WHITE PAPER

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Producing Implicit Liquidity™ to Improve Pension Performance

Using the Enhancement CPC™ to Make More of Your AUM
- No Alchemy Required

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A Change in Focus

Talk to almost any pension fund management professional and you will find that the focus of their discussions at social gatherings and conferences has changed in recent years. Once the direct ramifications and shock of the 2008 meltdown finally passed, topics like portfolio diversification and the avoidance of unintended correlations - achieving a true application of Modern Portfolio Theory, identifying the top emerging manager - who would that next "Financial Wizard" be, and risk mitigation - how do we keep what we have, came to dominate the dialog. Now. however, with the economy thriving, but the effects of years-old losses in the principal value of assets under management lingering coupled with the debilitating effects of chronic under-funding of many pension funds, conversations have turned to a combination of yield discovery and liquidity. The focus now is to achieve that "Holy Grail" of maintaining reliable incremental yield that offsets current liabilities while making long-view, wealth-building investments that counteract prior principal losses or compensate for less-than-scheduled contributions - all while still remaining liquid and nimble.

Short of alchemy, the question has quickly become how do pensions reliably pay their pension distributions while protecting the futures of their pensioners? Thus far based upon the investment tools and opportunities readily available at market today, conventional wisdom has perpetuated strategies that embody some form of fixed income or blue-chip public equities with alternative investments that bring with them the promise of "all-in" yield. The problem comes in the form of the balancing act

performed when a manager takes a best-guess at the amount of capital to be taken from sleeves of mostly liquid investments that produce predictable income needed to match known liabilities in order to place those funds with alternative investment managers, private equity funds, or real estate and development opportunities. Essentially, in making this strategic maneuver, the manager is both surrendering liquidity and an increment of defined current income for the hope of better performance over a longer horizon. No matter how you cut it, when your liabilities are fixed and matching them successfully is instrumental in assuring the distribution of pension benefits, this is a risky move in the short-term.

Although allocations to alternative investment funds, whether long-dated, project-linked or private equity oriented, are the most likely options available to produce the type of restorative returns that bring long-term increases to assets under management and build wealth for pension funds, these type of absolute return investments usually bring with them a "Red Phase" of as long as 3-5 years when there are little to no returns being generated for the investor and, when accessed through investment fund structure. management fees of a minimum of 1% per annum continue to be paid. The net effect is several years of losses and cash outflows prior to the investor if they chose well - generating substantial lump sum offsetting returns that not only repay principal invested but bring with them double-digit yield to reimburse the Red Phase expenditures. however, fails to account for the opportunity costs of the investment where, at minimum, one can assume that during the average 4-year term of

investment, the invested capital would have generated at least a return consistent with the balance of the fund's fixed income portfolio - say, conservatively, 4.5% annually. Further, these type of long-term investments are generally illiquid, so when you take into account the need for what should be a reasonable liquidity premium of say 4% per anum over the closest liquid investment equivalent, the pension fund has accumulated an implicit annual performance hurdle of approximately 9.5%. Meaning, it actually paid out in cash 1% in investment manager fees each year, failed to earn 4.5% in fixed income incremental return for the assets allocated to the long-view investment, and should have been compensated as a matter of course for an approximate 4% per annum premium to account for the inherent lack of liquidity of the alternative investment then purchased. Looked at in this light, that portion of the overall portfolio dedicated to the alternative investment strategy would be deemed a success over a 4-year average term when it generates at least a 38% aggregate return at its ultimate maturity or upon the occurrence of that elusive liquidity event. See Table 1.

Table 1

Cost/Premium	Cost of Investment	
	Annual	Over 4- year Term
Management Fee	1.0%	4.0%
Opportunity Cost	4.5%	18.0%
Liquidity Premium	4.0%	16.0%
Total	9.5%	38%

Creating an Enhancement Portfolio™

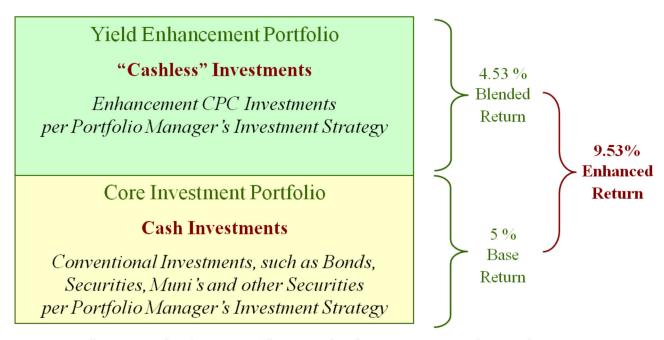
The advent of the Enhancement CPC™ as invented by UFT Commercial Finance is a game-changer for pension funds today. It provides a solution to parsing available investable capital between current income producing investments and the "all-in" alternative investment strategies that managers love to use to grow a bigger base of investable capital. The Enhancement CPC constitutes an entirely new credit asset class that enables an investor to create a completely independently risk modeled Enhancement Portfolio™ that sits atop a current income producing portion of the pension fund's portfolio (the "Core Portfolio™). See Figure 1 on the following page.

