The Fall of EBITDA Asset Valuations

A New Hybrid Discounted-Cash-Flow Valuation Method Uses a Valuation's Other Discounted-Cash-Flow Valuations as Assumptions and in doing so, Obsoletes EBITDA Asset Valuations

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Abstract

Upgrading and unifying a discounted-cash-flow investment valuation uses the valuation's other DCF valuations as assumptions, equates equity IRR and NPV (cash) to ROE (accrual) and obsoletes EBITDA asset valuations. Unifying discounted-cash-flow asset valuations enable the first-ever benchmarked valuation standard. Achieving the comprehensive valuation standard vanquishes three previously unavoidable asset valuation shortcomings: first, present and future investment valuations reciprocally solve, second, equity cash flow IRR equals NPV's equity cost assumption and third, concurrent discounted-cash-flow valuations no longer generate conflicting valuations. Benchmarking the valuation standard advances wealth formation measurement and decisions.

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G24 Investment Banking
G31 Capital Budgeting
G32 Value of Firms

1 Introduction

Over the decades, attempts at equaling a potential investment's equity cash flow IRR[1] with the investment's NPV equity cost assumption have not been successful. The inability to calculate asset valuations where equity cash flow IRR equals NPV's equity cost assumption has morphed into the notion equity cash flow IRR 'never will equal' NPV's equity cost. Given the investment valuation paradigm's 'never will equal' status quo, a business professional's points of interest never include exploring the benefits of creating asset valuations where an investment's equity IRR equals NPV's equity cost.

With the on-going NPV and IRR disconnect, the ensuing asset valuation discourse has produced various valuation approaches, all reaching inconclusive outcomes. The discourse has settled-out, for the most part, in the form of two valuation approaches. First, a firm's valuation requires basing an investment 'go/no go' decision on a subjective weighing of several disparate valuations. Invoked valuations methods can include IRR, NPV, EBITDA or more [a)]. Second, individual asset 'go/no go' investment decisions require surpassing a subjectively derived IRR hurdle rate.

Subjectivity always perplex asset valuations, but today, valuation subjectivity is uncomfortably placed too close to investment decisions themselves. By placing an investment's valuation subjectivity solely in an investment's singular assumption set moves investment subjectivity away from the investment decision and may provide business professionals more investment decision comfort.

Debt's greater leverage in the 1980s and subsequent investor acceptance of dot.com era's deferred upside performance has changed the investment valuation landscape. The combination of greater leverage and deferred upside performance have been unfavorable to traditional discount-cash-flow's ability to influence investment decisions.

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[1] See the initialism list at the end of the discussion.

Discounted-cash-flow's declining influence on investment decisions, combined with the advent of computational prowess, confluence a need to challenge the 'never will equal' adage of an investment's equity cash flow IRR and NPV equity cost assumption.

Have you ever wondered why valuing non-trivial[2] investment opportunities source multiple valuations? How do finalizing buy or sell 'go/no go' investment decisions deal with multiple sourced valuations? Do not disparate valuations from various valuation methods drive a need to weigh the valuations? What thought reasoning lead business professionals concluding subjectively weighing various valuation method outcomes improves investment decisions? Would investment decision comfort improve if subjectively weighing multiple valuations was no longer necessary?

What if subjective valuation weighing is made unnecessary and unifying IRR, PV[3] and FV valuations resolve IRR and NPV's historic 100+ years of shortcomings [b)]. What if current EBITDA valuations and IRR hurdle rates are deemed obsolete?

Have you ever considered what valuation architectures and standards exist in today's investment valuation paradigm? Discounted-cash-flow is sometimes thought of as a valuation standard. However, discounted-cash-flow is a valuation concept rather than a valuation standard. The point differentiating valuation concepts from valuation standards is valuation concepts follow valuation doctrines and are executed with valuation methods; valuation standards differentiate valuation architectures.

A new hybrid valuation architecture moves a valuation's subjectivity solely to an investment's singular assumption set and benchmarks a new valuation standard.

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[2] Non-trivial investment opportunities contain debt's leverage and either deferred upside or downside varying operating cash flows.

[3] The discussion's present value discounted-cash-flow calculations initiate with period one cash flow. Initiating present value discounted-cash-flow calculations with period one cash flow create an asset's present valuation (PV), rather than a *net* present value differentiation, as is the case initiating present value with period zero cash outflow.

Appendix A's Valuation Architecture Comparison – Traditional Versus New Hybrid diagrams and compares investment decision processes of traditional valuation and a new hybrid valuation architecture.

Traditional IRR and NPV investment valuation methods align with the time-value of money doctrine and the discounted-cash-flow concept. However, traditional IRR and NPV's valuation methods contain potential conflicting valuations within their valuation doctrine. Achieving the valuation standard of foregoing potential conflicting valuations requires upgrades of current IRR and NPV discounted-cash-flow valuation methods.

EBITDA's valuation doctrine is conceived within a macroeconomic convention. EBITDA's valuation method addresses high leverage and deferred upside investment opportunities [c]. However, EBITDA's valuation method does not provide time-value future valuations. Without time-value future valuations, EBITDA cannot reciprocate time-value present and future valuations. Achieving the valuation standard of reciprocating present and future valuations requires an upgrade of EBITDA's investment valuation method.

One could begin contemplating possibilities around discovery of new or upgraded asset valuation methods. What if an upgraded valuation method simultaneously foregoes both conflicting valuations and creates reciprocating present and future values? Would the upgraded valuation method then point to a possible comprehensive valuation standard? Would the upgraded valuation method then, in turn, be considered a comprehensive valuation method? Would the comprehensive valuation standard and the upgraded valuation method have enough real world business case application to be a relevant asset valuation method? Would a comprehensive valuation standard and corresponding valuation method, with a broad business case application, eliminate the need for an investment opportunity's multiple valuations or an investment's IRR hurdle rate?

Today, along with the absence of a comprehensive valuation architecture, standard and method, is also the absence of a valuation benchmark. Valuation benchmarks attest whether a valuation standard is achieved. A valuation benchmark has a pair of concise

threshold metrics. Whether a valuation benchmark's pair of metrics match one and other attests to whether an investment's valuation is achieving the valuation standard.

An investment opportunity 'go/no go' investment decision culminates on the business professional's comfort surrounding the investment opportunity's assumptions. A new valuation architecture combines a valuation standard and valuation benchmark with the time-value of money doctrine, the discounted-cash-flow valuation concept and a new hybrid valuation method. The new hybrid valuation architecture and supporting assumptions produce asset valuations and generate the investment's fully integrated prospective financial statements. Collectively, the new valuation architecture forms an investment opportunity's unified assumption set, propelling 'go/no go' investment decisions, as shown in Appendix A.

Spending all discerning investment analysis and valuation focus on a unified assumption set, when spending no effort subjectively weighing multiple sourced valuations or clearing subjective hurdle rates, should favorably influence a business professional's investment decision comfort.

Subjectively weighing multiple valuations or clearing trial and error hurdle rates appease three supposed unavoidable valuation realities. The three supposed unavoidable valuation realities are valuation shortcomings and are symptomatic of not achieving the comprehensive hybrid valuation standard. The discussion reveals straightforward discounted-cash-flow upgrades vanquishing the three unavoidable valuation realities, benchmarking the valuation standard and eliminating both subjective multiple valuation weightings and IRR hurdle rates.

The following three paragraphs help introduce the new hybrid valuation architecture. The following paragraphs describe the hybrid architecture's "Standard", "Benchmark" and "Method".

The Standard

The Solve/Assumption Synchronicity Valuation "Standard": after solving an investment opportunity's valuation and altering the hybrid valuation method for solving any other component from the investment's unified assumption set, the formerly solved valuation component amount is placed in the assumption set and solving the investment's new valuation amount produces an amount the component previously equaled as an assumption. The Standard unifies discounted-cash-flow valuations and thus, creates reciprocal present and future valuations and prospective integrated financial statements. Achieving the Solve/Assumption Synchronicity valuation standard provides an investment opportunity a quality investment valuation emanating from the investment opportunity's unified assumption set and fully integrated prospective financial statements.

The Benchmark

The Direct Linkage Valuation "Benchmark" is a matching metric threshold. The Benchmark's metrics are an investment opportunity given or solved equity cost and the equity cash flow IRR from the investment's prospective financial statements. The Benchmark's matching metrics succinctly demonstrates the valuation Standard is achieved and thus, conveys an investment opportunity's assumption set is a unified assumption set.

The Method

The Hybrid Valuation "Method" upgrades existing traditional discounted-cash-flow valuations. The Hybrid Valuation Method infuses Basic Investment Components (BIC) interaction with a bridge of Homogenizing Pre-Asset Operating Performance and bridges of Post-Asset Performance Structural Transfers. Homogenizing bridges address both vertical and horizontal ignored time-value axioms, remove possibly circular computational references and expand the Hybrid Valuation Method's business case application.

An investment opportunity's assumption set now contain the Hybrid Valuation Method's valuation, designating the set as a unified assumption set. A unified assumption set is derived from achieving the valuation Standard. Achieving the valuation Standard indicates the Benchmark's metrics match. Matching benchmark metrics indicate the

investment's prospective financial statements affirm the investment opportunity's valuation. An investment's unified assumption set and corresponding financial statements attain substantial investment decision 'go/no go' comfort over today's valuation methods.

2 Background

The time-value of money doctrine values a future dollar at a discount to a dollar today. The time-value of money doctrine expresses itself through the concept of discounted-cash-flow. IRR and NPV valuation methods dominate the application of the time-value of money doctrine and the discounted-cash-flow concept. However, traditional IRR and NPV can create conflicting and irreconcilable asset valuations.

Possible conflicting IRR and NPV valuations is the first of three supposed unavoidable valuation realities. A conflicting IRR and NPV valuation example is resolved in Section 12.

Is not the time-value of money's valuation doctrine compromised when traditional discounted-cash-flow valuations generate conflicting and irreconcilable valuations? How does the time-value of money doctrine differ valuation outcomes and create conflicting valuations? Does an ignored time-value axiom allow conflicting and irreconcilable discounted-cash-flow valuations? How is one made aware when upgraded IRR and NPV valuations no longer create conflicting valuations?

