater, Conservation's cost of capital will have been met.

Application to Mission Related Investing

Foundations, with some exceptions, typically maintain an unassailable wall between program and investment arms, preferring to invest corpus in anything that maximizes return. While this strategy has been exceptionally difficult to alter, there is considerable discussion within the foundation community about Mission Related Investments (MRI), i.e., financial investment of foundation corpus in investments consistent with its philanthropic mission. In the forest investment model discussed here, it is possible to achieve both conservation and financial goals without attempting to breach the wall. That is, in a given investment, the foundation's investment arm can realize a full market risk-adjusted rate of return made "mission-consistent" through a contribution to easement ownership or preservation from the program division. Thus the "wall" can remain - only communication and mission fit are required.

As an example, in the forest conservation model considered here, where the expected market return is 8.0% real, the PRI rate is 0.0% real, and the cost of conservation is 30% of total value, the blended return is 5.6%. Where the blended cost of capital of investment and program divisions in order to maintain and administer corpus is 3.0% real, cost of capital in this case will have been exceeded by 2.6%. [1]

THE TIMO MODEL – Refer to Conservation Economics Spreadsheet – TIMO Model

TIMOs have typically seen Conservation as a means of enhancing financial return or "stretching" private capital in order to be more competitive at the bidding table. This strategy relies on maintaining maximum negotiating distance from Conservation and selling socially valuable local geographies to them in post-closing flips. Thus Conservation has typically acquired property at retail prices approximating their full "hostage" value.

- **Development**. A component of the property has its highest use in development. A portion of this has no conservation value and is thus sold to development at closing for $3.0 million.

- **Development Sold to Conservation**
  - The balance of development property also has value in preservation and is thus held for sale to Conservation in three years. Its current wholesale value is $6.3 million.
  - **Required Return**. The TIMO requires a return of 12.0% on this component to compensate its investors for development risk, for holding for future sale, and

[1] **This example is highly simplified and illustrative only. Internal cost of capital and its calculation are specific to each foundation.**

because selling to Conservation at retail allows for higher appraised value. At 12.0% for three years, the retail price to Conservation is $8.9 million.

- **Easement**. TIMOs are easement averse. No easement is placed on the timber component.

- **Timber Component**. Valued at $64.5 million. Requires return of 8.0%.

- **Market Rationalization**. The market rationalizes at $73.8 million, within the appraised range of value of $73.5 million, plus or minus 2.0%. This represents FMV and the total proceeds to the Seller.

THE PARTNERSHIP MODEL – Refer to Conservation Economics Spreadsheet – Partnership Model

- **Development.** Similarly valued at $3.0 million and sold at closing.

- **Preservation**. Similarly valued at $6.3 million. In the Partnership model, however, Conservation acquires the preservation component at closing at the wholesale price. No risk premium is paid.

- **Easement.** In addition to Preservation, Conservation also acquires a restrictive easement on the timberland component.

  - Easement cost is the residual that, together with other value attributes, equates total value with FMV.

  - Easement cost, borne by Conservation, is $4.2 million.

- **Timber Component**
  - Represents the financial component of the transaction, valued at $60.3 million. The easement diminishes current value of the timberland as a result of restricting interim harvest levels, but increases 10-year value by increasing inventory.

  - **Easement Risk Premium**. Because easements are perceived as an investment risk for diminishing liquidity at the terminus, investors require a premium return to compensate them for this risk. The amount of premium varies with the easement and property, but has been determined by transaction evidence to range from 100 to 150 basis points. In this example, premium is 125 basis points.

  - Where easement risk can be managed through easement design and monitoring, private investors have the opportunity to earn a premium return without risking Private Benefit in a 501(c)3 context.

  - **Total Return**. Total required return to the financial investment, including easement risk premium, is 9.25%.

- **Market Rationalization**. As in the TIMO model, the market rationalizes at $73.8 million, within the appraised range of value. This represents FMV and the total proceeds to the Seller.

- **Investment Allocation to Conservation**

  - The means by which conservation earns its cost of capital is through a complementary investment in the timber component. On this component, Conservation is an investor like any other and enjoys the same rate of return**.** In this example, Conservation is allocated 40% of the financial investment.

  - Conservation also requires the 125 basis point risk premium required by financial investors. In addition, Conservation may adjust the risk premium to accommodate the value of the property's conservation attributes. Where conservation value is low, risk premium will be higher. Where conservation value is high, risk premium will be low.

  - **Total Conservation Cost of Capital.** In combining conservation costs with its share of the financial investment, Conservation must meet or exceed its cost of capital, including risk premium, of 3.25%

  - **Total Conservation Return.** Conservation earns an average return of 4.3%.

  - **Conservation Surplus.** Conservation value is the full value that Conservation would be willing to pay for conservation attributes if required to do so. It may be greater than, equal to, or less than conservation cost. As with consumer surplus, conservation surplus is defined as the difference between conservation value and conservation cost and is determined by total investment return relative to cost of capital. In this example, Conservation enjoys a surplus of 1.0% of return, or roughly 33% higher than it requires.

- **Competitive Advantage**

  - Where conservation value is high and Conservation enjoys a surplus, it has a marginal competitive advantage against financial investors. This results from the fact that Conservation, if viewed as both financial and conservation investor, values social attributes that financial investors can value only in an after market. Using their surplus they can bid marginally more for the conservation component than the financial investor up to the point that their blended return is equal to their cost of capital.

  - **UASFLA.** In addition to cost of capital limitation, Conservation is also limited by the Uniform Appraisal Standards for Federal Land Acquisitions (UASFLA). Where Federal funds are used, UASFLA limits Conservation to paying FMV without consideration of sales comparables reflecting "environmental" value. At

the retail level, Conservation has dealt with this through exploiting discontinuities in the appraisal process.

- At the wholesale level, however, appraisal results in a somewhat wider range of valuation and conservation may pay what it wishes within that range. Thus, rather than paying greater than market value, at the upper end of the range, Conservation may define the market, paying marginally more that other bidders but remaining within the appraised range of value. In this case, assume appraised FMV is $73.5 million, plus or minus 2.0%.

- **Example**

  - In this example, where Conservation enjoys a surplus of 1.0%, assume they wish to insure success by consuming a portion of the surplus and that a ***Marginal Applied Competitive Advantage*** (see model assumptions) of 10% of conservation cost will provide this insurance.

  - **Market Rationalization**. Application of 10% causes the market to rationalize $1.05 million higher than it otherwise would, still within the range of appraised valuation, but higher than financial investors would be willing to pay.

  - Conservation wins the bid, paying market value, but still enjoying a surplus of 0.6%.

- **Partnership Advantage**

  - The Partnership allows Conservation the ability to participate at landscape scale where its competitive advantage can be efficiently applied.

  - While private investors cannot enjoy a premium return by transferring risk to Conservation, partnership with Conservation on properties with high conservation value can make them more competitive than unaligned financial investors.

  - Because of its low cost of capital, in the case of acquisition of local preservation geographies, the ability to buy now at wholesale rather than buying later at retail can save Conservation PV dollars that can be applied to the acquisition of landscape level working forest easements. In this example, savings is $2.04 million. ***Refer to Partnership Model.***

  - Where easement risk proves to be perceived rather than actual or can be managed through proper design and monitoring, financial investors may earn a premium return.