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Hypothetical Liquidation at Book Value (HLBV) – Case Study

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HLBV – Basic Concepts



Hypothetical Liquidation at Book Value (HLBV) Method

- HLBV is a balance sheet-oriented approach to the equity method of accounting which provides a methodology for allocating pre-tax GAAP income or loss to an investor
- HLBV calculates the amount each partner would receive if the partnership were liquidated at book value at the end of each measurement period. The change in the allocated amount to each partner during the period is book income/loss allocated to that partner (adjusted for distributions and contributions)

Hypothetical Liquidation at Book Value (HLBV) Method *(cont.)*

- Generally, the HLBV Method is not considered appropriate where the conventional equity method can be applied
- Challenges to conventional application of equity method:
 - Investee's capital structure provides different rights and priorities to its owners or ownership percentages are not specified (or varies over the life of the investment)

Concept of HLBV Method

- Partnership assumes liquidation of assets at book value
- Determine how much to allocate to each partner
- The change in the allocated amount to each partner during the period is book income/loss allocated to that partner (adjusted for distributions and contributions)

HLBV – Modeling Concepts



Modeling HLBV Method

- In order to determine the amount allocated to each partner, an analysis of the partners' capital accounts (as adjusted per the liquidation provisions of the partnership agreement) must be performed
 - Note that the mechanics of HLBV involves a complex combination of GAAP and tax concepts
- Calculate income tax provision in order to determine after-tax net income from investment

Note: The following discussion of HLBV modeling concepts assumes that HLBV is being calculated in the context of a traditional partnership flip structure. Tax and accounting issues related to the partnership flip structure are covered separately in other sessions.

Modeling HLBV Method – Common Liquidation Waterfall

- Distribute proceeds from the realization of the net assets upon dissolution of the partnership (project entity) to:
 - Partners with deficit capital accounts to bring capital accounts to zero
 - Sponsor: distribute amounts up to original capital contribution
 - Tax equity investor: distribute amounts until target IRR achieved
 - Flip point is determined on after-tax basis and post-tax amounts needed to achieve flip point need to be converted to pre-tax amounts
 - All remaining proceeds are distributed 95% to sponsor and 5% to tax equity investor

HLBV Method – Calculation

1. Calculate partnership's pre-tax GAAP income
 - Determine partnership's GAAP capital account
2. Calculate partnership's taxable income
 - Determine partnership's 704(b) capital account
 - Allocate taxable income, cash distributions and capital contributions to partners in accordance with partnership agreement to determine each partner's 704(b) capital account
3. Compute tax gain on hypothetical liquidation of partnership
4. Allocate tax gain in accordance with liquidation provisions in partnership agreement
 - Allocate gain to partners with negative 704(b) capital account
 - Allocate gain to tax equity investor until its target IRR is achieved
 - Allocate remaining gain in accordance with tax allocations

HLBV Method – Calculation

5. Calculate adjusted 704(b) capital accounts (i.e., 704(b) capital account plus allocations of hypothetical tax gain from liquidation waterfall)
 - Partner's claim on partnership book value
6. Determine change in each partner's claim on partnership book value during the period (adjusted for contributions and distributions)

= ALLOCATION OF BOOK INCOME UNDER HLBV

HLBV Example



HLBV Example – Step 1

Pre-Tax GAAP Income to be Allocated: \$ 7,500,000

<u>GAAP Capital Account - Partnership</u>	
Beginning Balance	100,000,000
(+) Net Income / (Loss)	7,500,000
(-) Cash Distributions	(2,000,000)
(+) Capital Contributions	5,000,000
Ending Balance	110,500,000

HLBV Example – Step 2

Taxable Loss to be Allocated: (\$ 20,000,000)

<u>704(b) Capital Account – Partnership</u>	
Beginning Balance	100,000,000
(+) Net Taxable Income / (Loss)	(20,000,000)
(-) Cash Distributions	(2,000,000)
(+) Capital Contributions	5,000,000
Ending Balance	83,000,000

HLBV Example – Step 2 (cont.)

