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UFT
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Internal Rate of Return on Exposure™ (IRRE™):

A New Metric for Measuring Portfolio Enhancement

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Portfolio Enhancement using the Enhancement CPC™

The advent of the Enhancement CPC™ as an alternative method of enhancing investment portfolio performance brings with it some unique challenges when it comes to measuring its impact on a broader portfolio. Because an Enhancement CPC is not a traditional form of leverage, it needs to be looked at differently.

Traditional leverage applied in a core cash-based portfolio (a "Core Portfolio") generally is used to increase like-investment exposure. In other words, if an investor is willing to essentially double-down on an existing set of investments in its Core Portfolio, traditional leverage is able to increase available capital and investment capacity within that portfolio to permit the acquisition of leverage-provider-approved assets. Measuring the impact of traditional leverage in a portfolio of this kind is not difficult since the leverage occurs within the context of the Core Portfolio. It becomes simply a matter of looking at the internal rate of return ("IRR") of the portfolio prior to the application of leverage and then again after the application of leverage, and recording the net difference after costs.

Similar to traditional leverage, leverage in the form of margin loans carries with it characteristics that create a direct loan obligation on the investor's balance sheet to produce cash proceeds. Those proceeds are then applied in a fresh investment transaction. The creation of new investable capital in reliance upon margin carries with it a definitive set of costs to be serviced and a definitive set of covenants to be observed. Both costs and covenants can oftentimes prove troublesome if maintained over an extended period of time such as that which may be expected in many types of investments that would produce the return profile that makes this type of leverage scenario worthwhile. The cost of making that type of investment is a combination of the invested capital, plus the cost of accessing margin proceeds. Both of these are quantified in cash, making a measurement or projection of investment performance fairly simple by again applying a traditional IRR calculation.

Unlike these two most common examples of leverage, the Enhancement CPC, although oftentimes compared to these yield enhancement tools, operates very differently. The Enhancement CPC fuels a new method for investment in which "Cashless Investing™" is made possible. This means that, like with traditional leverage or a margin loan, a portion of the Core Portfolio may be encumbered in support of the undertaking of an investment that is intended to enhance the Core Portfolio. But unlike both of these forms of leverage, there is no step in an Enhancement CPC transaction in which the investor takes a direct loan or accepts freshly borrowed capital onto its books. In fact, in an Enhancement CPC, the investor is not borrowing cash at all. Instead, the use of an Enhancement CPC omits the "cash" portion of a leverage transaction in which borrowed funds would be invested in something new. Enhancement CPCs™ generate returns based solely

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upon a *contingent* undertaking in the form of a standby letter of credit that is secured against select assets of the investor's Core Portfolio. This approach creates a supplemental base of new investments – an "Enhancement Portfolio"— that is acquired without the investor's allocation of cash and that can be designed to be fully uncorrelated and detached from the investment behavior of the underlying Core Portfolio itself. The Enhancement Portfolio thereby becomes a vehicle for holistic portfolio yield enhancement in a new investment medium that exists atop select qualifying and investor-designated portions of a Core Portfolio. By utilizing what equates to the "ether" of an investor's portfolio, an investor can build an Enhancement Portfolio that operates in all key respects independently from the Core Portfolio – without taking on a direct loan obligation or an interim position, however short-lived, in borrowed "cash".

The creation of a free-standing Enhancement Portfolio can quickly become a compelling proposition for an investor or investment manager from a balance sheet, risk management, and investment perspective. However, when re-examining the conventions for quantifying investment performance, it becomes evident that there is no existing metric that accurately measures the impact of an Enhancement Portfolio within the context of a broader investment strategy that comprises the interaction between a Core Portfolio and an Enhancement Portfolio.

Enhancement CPC™ Returns

When the Enhancement CPC first became an investment reality, analysts at UFT Commercial Finance began establishing a method for expressing its value to investors. The clear definition of an understandable metric to measure the effects of this new method of investment was critical to broader adoption by the investment community. An investor cannot invest in something that it cannot measure.