Today, non-trivial IRR and PV valuations *never* use one as the other's assumption. Thus, traditional valuations have the possibility of conflicting valuations.

Successfully using equity IRR and PV discounted-cash-flow valuations as each other's assumption signifies an upgrade and unification of IRR and PV valuations. The upgrade eliminates possible IRR, PV and NPV conflicting valuations. Upgraded discounted-cash-flow valuations benchmark the valuation standard for not only simple, but also non-trivial investment opportunities.

The second supposed unavoidable valuation reality states an investment's present and future valuations cannot reciprocate. An initial non-trivial valuation can start with a future value assumption and solve the investment's present valuation; a reasonable expectation when re-starting the initial valuation is there should be a way of using the recently solved

present valuation as an assumption and reciprocally solve the original future value assumption. However, the initial future value assumption and the subsequent solved future value amount *never* match.

The third unavoidable valuation reality concerns prospective financial statements. Financial statements represent business's language. After calculating a non-trivial investment valuation, substantiating a critical valuation assumption should not be thought of as an unreasonable attainment. An investment's financial statements would be normally thought of as a good platform benchmarking an equity cost assumption, but an investment's equity cash flow IRR *never* matches the investment's equity cost assumption.

The benefit of unifying traditional discounted-cash-flow valuations is an investment opportunity's assumption set creates prospective financial statements and the financial statements owner's equity statement's IRR matches the investment opportunity's given equity cost [4]. The financial statements owner's equity statement's IRR matching the investment opportunity's equity cost assumption benchmarks the investment's assumption set as unified and signals achieving the valuation standard.

As described, a non-trivial investment opportunity's three unavoidable valuation realities are possible conflicting IRR and NPV valuations, non-reciprocating present and future valuations, and prospective financial statement's inability to affirm an investment's equity cost. The three unavoidable valuation realities are a part of subjectively weighing multiple valuations and setting trial and error hurdle rates to finalize 'go/no go' investment decisions.

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[4] For over forty-years the author has been unsuccessful searching for asset valuation methods resulting in an investment opportunity's prospective owner's equity statement IRR matching the investment opportunity's equity cost assumption while prospective equity issuances and dividends continuously drive a given equity/debt ratio assumption.

Appendix B compares hybrid and traditional valuation methods. Appendix B's hybrid and traditional valuations utilize the same assumption set. Appendix B's hybrid valuations, Lines [1] through [4] *do*, and traditional valuations, Lines [5] through [8] valuations *do not*, match corresponding items from the unified assumption set, Lines [17] through [20].

Appendix B's hybrid valuations show how an investment opportunity's IRR, PV and FV discounted-cash-flow valuations use each other as assumptions, and how Appendix B's hybrid valuations create reciprocal present and future valuations, and how Appendix B's hybrid valuations match equity cash flow IRR and given equity cost – the valuation benchmark metrics.

Appendix B's traditional valuations show how IRR, PV and FV valuations do not use each other as assumptions, and how Appendix B's traditional valuations create non-reciprocal present and future valuations, and how Appendix B's traditional valuations are not matching equity cash flow IRR and equity cost.

The three supposed unavoidable valuation realities are vanquished through the hybrid valuation method. The hybrid valuation method resolves the three interrelated unavoidable valuation realities with upgraded discounted-cash-flow valuations, achieving the Solve/Assumption Synchronicity valuation standard as attested by the hybrid valuation benchmark.

3.0 Getting Started

The first breakthrough addressing the three unavoidable valuation realities was realizing valuing non-trivial investment opportunities require focusing on the investment's equity cash flow separately from traditional combined equity and debt discounted-cash-flow analyses.

Time-value fractional denominators transform nominal periodic cash flow amounts into real economic values. Using a combined equity and debt weighted average capital cost rate in the $1/(1+WACC)^{nper}$ time-value denominator formula can be problematic for non-trivial traditional investment valuations, as seen in Appendix B's non-matching traditional valuations.

Traditional valuation methods, using a combined equity and debt cash flow analyses, simple averages time-value formula denominators. A weighted average capital cost's simple averaging of time-value denominators can mildly or grossly violate the time-value axiom, as depicted in the following examples.

The first example adds together one-third 1/3 and two-fifths 2/5 by a simple average of denominators and equals three-fourths 3/4. The 3/4 is close, but not the actual 0.733 amount; the 0.733 correctly uses a fifteen-common denominator. A second simple average example adds together negative one-third -1/3 and four-fifths 4/5 by also using the simple average of denominators. The second example also equals the first example's three-fourths 3/4, but now 3/4 is not near the second example's actual 0.467 amount using the fifteen-common denominator.

The two 3/4 example comparison demonstrates how an investment's debt influenced weighted average capital cost or deferred operating performance can combine and significantly diverge traditional and hybrid valuations due to ignoring the time-value axiom associated with simple averaging denominators.

Appendix B, with LBO type leverage and with dot.com era type deferred upside performance dramatizes today's investment valuations and ignored time-value axioms.

The next two Appendixes, C and D, are structured identically to Appendix B. However, unlike Appendix B, Appendixes C and D's traditional valuations match their unified assumption sets. Appendixes C (pre-1980s without leverage) and D (pre-2000s dot.com era level operating performance) help demonstrate Appendix A's post 2000s negative impact of using traditional valuation's simple averaging denominators in today's non-trivial discounted-cash-flow valuations.

Vertical equity and debt interaction does not exist in Appendix C. An ignored time-value axiom's impact in Appendix C is not present as the debt capital structure is 0%, Lines [14] and [21], unlike Appendix B's 80% leverage. Thus, Appendix C's traditional valuations match the unified assumption set, Lines [5] through [8] and Lines [17] through [20].

Similarly, horizontal deferred upside operating performance interaction does not exist in Appendix D. The ignored time-value axiom's impact in Appendix D is not present as operating performance is non-varying in Line [11], unlike Appendix B's Line [11]. Thus, Appendix D's traditional valuations, Lines [5] through [8] matches the unified assumption set, Lines [17] through [20], even with debt's 80% leverage, Lines [14] and [21].

If an investment opportunity has little to none of debt's leverage, Appendix C, there is little to no difference between traditional and hybrid investment valuations. Even if debt's leverage exists in an investment opportunity, but there is little to no variation in periodic operating cash flow amounts, Appendix D, there is little to no difference between traditional and hybrid investment valuations. When both debt's leverage and deferred operating performance exist, Appendix B, variances occur between hybrid valuations and traditional asset valuations.

Appendix F helps illustrate Appendix B's non-trivial hybrid and traditional valuation differences within a simple averaging denominator context. Appendix B's given debt leverage is 80% with deferred upside cash flow. Appendix B's weighted average capital cost is 12% and the comparable traditional internal rate of return is 21%, Line [1]. Appendix F illustrates the effect of traditional IRR's simple averaging time-value denominators in Column IRR Inherent, Lines [2] through [5]. Lines [2] through [5] are built with Lines [6] through [13]'s decomposing IRR calculations. Simple averaging has contorted the given 80% capital structure to 49% (Appendix F, Column WACC Structure, Line [4] debt ratio and Appendix F, Column IRR Inherent, Line [4] debt ratio).

In summary, applying a single weighted average capital cost to a combined equity and debt cash flow (traditional NPV and PV) uses simple averaging time-value denominators and ignores the time-value axiom. Also, deducing a single weighted average return rate from a combined equity and debt cash flow (traditional IRR) indirectly uses simple averaging denominators and ignores the time-value axiom. Combined equity and debt cash flow IRR valuations, ignoring the time-value axiom, results in today's use of trial and error IRR hurdle rates.

As both debt's leverage and varying deferred cash flows are present in Appendix B, the divergence between a traditional ($794) and hybrid ($500) investment valuation becomes significant and the three traditional unavoidable valuation realities are apparent.

EBITDA's valuation method addresses the post dot.com era's growing unease of using discounted-cash-flow valuations for higher leverage and deferred upside investment opportunities. However, EBITDA's own shortcomings are discussed in Section 4.4.

After identifying the need to separately focus on equity cash flow for non-trivial investment opportunities, the second hybrid valuation breakthrough was calculating an investment's prospective equity cash flow.

Although equity cash flow is readily found in historical owner's equity financial statements, appropriately defining and calculating prospective equity cash flow was a major challenge. Transitioning investment valuations from a combined equity, tax and debt cash flow format to equity only cash flow found more than just tax and debt in the transition. Identifying a third component between combined equity, tax and debt cash flow and equity only cash flow was a critical step developing the hybrid valuation method.

Short-term cash re-investment (referred to as secondary cash flow) is a third component between combined pre-tax equity and debt cash flow and just equity cash flow. Although secondary cash flow's existence has been discussed for some time [d)], definitive secondary cash flow formulation has been lacking prior to the hybrid valuation method.

Appendixes B, C and D, Line [13] shows secondary cash flow positioned between traditional combined equity and debt (referred going forward as traditional primary cash flow) and equity cash flow. The discussion's Sections 7 and 9 more fully detail secondary cash flow's role in investment valuations.

The third hybrid valuation breakthrough, addressing the three supposed unavoidable valuation realities, was recognizing BIC interaction. Achieving the Solve/Assumption Synchronicity valuation standard requires developing flexible discounted-cash-flow BIC interaction, discussed in Section 4.

What components, parameters and attributes define compelling investment valuation methods? How does one configure and apply valuation parameters and attributes? What are the existing investment valuation methods? What are existing investment valuation methods' strengths and weaknesses? Would an upgraded investment valuation method, replacing traditional investment valuations, have a broad enough business case application to address a wide range of investment opportunities?

> *Hypothesis: Pertaining to broad business case application – the hybrid investment valuation architecture provides an investment's unified assumption set to enhance 'go/no go' investment decision comfort by achieving the reciprocal Solve/Assumption Synchronicity valuation standard, as attested by a benchmark's matching the equity cost assumption and financial statement equity cash flow IRR.*

Describing in detail the valuation benchmark's matching equity cash flow IRR and equity cost benchmark is two part. First, an investment opportunity's equity cash flow IRR matches the investment opportunity's given or solved equity cost component from the investment's weighted average capital cost and second, the investment opportunity's equity cash flow PV valuation, discounting using the same equity cost component, matches equity cash flow's initial flow in the IRR calculation. The matching benchmark threshold signifies IRR and PV are unified, as hybrid IRR and PV equity valuations use each other as assumptions.