<u>704(b) Capital Account – Tax Equity Investor</u>	
Beginning Balance	99,000,000
(+) Net Taxable Income / (Loss)	(19,500,000)
(-) Cash Distributions	(1,950,000)
(+) Capital Contributions	5,000,000
Ending Balance	82,550,000

<u>704(b) Capital Account – Sponsor</u>	
Beginning Balance	1,000,000
(+) Net Taxable Income / (Loss)	(500,000)
(-) Cash Distributions	(50,000)
(+) Capital Contributions	-
Ending Balance	450,000

HLBV Example – Step 3

<u>Calculate Tax Gain on Liquidation</u>	
HLBV Proceeds (GAAP Capital Account)	110,500,000
Partnership Tax Basis	83,000,000
Gain / (Loss) on Liquidation	27,500,000

HLBV Example – Step 4

Step 4A – Allocate Gain to Restore Negative Capital Accounts

Gain Available to Allocate	27,500,000
<u>Partners' 704(b) Capital Accounts – Unadjusted</u>	
Tax Equity	82,550,000
Sponsor Equity	450,000

Allocation of Gain to Tax Equity Investor to Restore Negative Capital Account	0
Allocation of Gain to Sponsor to Restore Negative Capital Account	0

<u>Partners' 704(b) Capital Accounts After Step 4A</u>	
Tax Equity Investor	82,550,000
Sponsor	450,000
Gain Available to Allocate After Step 4A	27,500,000

HLBV Example – Step 4

Step 4B – Allocate Gain to Tax Equity Investor Until Target IRR Achieved

Gain Available to Allocate	27,500,000
Partners' 704(b) Capital Accounts – After Step 4A	
Tax Equity Investor	82,550,000
Sponsor	450,000

Pre-Tax Cash Needed to Achieve Tax Equity Investor's Target IRR	90,000,000
Gain Allocation to Achieve Tax Equity Investor's Target IRR	7,450,000

Partners' 704(b) Capital Accounts After Step 4B	
Tax Equity Investor	90,000,000
Sponsor	450,000
Gain Available to Allocate After Step 4B	20,050,000

HLBV Example – Step 4

Step 4C – Allocate Remaining Gain in Accordance with Tax Allocations

Gain Available to Allocate	20,050,000
<u>Partners' 704(b) Capital Accounts – After Step 4B</u>	
Tax Equity Investor	90,000,000
Sponsor	450,000

Tax Equity Investor – 5.00%	1,002,500
Sponsor – 95.00%	19,047,500

<u>Partners' 704(b) Capital Accounts After Step 4C</u>	
Tax Equity Investor	91,002,500
Sponsor	19,497,500
Gain Available to Allocate After Step 4C	0

HLBV Example – Steps 5 and 6

<u>HLBV Book Income – Tax Equity Investor</u>	
Claim on Partnership Book Value – Beginning	99,000,000
Claim on Partnership Book Value – Ending	91,002,500
Change in Claim on Book Value	(7,997,500)
(+) Cash Distributions	1,950,000
(-) Capital Contributions	(5,000,000)
HLBV Book Income – Tax Equity	(11,047,500)

<u>HLBV Book Income – Sponsor</u>	
Claim on Partnership Book Value – Beginning	1,000,000
Claim on Partnership Book Value – Ending	19,497,500
Change in Claim on Book Value	18,497,500
(+) Cash Distributions	50,000
(-) Capital Contributions	0
HLBV Book Income – Sponsor	18,547,500

For Discussion Purposes Only

- The example discussed in this presentation are intended to facilitate a discussion related to selected accounting and tax concepts relevant to HLBV modeling. The examples are not intended to illustrate a partnership (or a project entity) that complies or does not comply with the accounting and tax rules. Please consult your accounting and tax advisors when modeling the concepts discussed throughout the deck. The rules are very complex and each set of facts and circumstances are unique.



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