## Pricing Non-Publicly Traded Limited Partnerships

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In order to quantify the discounts to Net Asset Value at which syndicated limited partnerships ("LPs") trade in the secondary market, we studied 146 different limited partnerships for which prices were reported in the period of April through May, 1993. We found that market discounts were much larger than accepted in recent tax court decisions, especially for partnerships which are not making current distributions.

Data for the average prices reported and 18 other variables were compiled for 185 partnerships, and then edited to remove partnerships for which the data was incomplete. The remaining 146 partnerships were classified into several categories, depending on the nature of the assets. The following table summarizes the average discounts to Net Asset Value and range (within one standard deviation) by category, reflected in the LP's pricing.

| L.P. PRICING DISCOUNTS TO NET ASSET VALUE |  |  |  |
| :--- | :--- | :--- | :--- |
| Average and Range | Mean | High | Low |
| All Limited Partnerships | $38 \%$ | $61 \%$ | $16 \%$ |
| All Real Estate | $47 \%$ | $68 \%$ | $26 \%$ |
| Apartments | $48 \%$ | $76 \%$ | $22 \%$ |
| Commercial | $57 \%$ | $71 \%$ | $43 \%$ |
| Mini-warehouses | $25 \%$ | $38 \%$ | $12 \%$ |
| Mortgage Loan | $55 \%$ | $68 \%$ | $43 \%$ |
| Other Real Estate | $50 \%$ | $62 \%$ | $37 \%$ |
| Cable TV | $44 \%$ | $52 \%$ | $35 \%$ |
| Leased Property | $20 \%$ | $36 \%$ | $4 \%$ |

We also developed a multiple regression model that identified the most significant financial variables for predicting the expected price of an LP, and hence, its discount to Net Asset Value. The model produced a low standard error and an excellent fit to the data for both the entire group of partnerships and for the seven subcategories (R2 above 90\%).

Depending on the category of LP, some independent variables were more influential on the discount than others. For instance, many private LPs made no cash distributions. Since this variable is typically one of the most significant, we conducted a sensitivity analysis of low or non-distributing LPs I to determine their market discount. The table below shows that non-distributing LPs produced even larger discounts than the group of 146 taken as a whole:

| LOW DISTRIBUTIONS EFFECT ON DISCOUNT |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Test | No of Issues | R2 | Total Distr. | Indicated Discount |
| 1 | 54 | $94 \%$ | $5.0 \%$ | $31 \%$ |
| 2 | 25 | $97 \%$ | $3.0 \%$ | $47 \%$ |
| 3 | 20 | $98 \%$ | $2.0 \%$ | $63 \%$ |
| 4 | 18 | $95 \%$ | $1.5 \%$ | $76 \%$ |

The tables above illustrate the wide range of discounts that are observed in the market and underscore the necessity of considering those variables which most heavily influence pricing and the discount to Net Asset Value for a specific LP. The model developed in this study
provides a methodology to refine the determination of the appropriate discount and eliminates the need to rely arbitrarily on an average discount from this or any other study.

Many questions remain unanswered by this study, including the magnitude of the additional marketability discount for private partnerships where no recognized secondary market exists.