4.0 Basic Investment Components (BIC)

Discovering reciprocating discounted-cash-flow valuations started by examining investment valuation methods at a fundamental building-block level. Examining valuation methods at a building-block level reveals valuation methods have basic investment components. Three initial BIC are 'what you receive' over a period of time, 'what you have invested' at a particular point in time, and 'return' with no reference to time. Given any two

BIC, the third is solvable in a reciprocal manner. Table 1's BIC initially interact with each other within a single-period aspect.

BASIC INVESTMENT COMPONENTS (BIC) RELATIONSHIPS — Table 1

				Periods
(A)	$\frac{\text{what you receive}}{\text{what you have invested}}$	=	return	1
(B)	$\frac{\text{what you receive}}{\text{return}}$	=	what you have invested	1
(C)	what you have invested * return	=	what you receive	1

Note: Discussion Tables 1 through 7 each contain various investment valuation methods. Tables 1 through 7's upper case (A), (B) and (C) Line designation signifies a BIC formula. A subsequent Table's lower case (a), (b) and (c) line signifies a corresponding BIC formula example. Tables 1 through 7's right column indicates the valuation method's time-value aspect.

4.1 Return on Equity (ROE)

ROE is a prominent single-period investment valuation. Table 2's ROE relationships identically interact as Table 1's BIC interact. ROE's major shortcoming is ROE's single-period valuation approach. Traditional ROE captures only a brief valuation glimpse outside a time-value context and as an investment valuation method, a single ROE is of little value. However, a time-value multiple-period ROE would form a desirable investment valuation method. A time-value multiple-period ROE's strength would originate from a time-value aggregation of an investment's 'what you receive' economic values.

Investment opportunity valuations incorporating the time-value of money doctrine is an investment valuation cornerstone beginning around 3,000 years ago in ancient Sumer, presumably purchasing and selling domesticated livestock. The time-value of money doctrine went corporate mainstream for combined equity and debt asset valuations in the 1960s[e], primarily replacing the pay-back valuation method.

RETURN ON EQUITY BIC RELATIONSHIPS				Table 2 Periods
(A)	$\frac{\text{what you receive}}{\text{what you have invested}}$	=	return	1
(a)	$\frac{\$12}{\$100}$	=	12% Return on Equity	1
(B)	$\frac{\text{what you receive}}{\text{return}}$	=	what you have invested	1
(b)	$\frac{\$12}{12\%}$	=	$100 Equity Outstanding	1
(C)	what you have invested	* return	= what you receive	1
(c)	$100	* 12%	= $12 Net Income	1

Providing Table 1's BIC relationships with multiple time-value periods requires adding the same time-value 1-1/(1+return 'on')^nper factor (0.4325731443) to each Table 1 BIC relationship, as shown in Table 3.

The time-value factor's addition of the number of periods 'nper' is the fourth and final BIC.

Five 'nper' periodic payments for a $500 'what you have invested' asset at 12% 'return' is $139 'what you receive' each period. The discussion's $139 is utilized in-lieu of the actual $138.7048660 amount for illustrative simplicity.

TIME-VALUE OF MONEY DOCTRINE'S BIC RELATIONSHIPS							Table 3 Periods
(A)	$\frac{\text{what you receive}}{\text{what you have invested}}$	* (1-1/(1+return 'on')^nper)	=	return 'on'			>1
(a)	$139 / $500	* 0.433	=	12%			5
(B)	$\frac{\text{what you receive}}{\text{return 'on'}}$	* (1-1/(1+return 'on')^nper)	=	what you have invested			>1
(b)	$139 / 12%	* 0.433	=	$500			5
(C)	what you have invested	* return / (1-1/(1+return 'on')^nper)	=	what you receive			>1
(c)	$500	* 12% / 0.433	=	$139			5

Table 3's solved discounted-cash-flow 'what you receive', Line (C) quantitatively transitions from not just return 'on' depicted in Table 1, but also includes both return 'on' and 'of' amounts due to the time-value factor presence.

Observation #1: Table 3's 'return' BIC formula, Line (A) necessitates using return 'on' in its own definition thus, introduces the 'return' iterative polynomial aspect.

The 12%, $500, $139 and 5 period assumption set represents a discounted-cash-flow unified assumption set. The unified assumption set can individually derive each BIC business focus from an electronic spreadsheet's =IRR( ), =NPV( ), =PMT( ) and =NPER( ) function set.

4.2 Personal Home and Auto Loans – PMT Function

A personal home or auto loan rate: return 'on', initial loan amount: 'what you have invested' and loan payment: 'what you receive' interact as Table 3's BIC interact. However, comparing Table 4's BIC relationships to Table 3's relationships identifies a modified interaction step. Table 4 combines Table 3's 12% return 'on' with the 0.433 time-value factor and creates a 0.28 return 'on' and 'of' PMT factor (actual 0.2774097312).

PERSONAL HOME AND AUTO LOAN BIC CORE-BUSINESS RELATIONSHIPS — Table 4

								Periods
(A)	Loan Payment / Loan Amount	=	PMT Factor	:	IRR(-1, PMT factor for nper)	=	Loan Rate	>1
(a)	$139 / $500	=	0.28	:	IRR({-1, 0.28, 0.28, 0.28, 0.28, 0.28}) or RATE(5, 0.28, -1)	=	12%	5
(B)	Loan Payment	/	PMT Factor	;	Loan Payment / PMT Factor	=	Initial Loan Amount	>1
(b)	$139	/	0.28	;	$139 / -PMT(12%, 5, 1)	=	$500	5
(C)	Loan Amount	*	PMT Factor	;	Loan Amount * PMT Factor	=	Loan Payment	>1
(c)	$500	*	0.28	;	$500 * -PMT(12%, 5, 1)	=	$139	5

Solving an investment opportunity's return 'on' and return 'of' (RORO: – ***roh-****roh*) PMT factor is accomplished in either of two reciprocal ways, depending on which BIC is solved and which two BIC are given.

First, when solving BIC, Table 4, Line (A) 'return', a PMT factor generates by dividing a given periodic non-varying 'what you receive' by a given 'what you have invested' (non-varying $139 'what you receive' divided by $500 'what you have invested' equals a 0.28 PMT factor). Placing five 0.28 non-varying PMT factors in an electronic spreadsheet iterative =IRR( ) function separates out a 12% loan rate return 'on', Table 4, line (a) from the 0.28 PMT factor. Not unexpectedly, the iterative =RATE(5, 0.28, -1) electronic spreadsheet function also separates out a 12% return 'on'.

Secondly, when calculating a PMT factor and solving BIC, Line (B) 'what you have invested' or solving, Line (C) 'what you receive', dividing the now given return 'on' 12% by the (1-1/(1+return)^nper) time-value factor also generates a PMT factor (12% return 'on' divided by (1-1/(1+12%)^5 equals a combined return 'on' and 'of' 0.28 PMT factor). The resulting 0.28 PMT factor calculates a $500 initial loan amount, line (b) and a $139 loan payment, line (c). Also, not unexpectedly, an electronic spreadsheet PMT( ) function also generates the PMT return 'on' and 'of' factor from given return 'on' and number of periods (=PMT(12%, 5, -1) equals a 0.28 PMT factor).

Including quantitative 'what you receive' (Table 3) and qualitative 'return' (Table 4) with both return 'on' and 'of' maintains flexible straightforward reciprocal BIC interaction after introducing the BIC's time-value factor and its number of periods.

Personal loan's PMT function reflects a compelling, fundamentally sound and long standing valuation architecture, doctrine, concept and method.

As demonstrated in the on-going example, personal loans have unified assumption sets. However, personal loans have very simple BIC interaction. The simple personal loan BIC interaction downside is limited business case application. Non-trivial investment opportunities, opportunities involving debt's leverage and deferred upside cash flow, require an upgrade to PMT personal loan interaction to achieve the valuation standard.

4.3 Internal Rate of Return and Present Value

IRR and PV valuation methods usually do not have all the necessary PMT attributes for an effective investment valuation method, capable of achieving the Solve/Assumption Synchronicity valuation standard. On the positive side, IRR and PV valuation methods either are given or solve BIC's 'return' and 'what you have invested', but on the down side, IRR or PV usually do not have PMT's non-varying 'what you receive'.

Recognizing non-trivial investment opportunities need for periodic non-varying 'what you receive' was critical developing the hybrid valuation method and achieving the Solve/Assumption Synchronicity valuation standard.

IRR, PV and NPV investment opportunities having non-varying 'what you receive' do achieve the Solve/Assumption Synchronicity valuation standard, Appendix D, Line [11]. IRR, PV and NPV investment opportunities already having periodic non-varying 'what you receive' represent Table 4's IRR 'return' formula (A) and PV 'what you have invested' formula (B).

Addressing IRR and PV's usual periodic *varying* 'what you receive' requires a temporary proxy conversion. Conversions from periodic varying to a periodic non-varying proxy is made possible by a discounted-cash-flow homogenizing technique. Section 6,Homogenizing, details converting IRR and PV's normal varying periodic cash flows into a temporary non-varying proxy for hybrid valuation BIC interaction.

4.4 EBITDA Valuations (Earnings Before Interest Taxes Depreciation and Amortization)

BIC, ROE, PMT personal loans, IRR and PV valuation methods are similar. As previously discussed BIC, ROE, PMT, IRR, PV and also EBITDA asset valuations revolve around three-part component valuation structures, absent the number of periods.

EBITDA itself is 'what you receive' and EBITDA's Asset Valuation is 'what you have invested'. Like a triangle's angles, if EBITDA is a three-part valuation structure, with two parts matching BIC, EBITDA's third part also must match BIC's third part. As a result, an EBITDA-Multiple's *inverse* should be thought of as PMT's return 'on' and return 'of' factor.

EBITDA's reversing add-back components literally defines EBITDA's 'what you receive' as an amount providing pre-tax return 'on' and return 'of' a corresponding balance sheet's assets. Table 5 illustrates EBITDA's BIC interaction using an inversed EBITDA-Multiple.

