

BUSINESS VALUATION UPDATE

TIMELY NEWS, ANALYSIS, AND RESOURCES FOR DEFENSIBLE VALUATIONS

Determining the FMV of Small Privately Held Promissory Notes

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Privately held promissory notes can show up in many contexts and types of transactions. For instance, it is fairly common for gift and estate tax clients to have promissory notes in their estates. When this is the case, the notes must be valued at fair market value, which is the price at which the property would exchange hands between third parties without any compulsion to buy or sell the note. Frequently, the note originates from a son or daughter in exchange for the purchase of an interest in a family business or partnership. If a note is gifted or transferred to a related party, the same rules apply. Attorneys, accountants, and appraisers may then face such multifaceted valuation questions as:

- Is the note worth the current balance due or is the market value different than the outstanding balance?
- What is a market-based interest rate for a privately held note?
- How do I determine whether the result of the appraisal is reasonable?
- What is the best supporting data to use for the valuation of a promissory note so that it will hold up to the scrutiny of examination by the Internal Revenue Service?

When it comes to appraising a privately held note, the key factors that impact the value are

the stated interest rate, amortization schedule, collateral, payment history, note covenants, and marketability. Risk affects the value of bonds, like it does stocks. Bonds that trade in the public market trade at a discount to the par value, if the interest rate is below the current market interest rate or if the bond has an increased risk of repayment. Likewise, investors require a higher rate of return for a long-term bond compared to a short-term bond because they are exposed to more risk over the life of the note. Investors pay less than (or discount) the price of the bond, which increases the yield of the bond, thereby achieving a higher return to offset the increased risk. Privately held notes are priced and valued in the same manner. While publicly held bonds receive a lot of attention as an investment class, privately held notes are commonplace and are used to finance real estate and support business growth. A number of privately held companies specialize in buying and selling privately held notes.

Common source of interest rates. When notes are used for transactions between related parties, the IRS requires the use of a minimum interest rate called the applicable federal rate (AFR). These rates are typically low relative to third-party notes or investments even though they are privately held and may not be collateralized. For example, the long-term AFR is currently about 3.0% compared to a publicly traded corporate bond, which currently ranges from 4.0% to 7.0%. Exhibit 1 shows corporate bond interest rates public companies in the airline industry report.

Publicly traded high-yield corporate bonds have even higher interest rates, ranging from 7% to

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12%. An investor comparing a small privately held note with an AFR interest rate and these investments would obviously opt for a corporate bond because it represents less risk and has a higher return.

When valuing small privately held notes, it is common to see a note issued with a low interest rate based on the AFR or collateralized bank loan rate. In real-world transactions, interest rates for small privately held notes are much higher than these issued rates. When valuing large privately held promissory notes, appraisers can use corporate bond rates from publicly held companies for comparison. However, small privately held notes are typically not comparable to bonds large publicly held companies issue because publicly held companies are much larger and do not reflect the same level of risk as a small privately held note. A third-party buyer of a small privately held note would require an interest rate of 12% to 20% to reflect the true risk of the investment.

This large gap between public corporate bond rates and small privately held promissory notes requires appraisers to make sizable adjustments when they use corporate bonds to value privately held notes. Many times, this adjustment can be two or three times the original corporate bond rate (Exhibit 2).

As can be surmised, for small privately held notes that are not comparable to corporate bonds, the large adjustment represents a substantial leap of faith to calculate a proper interest rate for a small

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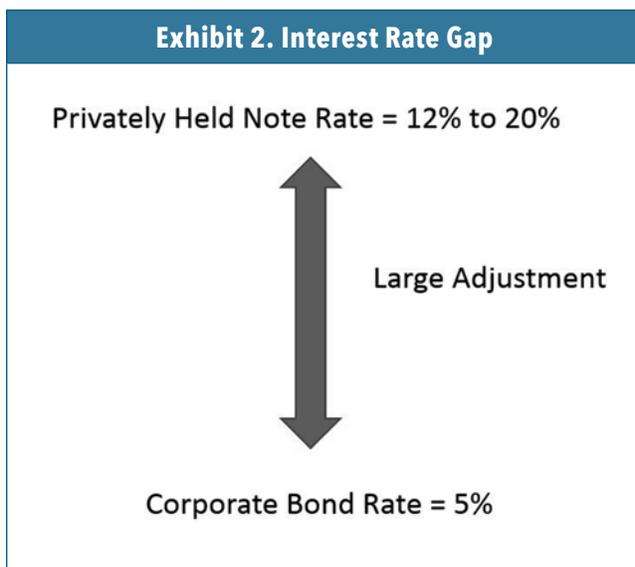
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Exhibit 1. Corporate Bond Interest Rates Public Airline Firms

