

**CONSIDERATIONS IN THE VALUATION
OF INTERESTS IN ESTATE FREEZE ENTITIES**

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The purpose of a Freeze Entity is to lock or “freeze” the rate of appreciation in assets that will be included in a senior generation’s estate for transfer tax purposes and shift the excess appreciation to the junior generation without additional transfer tax. This is accomplished by creating economic interests in the entity that enjoy little of the appreciation potential of the entity, but enjoy current income, and economic interests that enjoy substantially all of the appreciation potential. To accomplish this, it is common that a Freeze Entity is created with three classes of equity interests - Managing Units, Preferred Units, and Residual units.

The holders of the Managing Units have management control over the entity, and typically have a very small economic interest. The Preferred Units and the Residual Units generally have limited management rights, although collectively they typically have materially all of the economic interest in the entity. For the purpose of this discussion, we will assume an allocation of initial contributions to a Freeze Entity as follows: 1% to the Managing Units; 79% to the Preferred Units; and 20% to the Residual Units. For example, if assets with a fair market value of \$8,500,000 are contributed to a Freeze Entity upon its formation, the contributor would receive capital account interests of \$85,000 for the Managing Units, \$6,715,000 for the Preferred Units, and \$1,700,000 for the Residual Units.

The Preferred Units are generally entitled to a fixed annual dollar return as well as a fixed payment upon liquidation of the entity. The fixed payment upon liquidation would be the value allocated to Preferred Units when the original capital was contributed, or continuing with the above example, \$6,715,000, plus any accrued but unpaid dividends. The fixed annual dividend payment¹ would be based on an appropriate dividend rate (the “Stated Rate”) as established by an appraiser at the time of formation of the Freeze Entity, based on prevailing market rates of similar investments (the “Market Rates”) adjusted to incorporate the specific rights and attributes of the Preferred Units and certain characteristics of the Freeze Entity.

Since the annual dollar return and the liquidation preference of the Preferred Units are fixed, the value of the units is essentially “frozen” at the time of their creation². Consequently, any appreciation or depreciation in the value of the entity as a whole flows to the Managing Units and the Residual Units, hence, both can be considered residual interests.

¹ Note that applicable Internal Revenue Code guidelines allow for a deferral of up to four years from the formation date of the freeze entity to make a preferred payment.

² The value of the Preferred Units can vary prior to the entity’s liquidation date, primarily with changes in the Market Rates. Similar to the way bond prices move as market-driven interest rates move. However, on a relative basis the change in value is generally relatively small.

Valuing the Units of a Freeze Entity for Gift Tax Reporting Purposes

As part of the Omnibus Budget Reconciliation Act of 1990, which was signed into law on November 5, 1990, Chapter 14 was added to the Internal Revenue Code of 1986. Chapter 14, specifically Section 2701, applies special valuation rules to transfers of subordinate equity-type interests in corporations and partnerships.

At the heart of Section 2701 is the Subtraction Method for determining the value of residual interests in an entity that has both junior (i.e. Residual) and senior (i.e., Managing and Preferred) equity interests. The Subtraction Method requires that the value of the entire entity be computed first. Next, the value of the senior equity interests are computed, based on their specific rights and attributes, and subtracted from the value of the entire entity to determine the value of the junior equity interest. As will be discussed in more detail, Section 2701 does allow for discounts to the base value established for the junior equity interests for lack of control and lack of marketability.

Step One – Determining the Value of the Entire Freeze Entity

Since most Freeze Entities are holding companies, the value of which is highly dependent on the value of their underlying assets, the most common approach to determining the aggregate value of a Freeze Entity is what is referred to in the valuation community as the Asset Approach. Essentially, when applying the Asset Approach, the aggregate equity value of an entity is considered equal to the fair market value of its assets less the fair market value of its liabilities. This value is typically referred to as the entity's Adjusted Book Value.