EBITDA BIC RELATIONSHIPS — Table 5

							Periods
(A)	$\frac{\text{EBITDA Valuation}}{\text{EBITDA}}$	=	EBITDA-Multiple	inverse	=	PMT Factor	?
(a)	$\frac{\$500}{\$139}$	=	3.6	$\frac{1}{3.6}$	=	0.28	?
(B)	EBITDA	/	EBITDA-Multiple inverse		=	EBITDA Valuation	?
(b)	$139	/	0.28		=	$500	?
(C)	EBITDA Valuation	*	EBITDA-Multiple inverse		=	EBITDA	?
(c)	$500	*	0.28		=	$139	?

EBITDA valuation method's problematic issue is EBITDA's investment valuation concept does not provide EBITDA's valuation method an investment opportunity's critical fourth BIC number of periods. Without an investment opportunity's number of periods, one cannot differentiate the EBITDA 0.28 PMT factor between return 'on' and return 'of'. Separating a PMT factor between return 'on' and return 'of' is the fundamental driver of an investment's future valuation. EBITDA's lack of future valuations removes the ability to create reciprocal present and future valuations. Thus, EBITDA cannot fully achieve the hybrid valuation method's Solve/Assumption Synchronicity valuation standard.

Why not treat EBITDA's Multiple as a number of periods? Treating EBITDA's Multiple as a number of periods turns EBITDA valuations into the five-hundred-year-old pay-back valuation method [f]. There is no BIC 'return' in the pay-back valuation method.

Either way, EBITDA with a PMT factor (multiple inverse) and no distinction between return 'on' and 'of' or EBITDA with a number of periods (payback method) and no 'return' PMT factor, EBITDA valuations fall short of the Solve/Assumption Synchronicity standard.

Either assigning the EBITDA valuation method a number of periods or assigning EBITDA a 'return' PMT factor nullifies EBITDA's macroeconomic valuation doctrine. Assigning EBITDA a fourth BIC starts an irreversible valuation method transition down a hybrid time-value multiple-period valuation path.

Investment valuation methods utilizing four BIC enable building an investment's microeconomic set of assumptions. Table 4's three BIC core-business valuations, working in conjunction with the fourth BIC number of periods, attain unified assumption sets and achieve the Solve/Assumption Synchronicity valuation standard.

4.5 Hybrid Investment Valuations and a BIC Interaction Upgrade

Table 4's PMT personal loan and Table 5's EBITDA valuation methods are stories of contrasts. Table 4's PMT is a desirable time-value multiple-period method. However, PMT's business case application is very narrow. At the other end of the valuation method spectrum is Table 5's EBITDA method. EBITDA's business case application is broad, but lacks a desirable time-value aspect.

Combining PMT's reciprocal time-value multiple-period aspect with EBITDA's broad business case application moves a valuation architecture's subjectivity to an investment's assumptions, as shown in Appendix A, and increases a business professional's investment decision comfort. A combined Table 4 and 5 hybrid valuation does not need to subjectively weigh other valuations to reach investment 'go/no go' decisions. Removing the need to subjectively weigh multiple valuation is accomplished by the hybrid valuation method either unifying or eliminating the valuations used in subjectively weighing valuations. Also, IRR hurdle rates are no longer needed when the hybrid valuation method's equity cash flow IRR matches the desired equity cost.

The hybrid valuation method forms from two 'bridge' modifications to Table 4. The first 'bridge' is the previously mentioned homogenizing operating performance proxy (Section 4.3) and the second 'bridge' is homogenizing BIC structural transfers.

The two bridge modifications originate from differentiating 'what you receive' performance between pre- and post- asset performance. Identifying pre- and post- asset

performance not only expands Table 4's limited PMT function business case application, but also eliminates possible circular computational references.

Pre-asset performance of 'what you receive' does *not* have a close primary correlation to 'what you have invested'. Pre-asset performance sources exclusively from an investment's prospective income statement. Pre-asset performance items include an investment opportunity's prospective revenues, cost-of-goods sold, sales and marketing expenses, and administrative and general expenses. The singular multiplicative pre-asset performance bridge is discussed further in Section 6, Homogenizing.

Post-asset performance of 'what you receive' *does* have a close primary correlation to 'what you have invested'. Post-asset performance sources from both prospective income and cash flow statements. A partial list of post-asset performance items includes property tax, secondary cash flow (short-term cash reinvestment), deferred income tax and an investment ending asset sale or salvage amount. Post-asset structural transfer bridges are discussed generally below in this Section and with further detail in Section 7.

As post-asset operating performance, the close primary correlation with 'what you have invested' needs addressing. Post-asset structural transfer bridges use post-asset performance from 'what you receive', redefines the post-asset performance as relative percentages of 'what you have invested' and places the homogenized percentages in the 'return' PMT factor. Structural transfer bridges are additive, transforming unabridged (without bridges) PMT factors into abridged (with bridges) PMT factors for BIC interaction.

Table 6 apportions the on-going example's $139 'what you receive' between pre- and post- asset performance. The on-going example identifies $49 of the $139 asset performance as post-asset performance, creates an additive -0.10 total of post-asset bridges ($49/$500, actual -0.097409731), transitions a 0.28 *un*abridged PMT factor into a 0.18 *a*bridged PMT factor for BIC interaction and leaves $90 as pre-asset performance.

Other changes to the on-going example include increasing the asset's life from five periods to ten periods. Although the on-going example's asset life is now ten periods, the

length of the example's investment opportunity remains five periods with a $600 asset sale at the end of period five.

HYBRID PRE- AND POST- ASSET BIC RELATIONSHIPS — Table 6

											Periods
(A)	Oper Perform +/- Post-Asset Perf / Asset Valuation	=	Abridged Pre-Asset Perf / Asset Valuation	=	Abridged PMT	+/-	Bridge	Unabridged PMT			>1
(a)	$139 less $49 post-asset / $500	=	$90 / $500	=	0.18		-0.10	= 0.28			5
(B)	Oper Perform +/- Post-Asset Perf / PMT Factor +/- Bridge	=	Abridged Pre-Asset Perf / Abridged PMT	=	Asset Valuation						>1
(b)	$139 less $49 post-asset / 0.28 PMT plus -0.10 bridge	=	$90 / 0.18	=	$500						5
(C)	Unabridged PMT	+/-	Bridge	Abridged PMT	x	Asset Valuation	=	Pre-Asset Performance Abridged			>1
(c)	0.28		-0.10	= 0.18	x	$500	=	$90			5

Table 6, line (a), structurally transfers the $49 post-asset performance into a -0.10 post-asset structural transfer bridge. Further in the line (a) calculation, removing the -0.10 transfer bridge effect from the calculated 0.18 abridged PMT factor generates the previous 0.28 unabridged return 'on' and return 'of' PMT factor.

Even after post-asset structural transfer bridge's introduction, Table 6, line (a), still calculates Table 4's 0.28 PMT factor and Table 6, line (b) still calculates Tables 4's $500 asset valuation. Table 6, line (c) 'what you receive' calculation is now a $90 pre-asset performance, plus 0.10 PMT factor times $500 asset valuation, totaling the original periodic non-varying $139 'what you receive'.

Any subsequent $500 asset valuation increases or decreases also appropriately changes the example's initial $49 post-asset performance amount, but does not require changing the 0.10 post-asset structural transfer bridge. In the hybrid valuation method, amounts of post-asset performance appropriately fluctuate with asset valuation amount changes, but relative post-asset structural transfer bridges and their corresponding abridged PMT factors appropriately do not change with asset valuation changes.

Dividing pre- and post- $139 'what you receive' by the $500 asset valuation, line (a), before removing the $49 post-asset performance, causes a circular computational reference. Circular computational references generate from an asset performance having a high correlation with 'what you have invested', without a structural transfer bridge.

Hybrid post-asset performance 'what you receive' sources from both income and cash flow statements. EBITDA's 'what you receive' sources exclusively from income statements. By solely sourcing from only income statements, EBITDA's investment components are incomplete. Furthermore, without distinguishing between pre- and post- asset performance, EBITDA's valuation method inherently includes circular computational references. The sourcing and pre/post performance differences make EBITDA's valuation method and the hybrid valuation method incompatible and irreconcilable.

THREE BASIC INVESTMENT COMPONENTS (BIC) INTERACTION — Table 7

Hybrid Valuation Algorithms with Post-Asset Bridges					Periods
RETURN – Hybrid algorithm (a)					
Pre-Asset Performance abridged		$90			
Asset Valuation		$500			
PMT Factor abridged	divide =		0.18		
Less Post-Asset Bridges			-0.10		
PMT Factor unabridged				0.28	>1
Return	= RATE(5, 0.28, -1)			12%	
ASSET VALUATION – Hybrid algorithm (b)					
Pre-Asset Performance abridged			$90		
PMT Factor unabridged	=-PMT(12%, 5, 1)	0.28			>1
Add Post-Asset Bridges		-0.10			
PMT Factor abridged			0.18		
Asset Valuation	divide =			$500	
PRE-ASSET PERFORMANCE – Hybrid algorithm (c)					
Asset Valuation			$500		
PMT Factor unabridged	=-PMT(12%, 5, 1)	0.28			>1
Add Post-Asset Bridges		-0.10			
PMT Factor abridged			0.18		
Pre-Asset Performance abridged	times =			$90	
Pre-Asset Performance bridge				(0.450)	
Pre-Asset Performance period one unabridged				($200)	

Table 7 re-represents Table 6, Lines (A) and (a) 'return', Lines (B) and (b) asset valuation 'what you have invested', Lines (C) and (c) pre-asset performance 'what you receive' and post-asset structural transfer bridges. Table 7's tabular format better structures, summarizes and visualizes Table 6's basic investment components relationships. Future discussion references utilize Table 7, rather than Table 6.

5 Capital Cost Relationship with Equity capital cost

The on-going example's 0.28 PMT factor, five periods and the resultant return 'on' 12% can also be thought of as a 12% weighted average capital cost inclusive of an 80% debt weighting at a 5% interest rate and a 25% income tax rate. Going left to right in Table 8, the 0.28 PMT factor's 12% capital cost, after removing debt and tax, is 30% equity cost.