Company	Rate	Term
American Airlines	4.38%	2022
Delta Airlines	6.82%	2022
United Airlines	6.55%	2019
Jet Blue Airlines	6.75%	2039
Southwest Airlines	7.38%	2027



privately held note. Considering this disparity, appraisers should attempt to identify the most appropriate guideline data that are comparable to privately held promissory notes to determine an appropriate market rate of interest.

The following discussion presents a method for determining and applying an appropriate market rate in the valuation of a privately held promissory note.

Analysis of risks. An experienced business appraiser calculates the value of a privately held note by determining the present value of the future principal and interest payments of the note using a market rate of interest based on the risk of the note. This requires an analysis of the risk of the promissory note as compared to other alternative investments. The first step is to determine a market interest rate followed by discounting the future expected payments to present value.

To calculate the proper interest rate, appraisers determine a base rate and increase that by a specific risk premium for the additional risks not accounted for in the base rate.

$$\begin{array}{l} \text{Base rate} \\ + \text{Specific risk premium} \\ \hline \text{Market rate of interest} \end{array}$$

Since it is important to select the base rate based on measurable alternative investments with comparable levels of risk, an excellent source of comparative interest rates is publicly traded business development companies (BDCs). BDCs are typically formed as closed-end registered investment companies and provide loans to small and medium-sized privately held businesses.

Congress created BDCs in 1980 to encourage the flow of public capital to small and medium-sized private businesses in the United States. Typically, BDCs lend to small and medium-sized private companies that carry a rating of BBB- by Standard and Poor's. A BDC must meet multiple shareholder protections and government compliance regulations including:

- BDCs are exempt from corporate income taxes as long as they pay out at least 90% of their taxable income back to shareholders in the form of dividends;
- BDCs are required to file quarterly and annual reports with the SEC and have restrictions on the amount of debt they can hold;
- BDCs cannot invest more than 25% of the value of their assets in the securities of one issuer;
- BDCs must comply with the Sarbanes-Oxley Act, the Dodd-Frank Act, and the Investment Company Act of 1940;
- BDCs must place their securities in the custody of a bank or be subject to an additional audit and certain operational procedures to protect investors; and
- BDCs must maintain a bond from an insurance company to protect shareholders from fraud or embezzlement.

There are both publicly traded and nontraded BDCs. Approximately 50 BDCs are actively

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traded in the public market. The lending rates for collateralized loans of publicly traded BDCs typically range from 7% for large companies to 16% for smaller companies. The lending rates of nontraded BDCs can be as high as 20% for noncollateralized short-term loans with personal guarantees. Publicly held BDCs are listed on either the Nasdaq or NYSE and must comply with the corporate governance standards of the exchanges and are subject to regulatory exams by the SEC. Appraisers can use these interest rates for a base rate or use the current yield of publicly traded BDCs as a proxy. Currently, the average yield for debt-focused BDCs is approximately 10% (Exhibit 3).

Since small privately held promissory notes represent more risk than a BDC, a specific risk premium is added to the base rate to determine a market rate of interest. Specific risk premiums for financial investments usually range from 2% to 6% and compensate an investor for the additional risk factors that are not reflected in the base rate. The addition of a specific risk premium is based on the principle that, as the risk of an investment increases, the required rate of interest will also increase. The following factors should be considered when determining the specific risk premium.

1. *Horizon risk.* Long-term notes require higher interest rates than short-term loans since the buyer of a long-term note would be exposed to changes in macroeconomic

factors over the holding period of the note.