An approach that took into account the ability to assess returns in such a way as to produce an overall IRR on an Enhancement CPC portfolio seemed a logical strategy. However, it soon became apparent that whereas a measure of cash-on-cash returns derived from an Enhancement Portfolio proved very helpful in portraying the impact of the Enhancement CPC in overall portfolio cashflows, an application of conventional IRR calculations proved ineffective.

As illustrated earlier, the Enhancement CPC skips the step in a leverage process whereby new cash or investable capital is deposited in or deployed from the investor's accounts. As a result, an assessment of IRR is inherently and fundamentally skewed when overlaid to define returns in an Enhancement CPC transaction. This, because a calculation of IRR takes into account the amounts and timing of cash expenditures and cash returns related to an investment, while the Enhancement CPC relies expressly on the compliant presentation of a standby letter of credit as consideration for and as the basis of an investor's investment. This essentially means that an Enhancement CPC is acquired in reliance upon non-cash purchase consideration constituted by a contingent "promise to pay" should certain events occur or conditions be met in the future.

In simplest terms, the cash cost of investment in any Enhancement CPC is primarily the cost of the issuance of a conforming standby letter of credit -- expected to average approximately 1.0% per annum

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and ranging from a fraction of a percent to perhaps as high as 2% per annum[1]. Generally speaking, unless and until something were to occur to cause a default of the underlying investment for which the Enhancement CPC™ was issued, the letter of credit would remain undrawn, acting as a line-of-last-defense in the event of investment distress. It is only upon a letter of credit draw that cash funds would be disbursed by the investor's bank and recorded as a loan to the investor. By contrast, this is what is done in the case of a margin loan or most other forms of leverage from the date of their inception. In the case of the Enhancement CPC while the letter of credit has remained undrawn, the investor has been building value, driving the generation of a new source of yield to its portfolio, and potentially participating in a liquidity event derived from the investment linked to the operation of the Enhancement CPC. All this is achieved without investing more capital than the amount of cash needed to pay annual letter of credit issuance fees.

This is potentially very powerful from an investment perspective. But how powerful? How do you measure it? Mathematically, one quickly realizes that when hard investment costs are expected to be 1.0% to 2.0% per annum and returns are generated based upon 100% notional exposure, the application of a conventional IRR calculation soon becomes meaningless. Under those conditions, an IRR in the thousands of percent is readily achieved and such a measurement is rendered largely impractical in an investor's evaluation and decision-making process.

To remedy this, a system is needed that recognizes that although a well-performing Enhancement CPC does not trigger the deployment of cash investment capital at its onset, it does place a weight on a designated portion of a Core Portfolio. This "implied cost" of investment as rooted in the encumbrance of the underlying Core Portfolio assets, constitutes risk or exposure to those assets. That risk is the cost or the "weight of exposure" that needs to be accounted for in order to holistically determine the IRR on an "Enhanced Portfolio" – that is, a portfolio that embodies both the operation of an underlying cash-based Core Portfolio with an Enhancement Portfolio. Once this is defined, an investor can plainly see the IRR on its Core Portfolio, the quantified performance of its Enhancement Portfolio, and ultimately the IRR on its broader Enhanced Portfolio. A determination of the IRR on the Core Portfolio and the IRR on the Enhanced Portfolio provides an "apples-to-apples" comparison to see the true impact of introducing the Enhancement CPC on portfolio. It is the synthetic measurement of return on exposure that becomes the missing link that will enable this "Cashless Investment™" approach to be quantified.

Internal Rate of Return on Exposure

The "Weight of Exposure" on a Core Portfolio comes at a cost, albeit, not a "cash" one. The Weight of Exposure speaks to the intangible cost of encumbering portfolio assets that places a restriction on the ability to freely sell them for cash outside the context of the encumbrance itself. Put another way, once encumbered, the investor is restricted from spending sale proceeds from portfolio assets for something other than a permitted collateral substitution pursuant to the terms of the encumbrance. It is that Weight of Exposure that we seek to quantify when making a synthetic calculation of an internal rate of return on an Enhancement CPC or a collection of Enhancement CPCs constituting an Enhancement Portfolio. This synthetic measure, called an Internal Rate of Return on Exposure ("IRRE"), can be readily applied to measure performance of Enhancement CPC transactions that will take into account both its cash cost of investment

"The Weight of Exposure speaks to the intangible cost of encumbering portfolio assets ..."