CAPITAL COST RELATIONSHIP WITH EQUITY CAPITAL COST — Table 8

PMT factor	Rate Function	Capital Cost Note a	less 4% Debt	Equity Capital portion	Equity 20% weight	pre-tax Equity Cost	less Tax	after-tax Equity Cost
0.28	RATE(5,0.28,-1)	= 12%	- (80%*5%)	= 8% /	(1 - 80%)	= 40%	* (1 - 25%)	= 30%

The discussion's return 'on' weighted average capital cost (referred going forward only as 'capital cost'), exists in a pre-tax status and equity cost exists in an after-tax status, unless otherwise noted in the discussion.

All of Table 8's capital cost's assumptions are represented in the on-going example's hybrid valuation BIC interaction. Traditional capital cost's flexibility accommodating equity cost and a range of capital cost assumptions become evident in Table 8's capital cost definition and assumption interoperability. The hybrid capital cost's versatility is partially depicted in Appendix B and further depicted in the more comprehensive Appendix E, and specifically Appendix E, Page 4, Line [100].

6 Homogenizing

Homogenizing is an investment valuation technique. Homogenizing starts with an investment opportunity's varying periodic amounts and temporarily represents the varying amounts as periodic non-varying amounts, a necessary proxy for hybrid BIC interaction. Homogenizing generates both a multiplicative bridge for pre-asset performance and additive bridges for post-asset performance structural transfers.

The homogenizing technique allows an investment's pre-asset performances to vary up and down from period to period within a time-value aspect. Homogenizing pre-asset performance allows modeling an investment opportunity's higher start-up costs, early pre-asset revenue under performance and long time-frame higher revenue performance. Homogenizing pre-asset performance allows working with constant changing performance scenarios within a valuation's time-value multiple-period BIC framework.

Depicting the timing of an investment opportunity's pre-asset performance turnaround from under to over performance is often the key determination in an investment opportunity 'go/no go' investment decision. EBITDA's investment valuation method does not directly allow recognizing unique start-up costs, such as early under performance or future high performance within a time-value of money framework.

Homogenizing uses Table 9's first column of the on-going example's given five unabridged pre-asset performances ($200), ($200), $400, $400 and $628.499 and transforms the five pre-asset performances into the example's five non-varying $90 abridged pre-asset performance proxies. The $90 abridged proxy solves Table 7, algorithms (a) 'return' and (b) 'what you have invested' asset valuation. The hybrid valuation method and homogenizing not only create abridged pre-asset performances, but by reversing the homogenizing technique, homogenizing can reciprocally solve unabridged pre-asset performances, Table 7, algorithm (c) 'what you receive'.

The first column $90 abridged pre-asset performance proxy homogenizes using the five unabridged pre-asset performances, a 30% equity cost (Table 8), the example's five period count and the =NPV( ) and =PMT( ) function combination.

HOMOGENIZING PRE-ASSET PERFORMANCE — Table 9

		Pre-Asset Performance			
				Abridged	$90
	Period		Profile to period 1		
Unabridged	1	($200)	100%		
"	2	($200)	100%		
"	3	$400	(200%)		
"	4	$400	(200%)		
"	5	$628	(314%)		
=NPV(30%, periods 1 : 5)		$219	(110%)		
=-PMT(30%, 5, 1)		0.41	0.41		
Pre-Asset Perform abridged proxy		times = $90			
Pre-Asset Performance bridge				times =	(0.450)
Pre-Asset Performance period one unabridged				divide =	($200)

Table 9's second column shows how an investment opportunity may reciprocally solve unknown ($200), ($200), $400, $400 and $628.499 unabridged pre-asset performances. Table 7, algorithm (c), solves a $90 abridged pre-asset performance through a given $500 asset valuation times a given 0.18 abridged PMT factor. The $90 abridged pre-asset performance divided by Table 9's homogenizing (0.450) multiplicative pre-asset performance bridge solves the ($200) first period pre-asset performance.

To homogenize the (0.450) multiplicative pre-asset performances bridge, the Table 7, algorithm (c), must also be given Table 9's second column's 100%, 100%, -200%, -200% and -314.2495% pre-asset performance profile to period 1 assumptions. The pre-asset performance profile to period 1's first period assumption is always 100%.

After solving the $200 first period, Table 9's second column of pre-asset performance profile to period 1 assumptions determine periods two through five unabridged pre-asset performance amounts. Any BIC asset valuation or abridged PMT factor assumption changes, impacting the Table 7, algorithm (c), $90 abridged pre-asset performance, not only change the ($200) first period unabridged pre-asset performance but also changes subsequent periods two through five pre-asset performance amounts. The first period's

change flows through the remaining pre-asset performances using the pre-asset performance profile to period 1's assumptions.

Using the homogenizing technique to solve investment opportunities for abridged or unabridged operating performance is a powerful reciprocal valuation method attribute.

7.0 Post-Asset Performance Structural Transfer Bridge Details and Hybrid Valuation Multiples

Table 10 details five individual post-asset structural transfer bridges comprising the on-going example's (0.10) post-asset bridge total from Section 4.5. The five Section 7.1 post-asset bridge descriptions explain each post-asset performance's role in the on-going example. The post-asset performance descriptions introduce the remaining assumptions in the on-going example's unified assumption set.

POST-ASSET PERFORMANCE PROXIES AND STRUCTURAL TRANSFER BRIDGES Table 10

Post-Asset Performance	Homogenized Post-Asset Performance Proxy	Asset Valuation	Post-Asset Structural Transfer Bridges	Precision Post-Asset Transfer Bridges
Secondary Cash Flow bridge (re-investment)	($10)	$500	0.02	0.020724805
Deferred Tax activity bridge	8	$500	(0.02)	-0.016925662
Asset O&M Property Tax bridge	(27)	$500	0.06	0.054903075
Sale Book Value bridge	39	$500	(0.08)	-0.078704865
All But Sale Gain (Loss) bridge Note a	$10		(0.02)	-0.020002648
Sale Gain (Loss) bridge	39	$500	(0.08)	-0.077407083
Post-Asset Performance and Bridges	$49		(0.10)	-0.097409731

Note a: This subtotal is later used in Table 12

Table 10's cumulative (0.10) favorable post-asset transfer bridges decrease the 0.28 unabridged PMT factor, forming a 0.18 abridged PMT factor for BIC interaction. Post-asset structural transfer bridges decreasing PMT factors favorably increases Table 7, algorithm (b), asset valuations and decrease the need for Table 7, algorithm (c), pre-asset performance. Removing post-asset performance structural transfer bridges from an

abridged PMT factor in Table 7, algorithm (a), allows for unabridged capital cost and equity cost calculations, as shown in Table 8.

7.1 Table 10 Post-Asset Performance Descriptions

- **Secondary Cash Flow:** Secondary Cash Flow's origin is the balance sheet financial statement with an income statement impact. Secondary cash flows balance investment opportunities with the world outside the investment opportunity's external issuance and extinguishment financing. For a depreciating asset, secondary cash flow adjusts for the cash difference between external financing extinguishment and income statement depreciation recognition. Other cash versus accrual adjustments, such as current versus deferred income tax, also come into play. The investment opportunity owner situationally determines the secondary flow rate assumption. The on-going example's secondary cash flow is a short-term cash reinvestment and returns a 1.9% user-defined rate. The 1.9% rate is below the overall equity cost. The lower re-investment return rate generates an unfavorable homogenized $10 per period post-asset performance proxy need, Table 10.
- **Deferred Tax:** Deferred Tax activity assumes a six-period tax life versus a ten-period book life and double-declining tax versus straight-line book depreciation treatment. Deferred income tax's cash flow advantage generates a favorable homogenized $8 per period post-asset performance proxy, Table 10.
- **O&M and Property Tax:** The $20 asset O&M and Property Tax Expense assumes an initial 4% expense on the $500 asset valuation. Four subsequent periods increase the 4% by 1% to an 8%, $40 expense in period five. Asset O&M and Property Tax generates an unfavorable homogenized $27 per period post-asset performance proxy need, Table 10.
- **Sale Book Value:** Sale Book Value assumes a $500 ten-period asset with straight-line depreciation is sold at period five (50% book value). Selling the $250 net book value generates a favorable homogenized $39 per period post-asset performance proxy, Table 10.
- **Sale Gain (Loss):** Sale Gain (Loss) is a 240% gain selling price assumption, equaling a $600 selling price (240% of $250 ending book value). A $600 selling price less the previous $250 ending book value generates a $350 gain on the sale

and a favorable homogenized sale gain $39 per period post-asset performance proxy, Table 10.

7.2 Calculating Post-Asset Structural Transfer Bridges from Varying or Single Period Post-Asset Performances

Creating post-asset structural transfer bridges use the same homogenizing technique as Table 9's pre-asset performance homogenizing. Homogenizing generates a periodic non-varying 'what you receive' proxy amount for post-asset structural transfer bridges. Post-asset transfer bridges plus an unabridged PMT factor create an abridged PMT factor for BIC interaction. Most post-asset structural transfer bridge's homogenizing discount rate is equity cost. However, the exception is a balance sheet based post-asset bridge. A balance sheet based post-asset bridge's homogenizing discount rate is overall capital cost.

Table 11 depicts both the Book Value and Sale Gain structural transfer bridges. The $250 book value at period five of the ten period $500 asset equals 50 percent, Table 11, Column 1, Line 5. The $250 is the balance sheet portion of the $600 sale price. The $600 sale price is 240% of the $250 book value. The single $250 sale book value event, homogenizing at 12% capital cost is a time-value $39 (0.08) proxy for five periods. In addition, the single $350 income statement sale gain, equals 70 percent of the $500 asset valuation, Table 11, Line 5, Column 2. The single $350 sale gain event, homogenizing at 30% equity cost , is a time-value $39 (0.08) proxy for five periods.

Coincidently, the difference between the $250 book value and $350 sale gain amounts is mostly offset by the difference in the 12% capital cost (balance sheet) and 30% equity cost (income statement) homogenizing rates, arriving at approximately the same favorable, Table 10 (0.078704865) sale book value and (0.077407083) sale gain proxies.