Valuation at Formation: As noted, Adjusted Book Value is simply the fair market value of an entity's assets less the fair market value of its liabilities. If an entity holds marketable assets, such as unrestricted publicly traded common stock, corporate debt, treasury securities, etc., the fair market value of its assets is readily determinable. However, if the entity holds assets for which a ready market does not exist, or the sale of which is restricted in some manner, determining the entity's Adjusted Book Value becomes more complicated because issues such as lack of control and lack of marketability surface. The general issues concerning lack of control and lack of marketability will be explored in more detail later in this discussion.

Investment assets that typically require some discount for lack of control ("LOC") and/or illiquidity or lack of marketability (collectively referred to as "LOM") to mark them to their fair market value include private equity fund investments, listed common stock subject to trading restrictions or large block size issues, or hedge fund investments with withdrawal restrictions, to name a few. These "inside discounts," termed as such because the discount is typically taken inside the entity, can have a relatively wide range – from near 0% for some assets,

such as cash, to levels in the 30% to 40% range for various privately-held securities. The following presents a list of potential assets of a Freeze Entity and general ranges for the corresponding inside discounts. (Note: These are estimates only; the specific discounts would be based on the facts and circumstance of the contributed assets.)

Publicly Tradable Securities (Liquid to Thinly Traded) ¹	0% - 10%
Restricted Publicly Traded Securities	5% - 20%
Interests in Alternative Investment Type Funds	15% - 30%
Investments in Privately-Held Companies	20% - 40%

¹ Can include SEC Rule 144, "insider", or other restrictions that may apply.

For example, a simplified Adjusted Book Value at formation, that would be consistent with our previous example, may be as follows:

Asset Class	Freely Tradable Value	Sample Discount	Fair Market Value
Cash & Cash Equivalents	\$950,000	0.0%	\$950,000
Common Stock Portfolio	\$3,225,000	5.0%	\$3,063,750
Hedge Fund Investments	\$1,850,000	15.0%	\$1,572,500
Private Equity Investments	\$1,300,000	20.0%	\$1,040,000
Privately-held Stock	<u>\$2,675,000</u>	30.0%	<u>\$1,872,500</u>
Total Freely Tradable Value	\$10,000,000		
Adjusted Book Value, rounded			\$8,500,000
Weighted Average Aggregate Inside Discount		15.0%	

¹ These values may reflect original cost, accounting related values, or face values that may or may not reflect the value at which the asset could immediately be sold.

Although assets with a gross value of \$10,000,000 have been contributed to the Freeze Entity, after application of the appropriate inside discounts for lack of control and/or lack of marketability the entity has an Adjusted Book Value of \$8,500,000, rounded, which equates to a weighted average discount of 15% to the gross value of the contributed assets.

Valuation Subsequent to Formation: After formation of the Freeze Entity, its Adjusted Book Value is determined in the same manner it was at formation. However, one would expect to see either positive or negative movements in the value of the underlying investments due to changing market conditions. Further, other things being equal, the inside discounts applicable to certain underlying assets at formation may decline as time-related trading restrictions are lifted, investments approach a liquidity event, or withdrawal windows open-up.

Step Two - Valuing the Managing Units

Once the Freeze Entity's Adjusted Book Value is established, the first class of equity that typically gets valued are the Managing Units, since the Managing Unit's have the first claim on any distributions, including liquidating distributions, from the entity. The value of the Managing Units, in aggregate, is generally considered to be the Managing Unit's pro rata share of the entity's Adjusted Book Value. For example, utilizing the prior example, at formation the Managing Units would be valued at \$85,000 ($\$8,500,000$ Adjusted Book Value \times 1% economic interest). Under the Subtraction Method this would leave \$8,415,000 in value to be allocated to the Preferred Units and the Residual Units ($\$8,500,000$ Adjusted Book Value - \$85,000 Aggregate Value of the Managing Units).

Subsequent to formation, if the Adjusted Book Value of the entity increases or decreases, the value of the Managing Units will increase or decrease proportionally. For example, assuming that the Adjusted Book Value of the entity has increased by 5% since formation as a result of market conditions and a reduction in the applicable inside discounts, the Managing Units would be valued at \$89,250 ($\$8,925,000$ Adjusted Book Value \times 1% economic interest). This would leave \$8,835,750 in value to be allocated to the Preferred Units and the Residual Units ($\$8,925,000$ Adjusted Book Value - \$89,250 Aggregate Value of the Managing Units).