2. *Payment history.* Notes with a history of on-time payments are less risky than notes with no payment history or notes in default.
3. *Amortization structure.* An interest-only note or balloon note is generally riskier than a note that makes regular interest and principal payments because the principal is not repaid until the end of the term of the note.
4. *Protective covenants.* The provisions of a note should allow the holder to take legal action in the event of default in order to take possession of the collateral. Notes without strong protective covenants would have more risk.
5. *Collateral.* Notes that tangible assets sufficiently collateralize are less risky than uncollateralized notes. An uncollateralized privately held note would be difficult to sell to a third party.
6. *Personal guarantee.* Notes typically require a personal guarantee by the issuer. The net worth of the issuer is important in gauging the impact of the personal guarantee on the risk of the note.
7. *Marketability.* Unlike a publicly traded bond, a privately held note would take time to sell

Exhibit 3. Average Yield for Debt-Focused BDCs

5 Largest BDCs	Ticker	NAV (millions)	Price	Annual Dividend	Yield
Ares Capital Corp.	ARCC	\$7,320	\$15.58	\$1.54	9.90%
Apollo Investment Corp.	AINV	\$4,170	\$12.40	\$1.20	9.70%
Prospect Capital Corp.	PSEC	\$3,430	\$6.31	\$0.72	11.40%
FS KKR Capital Corp.	FSK	\$2,070	\$5.18	\$0.66	12.70%
Main Street Capital Corp.	MAIN	\$1,510	\$33.81	\$2.85	8.40%
			Average		10.40%

Source: cefdata.com/bdc

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Exhibit 4. Small Privately Held Promissory Note Specific Risk Premium Analysis				
Risk Factor	Comments	Low Risk	→	High Risk
Horizon	Short term (five years)		X	
Payments	All made on time to date	X		
Amortization	Standard principal and interest	X		
Covenants	Strong covenants included		X	
Collateral	No collateral			X
Personal guarantee	Yes. Net worth fair		X	
Marketability	Not likely to sell quickly		X	

to a third party or interested investor. This increases the risk of an investment in the note.

Base rate	10.0%
Incremental risk	4.0%
Required rate of interest	14.0%

Example

As an example, let’s assume we are valuing a five-year note with a balance of \$400,000 and an interest rate of 3%. The note is personally guaranteed but not collateralized.

- Original balance = \$400,000
- Interest rate = 3%
- Term = five years until maturity
- Annual P&I payment = \$87,342

Initially, a base rate of 10% is selected using the current yield of publicly held BDCs. An appraiser could also examine several publicly held BDCs that have similar investment objectives and read their 10-k to identify the rates that are charged on notes their customers issue.

Next, a specific risk premium is selected using a comparative analysis of the factors listed above. As mentioned previously, specific risk premiums typically range from 2% to 6%. In this case, the five-year note is not collateralized but has strong covenants and is personally guaranteed. Accordingly, a specific risk premium of 4.0% is selected and added to the base rate to determine an interest rate of 14.0%.

Exhibit 4 presents a framework for the thought process behind the estimation of the specific risk premium.

The final step in calculating the value of the note is to forecast the future interest and principal payments per the note’s amortization schedule and determine the present value using the market rate of interest determined above. As reflected below, the principal and interest payments are forecast to be \$87,342 for each of the next five years based on the terms of the note. Discounting the future principal and interest payments to present value using the market rate of interest of 14.0% results in a value of \$299,852 (Exhibit 5).

The market value represents a 25% discount from the balance of \$400,000 [1 - (\$299,852 ÷ \$400,000)].

Exhibit 5. Present Value Calculation					
Market interest rate = 14.0%					
	Year 1	Year 2	Year 3	Year 4	Year 5
Cash flow forecast	\$87,342	\$87,342	\$87,342	\$87,342	\$87,342
Net Present Value \$299,852					

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Conclusion. Even though the taxpayer and the IRS are primarily concerned with the discount from the note's balance, it is important to remember that it is the risk of the note (reflected in the interest rate) that ultimately impacts value. The discount is the result of applying a market rate of interest to the note. As a function of the term of the note and the interest rate, some notes will trade at large discounts while others will trade at small discounts.

Since a hypothetical buyer has many alternative investment choices, it is important to base any rate of return analysis on measurable alternative investments with comparable levels of risk. Instead of using corporate bonds to value small privately held notes, a better comparison is to

observe the rates used by publicly traded BDCs for the determination of a market rate of interest.

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