HOMOGENIZING POST-ASSET BRIDGES: BALANCE SHEET AND INCOME STATEMENT BASED — Table 11

Period	Sale Book Value Balance Sheet Based 12% Capital Cost		Sale Gain Income Based 30% Equity capital cost	
1	0.00		0.00	
2	0.00		0.00	
3	0.00		0.00	
4	0.00		0.00	
5	0.50	Note a	0.70	Note b
	0.28	=NPV(12%, per. 1-5)	0.19	=NPV(30%, per. 1-5)
	0.28	=PMT(12%, 5, 1)	0.41	=PMT(30%, 5, 1)
Bridges	(0.08)		(0.08)	

Note a: straight-line period-five book value percentage of a ten-period asset life

Note b: a given 240% ending book value sale price assumption less 100%, times 50% book value as an ending asset valuation percentage

Appendix E, Pages 1 through 6 are the on-going example's set of financial statements. Appendix E, Pages 7 and 8 provide more detail on the above post-asset transfer bridges.

Appendix E, Pages 9 and 10 reconcile the differences between hybrid and traditional valuations. The reconciliation demonstrates the hybrid valuation's use of equity cost as an operating performance discounting rate rather than the combined equity/debt capital cost of traditional discounted-cash-flow. Secondary flow's reconciliation captures the difference between a user-defined rate and equity cost. Sale book value does not need a reconciling hybrid versus traditional item since both hybrid and traditional appropriately use capital cost to discount. However, sale book value still needs Table 10's structural transfer bridge for Table 7 BIC interaction.

A hybrid valuation's Hybrid-Multiple concisely summarizes and communicates a significant portion of an investment opportunity's assumptions in a single figure. The on-going example's hybrid-multiple is 5.6, the inverse of the 0.18 abridged PMT factor, as shown in Appendix E, Page 7, Line [183]. Although not compatible with EBITDA-Multiples, Hybrid-Multiples offer business professionals a similar summary communicative format.

Table 10 represents only a partial post-asset structural transfer list. If an investment opportunity's operating issue is relevant, the hybrid valuation method can accommodate the issue, either as a pre- or post- asset operating performance component.

8 The Next Level of Hybrid Valuation Business Application: Beyond BIC

The algorithms in Table 7 solve the three BIC core-business focuses: algorithm (A): 'return', algorithm (B): 'what you have invested' and algorithm (C): 'what you receive'.

However, Table 12 solves none of the three BIC valuations, but solves the on-going example's (0.08) Sale Gain structural transfer bridge and subsequent $600 Sale Price. Table 12 demonstrates the ability to solve non-BIC investment components.

Adapting Table 7's BIC relationships enable solving an investment opportunity for any unified assumption set component. The hybrid valuation method allows solving investment opportunities for any Table 8, Table 9 or Table 10 component from the unified assumption set, fulfilling the Solve/Assumption Synchronicity valuation standard.

SOLVING AN INVESTMENT OPPORTUNITY'S SALE PRICE — Table 12

A Non-Basic investment component

Pre-Asset Performance abridged	$90					
Asset Valuation	500					
PMT Factor abridged (target)		0.18				
PMT Factor unabridged =PMT(12%, 5, 1)	0.28					
Post-Asset Bridges But Sale Gain (Table 10)	(0.02)					
PMT abridged Except Sale Gain bridge		0.26				
Difference - Sale Gain bridge (solve)			0.08			
Future Value of ones =-FV(30%, 5, 1)			9.04			
Sale Gain (Loss) on Asset Valuation				0.70		
Asset Valuation				$500		
Sale Gain (Loss)					$350	
Sale Ending Book Value (50% book value – period five of ten-period life)					250	
Sale Price (240% of Book Value)						$600

Incorporating any relevant investment opportunity component into an investment opportunity and then solving any possibly investment opportunity component creates unlimited business case application for the hybrid valuation method.

9.0 Affirming Balance Sheet, Income, Equity Cash Flow and Owner's Equity Statements

Everything for generating an investment opportunity's hybrid unified assumption set and affirming financial statements is in place. The next four tables (Tables 13, 14, 15 and 16) are the on-going example's integrated balance sheet, income, equity cash flow and owner's equity statements – all four are also found and fully referenced in Appendix E. The cash flow statement's equity cash flow and the income statement's net income build and relieve the summary owner's equity statement. In Section 10, the summary owner's equity statement, Table 16, is used to demonstrate the Solve/Assumption Synchronicity valuation standard.

9.1 Balance Sheet

The balance sheet starts with the $500 ten-period life depreciating asset with its periodic $50 accumulating depreciation. Secondary cash flow balances net assets, equity and liabilities. Cash paid versus book taxes build a reversing deferred liability.

BALANCE SHEET — Table 13

	0	1	2	3	4	5
Asset	$500	$500	$500	$500	$500	$0
Depreciation	0	50	100	150	200	0
Net	$500	$450	$400	$350	$300	$0
Secondary Cash Flow	0	40	61	68	62	0
Assets	$500	$490	$461	$418	$362	$0
Deferred Income Tax	$0	$29	$44	$50	$50	$0
Equity & Debt Financing[a]	500	461	417	367	312	0
Equity & Liabilities	$500	$490	$461	$418	$362	$0

Note a: previous balance less -PMT(12%, 5[b], $500[b], -$500*50%) - 12%*$500[b];
Note b: declining each period

The combined equity and debt financing declines ratable with a 12% capital cost, five period investment and 50% ending book value sale. All transactions occur at period end. As such, beginning amounts are held throughout the period. The balance sheet is closed-out at period five's asset sale, see the on-going example's closing trial balance, Appendix E, Page 6.

9.2 Income Statement

The income statement starts with Table 9's five unabridged pre-asset performances. Equal one-tenth of the $500 asset valuation recognizes $50 book depreciation expense each period. The asset O&M and property tax first period 4% assumption generates a $20 (4% of $500 asset valuation) income statement impact, incrementing 1% ($5) each period. The income statement $350 gain on the asset $600 sale resides at the end of period five.

Income taxes are 25%. Current income taxes calculate using a six-period life and double-declining balance accelerated tax depreciation deduction. Deferred taxes absorb the tax difference between book and tax depreciation. Interest expense uses 80% of the balance sheet's combined equity and debt outstanding times the 5% interest expense cost rate, Table 8 assumptions. Secondary cash flow return is the balance sheet's outstanding secondary flow balance times the user-deemed 1.9% rate.

INCOME STATEMENT — Table 14

	1	2	3	4	5
Pre-Asset Performance	($200)	($200)	$400	$400	$628
Depreciation	(50)	(50)	(50)	(50)	(50)
O&M and Property Tax	(20)	(25)	(30)	(35)	(40)
Sale Price Gain (Loss)					350
Income Tax current	102	89	(70)	(75)	(269)
Income Tax deferred	(29)	(15)	(6)	0	50
Interest Expense	(20)	(18)	(17)	(15)	(12)
Secondary Flow Return	0	1	1	1	1
Net Income	($218)	($219)	$229	$227	$658

9.3 Equity Cash Flow Statement

The equity cash flow statement begins with a $500 asset purchase, financed with 20% equity and 80% debt. The equity cash flow statement's operations portion starts with net income and adds back non-cash income statement items. The period-over-period balance sheet change in secondary flow recognizes secondary cash flow's balancing short-term nature. Debt's issuance and repurchases are 80% of the balance sheet's change in external

financing. The period five asset sale retires the remaining debt balance. The $250 ending book value sale price is a non-income statement source of funds.

EQUITY CASH FLOW STATEMENT — Table 15

	0	1	2	3	4	5
Net Income		($218)	($219)	$229	$227	$658
Add-back Depreciation		50	50	50	50	50
Add-back Deferred Income Tax		29	15	6	(0)	(50)
Secondary Flow		(40)	(21)	(7)	5	62
Debt Issuance (Repurchase)	$400	(31)	(35)	(39)	(44)	(250)
Sale Price Ending Book Value						250
Asset Valuation purchase	(500)					
Equity Cash Flow	($100)	($210)	($211)	$239	$238	$721

9.4 Owner's Equity Statement

The owner's equity statement is the repository for the income (accrual based) and equity cash flow statements. The income statement's final line and the equity cash flow statement's final line build and relieve the owner's equity statement.

Table 16's finite (beginning and ending in zero) owner's equity statement succinctly summarizes the on-going example's investment opportunity. The summary owner's equity statement simultaneously displays the investment's periodic economic value outcomes in the form of net income and the investment opportunity's equity cash flow in the form of equity issuances and dividends. The owner's equity statement's dual-direction cash flow is unencumbered by other non-equity cash flows.

OWNER'S EQUITY STATEMENT — Table 16

	0	1	2	3	4	5
Beginning Owner's Equity		$100	$92	$83	$73	$62
Net Income		(218)	(219)	229	227	658
Issuance (Dividend)	$100	210	211	(239)	(238)	(721)
Ending Owner's Equity	$100	$92	$83	$73	$62	$0

Starting with any Table 7 formula and using no additional assumptions other than the assumptions previously discussed, the Table 16 owner's equity statement automatically balances to zero at the end of the investment time-frame.

In addition, the initial three $100, $210 and $211 equity infusions (periods 0, 1, and 2) and the remaining $239, $238 and $721 dividends maintain the 20% equity and 80% debt capital structure assumption throughout the entirety of the investment time-frame.

A self-balancing finite owner's equity statement, while maintaining a given equity/debt ratio, sourced solely from a unified assumption set, solidifies the hybrid valuation method's ability to solve unlimited investment types and favorably influence a business professional's decision comfort. From a comprehensive valuation method perspective, in his book "Investment Valuation", 2012, Aswath Damodaran identifies three overall approaches to investment opportunity valuations [g]. The three approaches he identifies are direct discounted-cash-flow, relative valuation (looking at the pricing of comparable assets) and contingent claim valuations. Materializing the hybrid valuation architect's four BIC for the three valuation approaches provides an opportunity to compare and possibly converge a specific investment's different outcomes from the three valuation approaches.

10.0 Core-Business Focus Reciprocating Discounted-Cash-Flow Valuations

A core-business focus is a valuation focus business professionals routinely solve. Electronic spreadsheets recognize core-business focuses with dedicated functions. The hybrid valuation method distinguishes three out of the four BIC as core-business focuses. The 'nper' BIC is not considered a hybrid core-business focus.

In addition to the other three BIC core-business focuses, a non-BIC core-business focus provides an investment opportunity's 'what you *will* receive' bookend as the hybrid method's fourth core-business focus. The four core-business focuses and their electronic discounted-cash-flow functions are: abridged PMT 'return' and =IRR( ), asset valuation 'what you have invested' and =NPV( ), pre-asset performance 'what you receive' and =PMT( ), and the bookend sale price/salvage 'what you *will* receive' and =FV( ). Table 17 summarizes the core-business focuses' on-going example valuations.