Step Three - Valuing the Preferred Units

Since the Preferred Units have a senior claim on the cash flows and net assets of the entity relative to the Residual Units, the Preferred Units are valued next under the Subtraction Method.

Valuation at Formation: The Preferred Units of a Freeze Entity are valued in a manner similar to the valuation of any non-convertible, cumulative, preferred stock, which typically entails utilization of the Income Approach. Within the Income Approach, two methods are generally used: (1) a "discounted cash flow" method and (2) the "income capitalization" method. Both are used to determine the present value of the income streams (i.e., cash flow streams) that the holders of the securities are expected to receive. Both also utilize a market based required rate of return or discount rate.

As discussed previously, the cash flows to be received by the holders of the Preferred Units of a Freeze Entity consist of annual fixed dividend payments and a liquidation payment (including any accrued dividends), both of which are fixed at the time the entity is created. The liquidation payment is the Adjusted Book Value allocated to Preferred Units upon formation (in our example \$6,715,000). The fixed dividend payment is this fixed value times the Stated Rate. To determine an appropriate Stated Rate, an appraiser will "benchmark" off market rates of a variety of equity and debt investments, such as the prevailing yields of

preferred stock issued by selected closed-end investment companies and other corporate issuers, mezzanine debt yields, and other rate related measurements in the marketplace. In the benchmarking process, consideration is given to many factors including differences between the Preferred Units in question and the securities sampled, such as variations in asset and dividend coverage ratios, voting rights, term, size of the issuing entities, payment frequency, and marketability.

At the present time, market yields on the entities discussed above fall in the 6% to 7% range. However, it is not uncommon for the Stated Rate to be set 150 to 250 basis points above these yields to account for the differences noted above between the generally marketable investments sampled and the Preferred Units. Typically, at formation, a Freeze Entity will have lower asset and dividend coverage ratios relative to publicly traded preferred securities, and is typically much smaller than the entities issuing publicly traded preferred securities. These factors increase the relative risk of the Preferred Units, which would prompt an investor in the Preferred Units to demand a higher required rate of return. Additionally, the fact that no active market will exist for the Preferred Units also argues for a higher required rate of return on the Preferred Units. Note, however, that the less initial capital allocated to Preferred Units upon formation the lower the applicable Stated Rate since, other things being equal, the asset and dividend coverage ratios of the Preferred Units would be stronger.

Addendum I presents a sample discounted cash flow valuation of the Preferred Units at formation, using the prior example, and assuming that: (i) the Stated Rate is set at 8.0%, which would result in a fixed annual dividend payment of \$537,200 (\$6,715,000 million \times 8.0%); (ii) the Stated Rate is equivalent to an appropriate "market" rate on the Preferred Units, and (iii) the freeze entity is expected to have a thirty year term. Note that that present value of the cash flows to be paid to Preferred Units is equal to the liquidation or face value assigned to the units since the market rate, or the required rate of return, is equal to the Stated Rate.

Under the Subtraction Method, this leaves \$1,700,000 in value to be allocated to the Residual Units, as follows:

Freeze Entity Aggregate Adjusted Book Value	\$8,500,000
Less the Aggregate Value of the Managing Units	-85,000
Less the Aggregate Value of the Preferred Units	<u>-6,715,000</u>
Aggregate Base Value of Residual Units	\$1,700,000

Valuation Subsequent to Formation: If market rates have changed since formation of the Freeze Entity, the value of the Preferred Units may also change since the present value of the fixed dividend payments will be determined using a discount rate that may no longer be equivalent to the Stated Rate.

In addition to changes in market rates, when selecting the appropriate discount rate the appraiser should also be cognizant of changes in the Freeze Entity itself since formation. For example, if the assets coverage and/or dividend coverage ratios for the Preferred Units have changed as a result of a change in the value of the Freeze Entity's underlying assets or a change in the entity's ability to generate cash flow to pay the preferred dividend, these changes need to be considered when selecting an appropriate discount rate.