[1] Assumes the application of internationally standardized banking, capital treatment, and currency control parameters in the regulatory jurisdiction of the letter of credit issuing bank

"… Internal Rate of Return on Exposure … will take into account both its cash cost of investment and returns as well as its intangible cost of asset encumbrance or portfolio exposure."

and returns as well as its intangible cost of asset encumbrance or portfolio exposure. In its simplest terms, we start with an understanding that the maximum Weight of Exposure on Core Portfolio assets will always be equal to the maximum amount available for draw in aggregate under all standby letters of credit then outstanding as purchase consideration for any one or more Enhancement CPCs™ comprising the Enhancement Portfolio. This amount is framed as a synthetic cost of the transaction.

For the sake of example, let's assume that the Enhancement Portfolio consists of a single Enhancement CPC™ that has been bought via the issuance of a single standby letter of credit. We then offset any cashflows/yield periodically collected under the Enhancement CPC against the maximum Weight of Exposure then outstanding from the same period to arrive at a maximum Net Weight of Exposure for such period. Then, at the conclusion of the term when the Enhancement CPC is being retired in the normal course of business (barring any default that would cause a draw under the letter of credit), the cancelation and release of the letter of credit results in a virtual "credit" equal to the then outstanding face value of the letter of credit such that the maximum Weight of Exposure is reduced to zero. Once this full life-cycle of calculations has been run, a simple IRR calculation is made using the New Weight of Exposure for each period being measured. The result of that calculation is the IRRE for the specific Enhancement CPC being modeled. *See*, Example 1 below.

The IRRE quantifies the anticipated performance of the Enhancement Portfolio in isolation as a free-standing portfolio to help an investor make an assessment of "reasonableness" when considering risk versus reward of engaging in one or more Enhancement CPC transactions, whether taken in aggregate or individually. However, as stated earlier, now that the IRRE has been discovered, it gives us the data points needed to calculate the IRR on the Enhanced Portfolio. Knowing the IRR on the Enhanced Portfolio permits us to demonstrate the overall portfolio uplift from the original pure, cash-based IRR as calculated on the starting Core Portfolio, such that the economic value of the Enhancement Portfolio can be translated to a meaningful increase in IRR on a consistent, comparative basis. That uplift, stated as conventional IRR produced by the operation of the Enhancement Portfolio, can be discovered through a simple deductive process. The true additive value of the Enhancement Portfolio is equal to the difference between the IRR on the Enhanced Portfolio and the Core Portfolio.

When determining the IRR on the Enhanced Portfolio, we do so neither by blending the IRR on the Core Portfolio and the IRRE on the Enhancement Portfolio nor by a simple additive summation of the two. Neither approach is a legitimate or accurate representation of what is occurring in practice. In reality, the Core Portfolio's performance is measured using a conventional cash-based IRR calculation, whereas, the Enhancement Portfolio's IRRE is measured using a synthetic interpretation that combines cash-based and non-cash-based weightings of contingent exposure throughout the life of the holistic portfolio. A face value combination

Example 1

BASECASE	$ 500,000,000	Year 1	Year 2	Year 3	Year 4	Year 5
TOTAL INTERNAL RATE OF RETURN ON EXPOSURE	9.77%					
Net Estimated Current Yield (after LC Fees) over Term		$ -	$ 215,500	$ 1,290,500	$ 1,964,000	$ 918,120
Projected Asset/Project Appreciation Participation Amount to Lender		$ -	$ -	$ -	$ -	$ 79,500,000
Annual Credit (Enhancement) Amount		$ (91,000,000)	$ (117,000,000)	$ (27,000,000)	$ -	
Credit Enhancement Release Amount (at Funding Repayment)						$ 235,000,000
TOTAL REVENUES		**$ (91,000,000)**	**$ (116,784,500)**	**$ (25,709,500)**	**$ 1,964,000**	**$ 315,418,120**

of the two end products is a mixing of mathematical metaphors that inaccurately reflects the transaction, given the calculation of IRR and IRRE, respectively, relies upon different underlying data points.