RECIPROCAL DISCOUNTED-CASH-FLOW VALUATION SUMMARY — Table 17

Investment Component	Core-business Focus	Electronic Function	On-Going Example's Reciprocal Valuations
return	Equity Capital Cost	=IRR( )	30%
what you have invested	Asset Valuation	=NPV( )	$500
what you receive	Pre-Asset Performance	=PMT( )	$90
what you receive	Post-Asset Performance	structural transfers	10% & $49
what you will receive	Asset Salvage/ Sale Price	=FV( )	$600

The four core-business focus valuations calculate reciprocal discounted-cash-flow functions using the on-going example's equity cash flow, Table 16. The core-business focus calculations demonstrate the Solve/Assumption Synchronicity valuation standard – alternating the four core-business focuses between solve and assumption within a unified assumption set.

The example's equity cash flow, Table 16, computes a 30% equity IRR, Calculation 1, equaling the investment opportunity's equity cost.

Calculation 1: Hybrid IRR

IRR({ -$100, -$210, -$211, $239, $238, $721}) = IRR 30%.

The example's equity cash flow, Table 16, compute a $100 equity PV, Calculation 2, equaling the investment opportunity's initial equity investment, grossing-up to the full $500 asset valuation, inclusive of debt.

Calculation 2: Hybrid PV

NPV(30%, -$210, -$211, $239, $238, $721) = $100 divided by 20% equity weight = $500 PV asset valuation

The example's equity cash flow, Table 16, less unknown pre-asset performance, Table 14, compute a PMT equaling the investment opportunity's first period pre-asset

performance. The ($200) pre-asset performance first period, Calculation 3 and the pre-asset performance profile to period 1 assumption, Table 9, calculate the five unabridged pre-asset performances.

Calculation 3: Hybrid PMT

PMT(30%, 5, -100 + NPV(30%, -$10, -$11, -$161, -$162, $92)) = $90 divided by PMT(30%, 5, -NPV(30%, 100%, 100%, -200% ,-200%, -314.2495%)) =($200) PMT pre-asset performance first period

The example's equity cash flow, Table 16, less an unknown $600 combined book value and sale gain, Tables 13 and 14, compute a $600 FV future value, Calculation 4, equaling the investment opportunity's asset sale price.

Calculation 4: Hybrid FV

FV(30%, 5, 0, -$100 + NPV(30%, -$210, -$211, $239, $238, $121)) = $600 asset sale price

The hybrid valuation method's time-value multiple-period approach is apparent as discounted-cash-flow tools reciprocate around the four core-business focuses' equity cash flow.

10.1 Traditional Discounted-Cash-Flow Valuation Comparison

The on-going example's traditional IRR and NPV primary cash flow is subtotaled in Table 18 (and Appendix B). The traditional combined equity and debt cash flow computes a 21% IRR, Calculation 5, comparable to the hybrid's 12% capital cost. Traditionally, the 21% would be used in an IRR hurdle rate comparison for a capital budgeting 'go/no go' investment decision.

The IRR 21% traditional equity cost component is 64% (21% less 4% debt, divided by 20% equity weight, times 75% after-tax, (as demonstrated in Table 8), comparable to the hybrid's 30% equity cost , as previously shown in Appendix B.

Calculation 5: Traditional IRR

IRR({ -$500, -$220, -$225, $370, $365, $1188}) = IRR 21%

The example's traditional primary cash flow, Table 18 and 12% capital cost compute a traditional $794 PV asset valuation, Calculation 6, and is $294 higher than the hybrid's $500 PV asset valuation.

Calculation 6: Traditional PV

NPV(12%, -$220, -$225, $370, $365, $1188) = $794 PV asset valuation

TRADITIONAL PRIMARY AND EQUITY CASH FLOW — Table 18

	Table reference	0	1	2	3	4	5
Purchase & Sale Price	13 + 14	($500)					600
Pre-Asset Performance	13		($200)	($200)	$400	$400	$628
Post-Asset O&M Prop Tax	13		(20)	(25)	(30)	(35)	(40)
Traditional Primary Cash Flow	subtotal	($500)	($220)	($225)	$370	$365	$1,188
Secondary Cash Flow	13 + 14		(40)	(20)	(6)	7	63
Debt	13 + 14	$400	(51)	(54)	(56)	(59)	(262)
Income Tax current	13		102	89	(70)	(75)	(269)
Equity Cash Flow	total & 15	($100)	($210)	($211)	$239	$238	$721

10.2 Explaining Traditional and Hybrid Discounted-Cash-Flow Differences

The difference between the example's $500 hybrid investment valuation and the $794 traditional valuation is primarily driven by two items. First, is the debt driven portion of the 1800 basis point spread between the example's 30% equity cost and 12% capital cost, and secondly is the investment opportunity's degree of deferred pre-asset performance, as captured in the +1.3 Operating Performance Relative Slope (OPRS) of the on-going example, Calculation 7.

Calculation 7: Operating Performance Relative Slope

SLOPE({-$220,-$225, $370, $365, $588},{1, 2, 3, 4, 5}) divided by
AVERAGE(-$220, -$225, $370, $365, $588)
= +1.3 Operating Performance Relative Slope

Appendix E, Pages 9 and 10's reconciliation uses Section 6's homogenizing technique and captures individual cash flow differences attributable to the on-going example's 1800 basis point spread between the example's 30% equity cost and 12% capital cost, the +1.3 operating performance relative slope and secondary flow rate differences.

As discussed previously, simplified non-leveraged investment opportunities (Appendix C) or flat non-varying operating performance investment opportunities (Appendix D) with

user-deemed secondary flow return rates matching equity cost create no difference between hybrid and traditional discounted-cash-flow valuations.

Hybrid and traditional discounted-cash-flow differences work symmetrically. If typical basis point spread differences between equity cost and capital cost turns negative and if operating performance relative slope is negative, generally, hybrid IRR and PV asset valuations are higher than traditional discounted-cash-flow valuations.

11.0 Equity Capital Cost and Wealth Formation Measurement

The hybrid valuation method's Solve/Assumption Synchronicity valuation standard afford business professionals to choose a core-business focus an investment opportunity initially solves. Generally, the initial hybrid method solving focus is the core-business focus with the greatest risk profile.

Therefore, an investment opportunity's initial core-business focus excludes equity cost , as equity cost 's focus is used assessing an investment's risk profile. Excluding solving equity cost as the initial core-business focus eliminates the circular attempt at defining an investment's risk profile with itself. Baseline equity risk profiles are subjectively assessed, not solved.

Baseline risk profile assumptions are commensurate with the investment opportunity and are generally measured by the investment opportunity's ability to attract external capital in the market place or in a like-kind arms-length fashion. Baseline equity cost risk profiles must not only capture the core-business focus risk profile, but also incorporate and balance other assumptions' risk profiles of the unified assumption set. The hybrid valuation's unique architecture addresses valuation subjectivity by limiting an investment's valuation subjectivity to the realm of an assessed baseline risk profile, as shown in Appendix A.

A hybrid valuation's assessed baseline equity cost risk profile is an advocate of the unified assumption set. The degree and levels of the assumptions within the set should be coordinated and adjusted with the baseline risk profile in mind. In turn, an investment opportunity's unified assumption set holistically substantiates the investment opportunity,

as the assumption set coalesces into prospective financial statement road maps. Uniquely assessing an investment's baseline equity cost risk profile and surrounding the profile with the investment's unified assumption set levels the playing field for choosing between concurrent investment opportunities.

11.1 When Does Equity Baseline Risk Profile become Return on Equity?

After a business professional's 'go/no go' decision accepts or rejects an investment opportunity, business professionals may continue examining the investment's assumptions. An accepted investment's exit strategy timing monitors maintaining, shortening or lengthening the investment's time-frame. In the case of a rejected investment opportunity, assumptions are monitored for possible reconsideration of the opportunity.

Beginning with the investment 'go/no go' decision and throughout remaining exit strategy reevaluations or investment reconsiderations an investment's assumption set changes, but the on-going investment assumption set maintains a unified status.

A hybrid investment valuation may quickly see the core-business focus change from solving 'what you have invested' to solving 'what you receive' or 'what you will receive' at the end of the investment opportunity. However, as the risk surrounding assumptions start diminishing with time, equity cost 's role as a baseline risk profile assessment also diminishes. Finally, nearing the end of the investment, with the risk profile role no longer needed, an investment opportunity's core-business focus transitions to 'return', an investment opportunity's last core-business focus. As the core-business focus solves 'return', equity cost transitions away from the baseline risk profile and becomes return on equity. Internal Equity Return (IER) is a hybrid valuation term describing both an investment's assessed baseline risk profile and ending solved return on equity.

The on-going example's net income net present value is $64, Appendix E, Page 3, Line [64]. The on-going example's equity outstanding net present value is $212, Appendix E, Page 3, Line [65]. Dividing the $64 net income net present value by the $212 equity outstanding net present value equals 30% IER, Appendix E, Page 3, Line [66].

Depending when in the investment the 30% IER calculation occurs, the Appendix E, IER could be the given equity baseline risk profile (IER:B) at the investment's beginning or the solved return on equity at the end of the investment opportunity (IER:S).

Measuring an investment opportunity's economic impact can be seen as the delta between the investment's beginning baseline net income present value (NIPV: ***nahy-****piv*) and the investment's ending return on equity NIPV. The beginning baseline NIPV discounts prospective net income at the assessed IER:B equity cost risk profile. The investment ending NIPV discounts net income at the solved IER:S return on equity.

PV of periodic net incomes measure time-based economic value. Economic value defines as simultaneously recognizing both the investment owner's qualitative 'on' portion of 'return' and the quantitative 'on' retained and subsequently paid-out dividend amounts of 'what you receive'.

NIPV as economic value recognizes the investment's equity *cash* flow IRR equaling ROE's *accrual* net income numerator as it relates to ROE's denominator of 'what you have invested'. ROE's NIPV numerator is the investment owner's economic value interest.