Addendum II presents the calculation of the value of the Preferred Units assuming (i) a one-year passage of time; and (ii) that the appropriate required rate of return has decreased to 7.8% as a result of market conditions and improved coverage ratios. The calculations result in a value for the Preferred Units, in aggregate, of \$6,867,679. Note that while the market value of the Preferred Units can change over time based on changes in the Market Rates, other things being equal the value of the Preferred Units approach the value of the Liquidation Payment as time passes or early liquidation becomes more likely.

Under the Subtraction Method, a value for the Preferred Units of \$6,867,679 leaves \$1,968,071 in value to be allocated to the Residual Units, as follows:

Freeze Entity Aggregate Adjusted Book Value	\$8,925,000
Less the Aggregate Value of the Managing Units	-89,250
Less the Aggregate Value of the Preferred Units	<u>- 6,867,679</u>
Aggregate Base Value of the Residual Units	\$1,968,071

Generally, assuming no increase in the Adjusted Book Value of the Freeze Entity, as the Market Rates increase the value of the Preferred Units decreases and the value of the Residual Units increases. Conversely, if the Market Rates decline, the value of the Preferred Units increases and the value of the Residual Units decreases.

Step Four – Valuation of the Residual Units

Under the Subtraction Method prescribed by Section 2701, the aggregate base value of the Residual Units is exactly what their name implies; the residual value of the entity's Adjusted Book Value that remains after value has been allocated to the Managing and Preferred Units (referred to in this discussion as the Base Value of the Residual Units). However, it is typical to apply valuation discounts for lack of control and lack of marketability to the Base Value of the Residual Units to determine the units' Fair Market Value, a practice which is consistent with the provisions of Section 2701. In certain circumstances, appraisers may combine these discounts into one overall discount. It should be noted, however, that Section 2701 appears to establish a floor on the value of the Residual Units for gift tax purposes. Section 2701 appears to imply that the aggregate value of the Residual Units must not be less than 10% of the Freeze Entity's Adjusted

Book Value when reporting a gift, regardless of the actual Fair Market Value of the units.

Valuation at Formation: Under the valuation at formation example utilized throughout this discussion, the residual Adjusted Book Value to be allocated to the Residual Units, or the Base Value of the Residual Units, is \$1,700,000. As noted previously, the Asset Approach has served as the principal valuation approach. The use of an asset-based valuation method is implicitly assumed to generate a fully controlling value and a fully marketable value. Such is not the case for the Residual Units, as control typically is expressly granted to the Managing Units, and no active market exists for the Residual Units.

Lack of Control or Minority Discount: Frequently used benchmarks for lack of control or minority discounts applicable to investments in holding companies are the discounts to the underlying asset value at which minority positions in Closed-End Investment Companies tend to trade or, when real estate is involved, the implied discounts observed in Real Estate Investment Trust acquisitions and the trading discounts of semi-public real estate limited partnership interests. These discounts recognize an investor's lack of control over the underlying assets of the holding company, and also take into consideration the portfolio risk of the holding company. They tend to be lower for companies with larger, more diversified portfolios, and increase as diversification decreases. The highest discounts are associated with companies which have portfolios comprised of non-diversified, high-risk, closely-held securities and/or leveraged non-distributing real estate interests. Typically, for most Freeze Entities, the lack of control discount applicable to the Base Value of the Residual Units falls in the 5% to 15% range.

Continuing with our previous example, and assuming the applicable lack of control discount is 10%, the Aggregate Fully Marketable Minority Interest Value of the Residual Units would be \$1,530,000 ($\$1,700,000 \text{ Aggregate Base Value of Residual Units} \times [1 - 10\%]$).

Lack of Marketability Discount: There have been a number of studies that have compared private stock transactions (at the minority interest level) for companies which subsequently went public, as well as the discounts applicable to the restricted stocks of public companies. The mean and median lack of marketability, or lack of liquidity, discounts observed in these studies are between 25% to 45%. These are frequently used to benchmark the lack of marketability discount applicable to closely-held business interests, including the Residual Units of Freeze Entities. Appraisers approach the determination of these discounts in various ways. Some may rely on specific studies or on data compiled from their own studies. Other studies, such as the previously mentioned trading discounts of semi-public real estate limited partnership interests, may also be reviewed.