“A measure of IRRE permits a reasonable comparison of two similar projects or investments -- one made with cash and the other made “cashless-ly” -- leveling the playing field to establish an equivalency with conventional IRR measurement tools …”

Compatibility of the two is found in the fundamentals of adding the net cashflows derived from the operation of the Enhancement Portfolio to the cashflows arising from the Core Portfolio for the same period, being sure to account for the letter of credit issuance costs. Once these consolidated periodic cashflows have been defined, a standard IRR calculation can be overlaid across those final cashflows. This is the IRR for the Enhanced Portfolio. With this established, the true impact of the Enhancement Portfolio can be modeled. First, in isolation, by determining an Enhancement Portfolio’s IRRE, which provides the investor with a view through a lens that not only accounts for cash movements, but assigns a cost to the encumbrance of the investor’s Core Portfolio assets. Second, as part of an Enhanced Portfolio that combines the performance of the investor’s Core Portfolio with the Enhancement Portfolio to provide a broad view of the investor’s position, allowing the investor to readily assess how the addition of an Enhancement Portfolio can uplift total IRR generated by its same amount of investable capital. The latter of these two fosters a true equivalency that allows an investor to assess the impact of adding particular Enhancement CPCs™ to the totality of its portfolio.

Conclusion

The rate of adoption of any new asset class into the fabric of investors’ portfolios is a direct reflection of the ability for those investors to interpret risks and benefits related to that asset class in readily understandable terms. A calculation of an internal rate of return, or IRR, is the standard metric used to estimate the profitability of a traditional cash investment. With a “Cashless Investment™” vehicle like the Enhancement CPC™, this metric is neither directly comparable nor does it even makes sense, unless the investment can be "framed" comparably to a typical cash investment. The new-found ability to calculate the Internal Rate of Return on Exposure, or IRRE, as a benchmark to quantify the cost-benefit of acquiring Enhancement CPCs to enhance portfolio yield will play a critical role in that framing. A measure of IRRE permits a reasonable comparison of two similar projects or investments -- one made with cash and the other made “cashless-ly” -- leveling the playing field to establish an equivalency with conventional IRR measurement tools when evaluating a potential Enhancement CPC investment.

In addition, it is important to note that leveraging a portfolio using cashless investment products is not necessarily comparable to leveraging a portfolio using a loan or traditional leverage. When a portfolio is leveraged with a loan, the total IRR can be calculated independently. That is, the IRR of the original portfolio plus the IRR of the investment purchased with the loan, when essentially added together, reflects the total IRR of the leveraged portfolio. However, determining the IRR of an Enhanced Portfolio is not just a function of adding the IRR of the underlying Core Portfolio to the IRRE

“...it is important to note that leveraging your current portfolio via a cashless investment is not necessarily comparable to leveraging your portfolio using a loan or traditional leverage.”

"IRRE is best applied when looking at an Enhancement CPC or Enhancement Portfolio in isolation to compare to other similar investment transactions that may be undertaken using cash..."

of the Enhancement Portfolio. Due to the "contingent credit" nature of the standby letter of credit and the synthetic nature of the "Weight of Exposure" in determining the intangible impact of placing an Enhancement CPC™ atop a Core Portfolio, these two measurements, IRR and IRRE, cannot simply be blended to discover a portfolio-wide IRR. They are fundamentally different. IRRE is a combined measure of investment exposure and cashflows while IRR is customarily used to measure returns based upon a standard time-value of money principle.

Instead, to correctly calculate the IRR of an Enhanced Portfolio – one that includes the Core Portfolio as well as an Enhancement Portfolio – the IRR of the Enhanced Portfolio must be calculated more holistically, by first determining the total return of the combined Enhanced Portfolio and deducting the original unleveraged Core Portfolio IRR to arrive at the difference, which then constitutes the IRR on the Enhancement Portfolio. Once *both* the IRRE and IRR of an Enhancement CPC or Enhancement Portfolio are determined — first, in isolation and, then, as part of a broader Enhanced Portfolio — the investor can build a picture of the opportunity by assigning precise situational values that will aid in determining the merits of investing. Understanding how IRR and IRRE relate to each other is vital to appreciating the true value of incorporating the Enhancement CPC into a broader portfolio strategy.

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