WEALTH MEASUREMENT AS ECONOMIC VALUE AND DELTA NIPV — Table 19

[1]	Wealth Formation/ Economic Value	=	(Actual NIPV – Baseline NIPV) * (1+rate)^nper
[2]	Delta NIPV	=	($NIPV_{(nper)}$ – $NIPV_{(start)}$) * (1+rate)^nper
[3]	$Potential_{(nper\ less\ x)}$ Delta NIPV	=	(Expected NIPV – $NIPV_{(start)}$) * (1+rate)^nper

Line [2], 'start' is period = 0; 'nper' is an investment's concluding elapsed periods since 'start'; NIPV(start) discounts using IER:B's given baseline risk profile; NIPV(nper) discounts using IER:S's solved return on equity;

Line [3], 'nper less x' represents a time-frame short of the investment's conclusion where 'x' is any period count less than or equal to 'nper' but not less than 1; investment 'go/no go' decisions occur when x = nper; Expected NIPV estimates NIPV at the investment's conclusion prior to the investment's conclusion; Expected NIPV's core-business focus solves 'return' and discounts using IER:S's solved return on equity.

Actual NIPV and baseline NIPV's difference, Table 19, Line [1], brought forward to a point-in-time, defines microeconomic wealth formation – or destruction. An individual or organization's opportunity cost 'rate' and 'nper' periods brings economic value/wealth formation forward to a future point in time.

Delta NIPV's calculation at the end of the investment opportunity, Table 19, Line [2] captures economic value/wealth formation. When Delta NIPV's calculation timeframe is before the end of the investment opportunity, Delta NIPV becomes Potential Delta NIPV and Actual NIPV becomes Expected NIPV, Line [3].

Observation #2: In the event of an investment opportunity having multiple polynomial IRR solutions, the investment opportunity's wealth potential is unaffected, as Expected NIPV remains unchanged, regardless of the IRR solution.

12 Prioritizing Concurrent Investment Opportunities Using the Hybrid Method

HYBRID VALUATION METHOD'S WEALTH FORMATION MEASUREMENT THROUGH POTENTIAL DELTA NIPV — Table 20

			First Series Option		Second Series Option		
			A	B	A	B	
	Traditional Valuations:						
	IRR	[33], [93]	25%	22%	25%	22%	[33], [93]
[2]	NPV	[34], [94]	$38	$69	$33	$84	[35], [95]
[3]	Selection			?		?	
	Hybrid Delta NIPV:						
[4]	Expected NIPV	[30], [90]	$52	$47	$52	$47	[30], [90]
[5]	Less: Baseline NIPV	[150], [210]	$16	$16	$21	$11	[270], [330]
[6]	Potential$_0$ Delta NIPV	[4]-[5]	$36	$31	$31	$36	[4]-[5]
[7]	Selection	Line [6], If Option ([A]>[B], "A", "B")	A			B	IF([A]>[B], "A", "B")
[8]	Baseline Risk Profile	[G], [G]	6%	6%	8%	4%	[G], [G]
[9]	Oper Perf Relative Slope	[176], [236]	-0.4	+0.5	-0.4	+0.5	[296], [356]

Note: Lines greater than [9] are found in Appendix G

Table 20 includes two Series of examples, First and Second. In addition, both First and Second Series each have Options A and B.

Conflicting IRR and NPV traditional valuations can occur if one concurrent option has a positive and the other competing option have a negative operating performance relative slope, See Calculation #7. Option A's operating performance relative slope is a negative -0.4 and option B's operating performance relative slope is a positive +0.5 for both the first and second series, Line [9].

Table 20, IRR, Line [1] and NPV, Line [2] show four first series and four second series traditional IRR and NPV valuations. None of Table 20's, Lines [1] and [2] traditional valuations achieve the Solve/Assumption Synchronicity valuation standard. Traditional first and second series IRR and NPV valuations conflict between options A and B, Line [3].

Table 20, IRR, Line [4] and PV, Line [5] show four first series and four second series hybrid Expected and Baseline NIPV valuations. All of Lines [4] and [5] hybrid valuations achieve the Solve/Assumption Synchronicity valuation standard. Line [6] computes a Potential_0 Delta NIPV difference between Expected and Baseline NIPV valuations at the time of a 'go/no go' investment decision. Hybrid first and second series IRR and PV valuations show a definitive choice between options A and B, Line [7].

The difference between the first and second series options focus exclusively on differences between assigned baseline risk profiles. First series, option A and B's are each assigned a 6% baseline equity cost risk profile. Second series, option A is assigned an 8% baseline risk profile and options B is assigned a 4% baseline risk profile, Line [8].

Not only does the hybrid valuation method resolve traditional conflicting IRR and NPV valuations, but Table 20's hybrid valuation method's NIPV also demonstrates baseline equity cost risk profile differentiations, as seen in Table 20, Line [7]'s preferential option change between the first and second series.

Prioritizing concurrent investment opportunities with Table 19's Potential Delta NIPV increases investment decision comfort over traditional valuation methods.

13 Conclusion

Investment opportunities with debt's leverage and deferred upside cash flow can have significant differences between the discussion's hybrid investment valuations and traditional discounted-cash-flow valuations.

The hybrid's Solve/Assumption Synchronicity valuation standard manifests itself with a unified investment assumption set and affirming financial statements, driving compelling investment decisions and fostering greater investment decision comfort. The familiar owner's equity financial statement becomes a summarizing investment opportunity platform, presenting the investment opportunity's focal net income and equity cash flow.

The new hybrid investment valuation method brings together the PMT function's time-value approach with unlimited business case application. Homogenizing pre-asset operating performance and post-asset structural transfers upgrade the PMT function into the hybrid valuation method. The hybrid valuation's benchmark indicates achievement of the Solve/Assumption Synchronicity valuation standard.

INVESTMENT VALUATION RESEARCH SUMMARY FINDINGS Table 21

Investment Valuation Method	Prospective Financial Statement Affirmation	BIC - Basic Investment Component Reciprocity	Time-Value Multiple-Period Approach	Pre Varying & Post-Asset Oper Perform Recognition	Business Case Application
ROE Return on Equity	No	Yes	No	None	Very Limited
PMT Auto/Home Discounted-Cash-Flow	Yes	Yes	Yes	None	Limited
IRR/NPV Discounted-Cash-Flow Traditional	No	No	Yes	Some	High
EBITDA Macro-Economic Valuation Method	No	Yes	No	Some	High
Hybrid Investment Valuation Method	Yes	Yes	Yes	Full	Unlimited

The hybrid valuation method enables creating an investment's initial holistic perspective, found in the investment's baseline risk profile and unified assumption set. While maintaining a unified assumption set, wealth formation's definition measures the extent an investment's initial baseline economic value grows into real incremental value.

Table 21 summarizes and helps place into context how the hybrid investment method melds EBITDA and various traditional discounted-cash-flow strengths.

The hybrid valuation method upgrades and unifies traditional discounted-cash-flow valuations. Upgrading and unifying traditional discounted-cash-flow valuations alleviates business professionals from subjectively evaluating multiple valuation outcomes or attempting to substantiate trial and error IRR hurdle rates.

Three related unavoidable discounted-cash-flow valuations realities are debunked. Discounted-cash-flow valuations no longer create conflicting and irreconcilable results, investment valuations not only reciprocally solve between present and future value, but can solve any investment component, and prospective financial statements can affirm an investment's equity cost.

Upgrading discounted-cash-flow investment valuations are quickly recognized as superior over EBITDA's incomplete investment valuations containing only three BIC. However, EBITDA's macroeconomic convention can still be relevant when assessing IER's equity cost baseline risk profiles.

A hybrid valuation method's inverse abridged PMT factors creates Hybrid-multiples. Hybrid-multiples concisely summarize both an investment opportunity's capital cost components and post-asset transfer bridges. Between concurrent investment opportunities, hybrid-multiples quickly give business professionals a high level comparative ability while also providing drill down ability into the differing causation detail.

The historic cash versus accrual valuation debate is now resolved. Hybrid equity cash flow IRR and accrual time-value ROE investment valuation methods are unified under the hybrid valuation method.

The historic multiple IRR solution debate is now resolved. The hybrid valuation architecture's wealth formation measurement turns the issue of an investment's multiple polynomial solutions into a moot point.

The discussion's goal is to grasp the unifying IRR, PV, PMT and FV phrase, "as a discounted-cash-flow valuation uses the valuation's other discounted-cash-flow valuations as assumptions". The phrase is profound in its application, as shown throughout the discussion. However, maybe the phrase should state, "as a discounted-cash-flow valuation *again* uses the valuation's other discounted-cash-flow valuations as assumptions", for before the LBO and dot.com era, IRR, PV, PMT and FV valuations much more closely acted as a unified assumption set. The discussion's hybrid valuation method helps IRR, PV, PMT and FV regain their former relationships.

An investment's equity cost equals equity cash flow IRR when a discounted-cash-flow valuation is using the valuation's other discounted-cash-flow valuations as assumptions. Using other discounted-cash-flow valuations as assumptions identifies the presence of a benchmarked comprehensive valuation standard. A new comprehensive valuation standard is the key part of a new valuation architecture. The hybrid valuation's unique architecture addresses valuation subjectivity by limiting an investment's valuation subjectivity to the realm of an investments unified assumption set. Placing investment valuation subjectivity in the realm of an investments unified assumption set appropriately moves valuation subjectivity earlier in an architecture's structure than today's investment decisions. Moving valuation subjectivity earlier in investment decisions increases a business professional's investment decision comfort. Increasing a business professional's investment decision comfort while advancing wealth formation measurement increases an organization or individual's overall wealth formation.

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Initialisms:

- DCF – Discounted-Cash-Flow
- EBITDA – Earnings Before Interest Taxes Depreciation and Amortization
- FV – Future Value
- IRR – Internal Rate of Return
- LBO – Leverage Buy Out
- nper – Number of Periods
- NPV – Net Present Value (period 0)
- PMT – periodic non-varying Payment
- PV – Present Value (period 1)
- ROE – Return On Equity
- RORO – Return 'On' and Return 'Of'
- WACC – Weighted Average Capital Cost

Introducing:

- BIC – Basic Investment Components
- OPRS – Operating Performance Relative Slope
- IER – Internal Equity Return
- NIPV – Net Income Present Value

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