In assessing the lack of marketability discount applicable to a Residual Unit in a Freeze Entity, not only must an appraiser give consideration to the lack of marketability discounts suggested by the studies, but he or she must also take into consideration a number of factors specific to the interest in question, including, but not limited to:

- (i) the potential for distributions to the interest – the more likely that a holder of a Residual Unit will receive distributions, the lower the relative discount since distributions are generally viewed as important to a holder of a closely-held investment because they provide a means for the investor to earn a return on the investment without having to sell it;
- (ii) the potential of near-term liquidation – one means for the holder of a closely-held investment to turn his or her investment into cash is through liquidation of the entity which: if it is probable that the entity will liquidated in the near term, then the applicable discount will be lower; and
- (iii) restrictions on transfer and withdrawal – if an interest holder is prohibited or severely limited from transferring or selling his or her interest, or may only do so on approval of a majority of the other interest holders, the risk inherent in being forced to hold the interest, even if the investment needs change causes the applicable lack of marketability discount to increase.

Typical lack of marketability discounts for the Residual Units of Freeze Entities fall in the 20% to 35% range at formation. In our example, applying a 30% discount to the Aggregate Fully Marketable Minority Interest Value of the Residual Units would result in an Aggregate Fair Market Value for the units of \$1,071,000 ($\$1,530,000$ Aggregate Fully Marketable Minority Interest Value \times [1 – 30%]). This value would be multiplied by the percentage interest being gifted to determine a reported value for the gift (e.g., a 25% interest in the Residual Units would be valued at \$267,750).

Valuation Subsequent to Formation: Valuation discounts for lack of marketability and lack of control would continue to be applicable to the Residual Units post formation. However, the discounts may change based on market conditions at the time and as a performance history for the entity is established.

Lack of Control Discount: If the market-driven benchmarks for lack of control discounts change, the lack of control discount applicable to the Residual Units will likely change. In our post formation example, let us assume the benchmarks suggest that an 11% lack of control discount is appropriate for the Residual Units. This would result in an Aggregate Fully Marketable Minority Interest

Value for the units of \$1,751,583 (\$1,968,071 Aggregate Base Value of Residual Units \times [1 - 11%]).

Lack of Marketability Discount: As a performance history is established for the entity, and that history differs from what assumed at formation, a change in the applicable lack of marketability discount may occur. The most common reason for such a change would be if the Residual Units receive more or less in distributions than was anticipated at formation. Another reason might be announced plans for making specific, sizable, partial or liquidating distributions. Additionally, as the entity approaches the expiration of its term, the applicable lack of marketability discount on the Residual Units will decline. In other words, the sooner full liquidity is expected to be realized, the lower the discounts for both lack of control and lack of marketability.

In our post formation example, let us assume that the entity generates more cash flow than originally anticipated and, after meeting its preferred dividend obligation, decides to pay the excess in distributions to the Residual Units (and is likely to do so on an ongoing basis). In that instance, a lack of marketability discount of only 25% may be appropriate. This would lead to an Aggregate Fair Market Value of \$1,313,687 for the Residual Units (\$1,751,583 Aggregate Fully Marketable Minority Interest Value \times [1 - 25%]). Again, this value would be multiplied by the percentage interest being gifted to determine a reported value for the gift (e.g., a 25% interest in the Residual Units would be valued at \$328,422).

This document is for illustrative purposes only. The assumptions contained herein may not apply in all circumstances. Further, the Internal Revenue Service or other appraisers may apply different assumptions and/or methodologies in their analyses.

**VALUATION OF THE PREFERRED UNITS
AT FORMATION**

Year	Dividend Payment	Liquidation Payment	Total Payments	Present Value Factor at 8.0%	Present Value of Payments
1	\$537,200		\$537,200	0.9259	\$497,407
2	\$537,200		\$537,200	0.8573	\$460,562
3	\$537,200		\$537,200	0.7938	\$426,447
4	\$537,200		\$537,200	0.7350	\$394,858
5	\$537,200		\$537,200	0.6806	\$365,609
6	\$537,200		\$537,200	0.6302	\$338,527
7	\$537,200		\$537,200	0.5835	\$313,451
8	\$537,200		\$537,200	0.5403	\$290,232
9	\$537,200		\$537,200	0.5002	\$268,734
10	\$537,200		\$537,200	0.4632	\$248,828
11	\$537,200		\$537,200	0.4289	\$230,396
12	\$537,200		\$537,200	0.3971	\$213,330
13	\$537,200		\$537,200	0.3677	\$197,527
14	\$537,200		\$537,200	0.3405	\$182,896
15	\$537,200		\$537,200	0.3152	\$169,348
16	\$537,200		\$537,200	0.2919	\$156,804
17	\$537,200		\$537,200	0.2703	\$145,188
18	\$537,200		\$537,200	0.2502	\$134,434
19	\$537,200		\$537,200	0.2317	\$124,476
20	\$537,200		\$537,200	0.2145	\$115,255
21	\$537,200		\$537,200	0.1987	\$106,718
22	\$537,200		\$537,200	0.1839	\$98,813
23	\$537,200		\$537,200	0.1703	\$91,493
24	\$537,200		\$537,200	0.1577	\$84,716
25	\$537,200		\$537,200	0.1460	\$78,441
26	\$537,200		\$537,200	0.1352	\$72,630
27	\$537,200		\$537,200	0.1252	\$67,250
28	\$537,200		\$537,200	0.1159	\$62,269
29	\$537,200		\$537,200	0.1073	\$57,656
30	\$537,200	\$6,715,000	\$7,252,200	0.0994	<u>\$720,704</u>
Present Value of Payment Stream					\$6,715,000

**VALUATION OF THE PREFERRED UNITS
SUBSEQUENT TO FORMATION**

Year	Dividend Payment	Liquidation Payment	Total Payments	Present Value Factor at 7.8%	Present Value of Payments
1	\$537,200		\$537,200	0.9276	\$498,330
2	\$537,200		\$537,200	0.8605	\$462,273
3	\$537,200		\$537,200	0.7983	\$428,825
4	\$537,200		\$537,200	0.7405	\$397,797
5	\$537,200		\$537,200	0.6869	\$369,013
6	\$537,200		\$537,200	0.6372	\$342,313
7	\$537,200		\$537,200	0.5911	\$317,545
8	\$537,200		\$537,200	0.5483	\$294,568
9	\$537,200		\$537,200	0.5087	\$273,254
10	\$537,200		\$537,200	0.4719	\$253,483
11	\$537,200		\$537,200	0.4377	\$235,142
12	\$537,200		\$537,200	0.4060	\$218,128
13	\$537,200		\$537,200	0.3767	\$202,345
14	\$537,200		\$537,200	0.3494	\$187,704
15	\$537,200		\$537,200	0.3241	\$174,122
16	\$537,200		\$537,200	0.3007	\$161,524
17	\$537,200		\$537,200	0.2789	\$149,836
18	\$537,200		\$537,200	0.2587	\$138,995
19	\$537,200		\$537,200	0.2400	\$128,938
20	\$537,200		\$537,200	0.2227	\$119,608
21	\$537,200		\$537,200	0.2065	\$110,954
22	\$537,200		\$537,200	0.1916	\$102,926
23	\$537,200		\$537,200	0.1777	\$95,478
24	\$537,200		\$537,200	0.1649	\$88,570
25	\$537,200		\$537,200	0.1529	\$82,161
26	\$537,200		\$537,200	0.1419	\$76,216
27	\$537,200		\$537,200	0.1316	\$70,702
28	\$537,200		\$537,200	0.1221	\$65,586
29	\$537,200	\$6,715,000	\$7,252,200	0.1133	\$821,345
Present Value of Payment Stream					\$6,867,679

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