"... the Enhancement CPCTM constitutes an entirely new credit asset class that enables an investor to create... and Enhancement PortfolioTM that sits atop a current income producing ... portfolio."

The Enhancement CPC is an investment vehicle that keeps the multiplicative downside risk of conventional leverage out of the mix, while still enabling a pension manager to position a whole new slate of supplemental investments that otherwise would not be cost-effective or perhaps even possible using existing leverage tools today. Because of the fundamental characteristics of the Enhancement CPC, this new Enhancement Portfolio can be built to conform to a completely independent investment strategy from the underlying Core Portfolio upon which it is built and to manifest a source of true yield enhancement that is additive to the overall portfolio performance (i) with an extremely low cost basis, (ii) without disrupting the underlying income producing assets in the Core Portfolio, and (iii) without a loss of liquidity or agility in those same core underlying assets.

Technically, every Enhancement CPC is a fractional beneficial ownership interest or a "participation" in a credit enhancement facility ("Credit") that supports an investor-approved commercial credit, infrastructure project, investment fund, or equitylike transaction. The Credit is secured by an assignment of assets varying from traditional commercial assets to fund units (ownership interests) to private equity shares, dependent upon the nature of the underlying transaction. When a pension fund manager as "investor" acquires an Enhancement CPC, the risk profile of the associated Enhancement CPC is fully transparent and reflective of the risks associated with that underlying asset or transaction, effectively making the transaction risk neutral to the investor when compared to the same investment undertaken with a conventional investment of cash. Because the Enhancement CPC constitutes an interest in a Credit that does not call for the distribution of cash proceeds to purchase as would be the case when purchasing a fully-funded loan participation for example, the investor purchases an Enhancement CPC simply by providing an acceptable form of credit support for the underlying transaction. That support comes in the form of a specially formatted

Figure 1



Important Note: All returns quoted are for purposes of illustration only and are not representative of any actual investment.

letter of credit. No cash purchase payment is required to fold an Enhancement CPC™ into a newly minted Enhancement Portfolio™. The letter of credit is the "currency" that is used to acquire an Enhancement CPC at par in order to gain investment exposure to the performance of the underlying transaction. By simply pledging its unencumbered and bank-approved assets as collateral for the issuance of a letter of credit to purchase a desirable Enhancement CPC, a pension fund manager has the opportunity to generate more return on its portfolio without liquidating current investments, moving funds, taking direct debt onto its books, or introducing conventional leverage risks.

Liquidity and the Enhancement CPCTM

Enhancement CPCs are a part of a larger credit asset Master known as Credit Participation Certificates, or "CPCs". All CPCs are built upon a Master Credit Participation Agreement, and in the case of an Enhancement CPC, an Enhancement Supplement to that Master Agreement. There are 26 different types of CPCs and Enhancement CPCs that rely upon the global terms of these Master Agreements. That reliance produces intrinsic standardization of all foundational terms conditions of these instruments. Standardization produces an inherent fungibility to the CPCs issued in each of these respective CPC product silos, and, as a result, breeds an expectation of a greater degree of tradability and liquidity of the CPC as an asset class.

UFT Commercial Finance has laid the foundation for the establishment of an initial OTC trading marketplace for the CPC that will move quickly toward a financial exchange-traded marketplace for CPCs. Market makers and regulators have already been consulted and it is expected that a liquid market for CPCs will be established within 18 months of the publication date of this paper. The advent of this CPC exchange will mark a sea change in how credit is managed within the secondary market and present a meaningful option for entering and exiting a transaction that would largely be considered illiquid pursuant to market standards today.

This said, the topic of liquidity is an interesting one when considering the portfolio dynamics created by the introduction of the Enhancement CPC, even before a free-trading secondary market for the Enhancement CPC is readily available. Specifically, because the Enhancement Portfolio sits freely atop what is essentially a segment of the Core Portfolio that consists of marketable securities, such as fixed income, bonds, and public equities, liquidity can be maintained in the Core Portfolio throughout the duration of the Enhancement CPC term by simply agreeing a right of collateral substitution with the bank that will issue the required letters of credit. This permits the pension manager to continue to manage the Core Portfolio fluidly in a manner consistent with its core strategy, regardless of the overlay of the

"... pensions may be well-served to consider the merits of establishing an internal scale for quantifying "Implicit Liquidity" when an Enhancement PortfolioTM has been incorporated into the broader pension fund strategy."

Enhancement Portfolio™. Fundamentally, however, because a portion of the Core Portfolio assets — although liquid in their own right — are technically encumbered as the basis to produce the letters of credit that acquire the Enhancement CPCs™ which when taken together constitute the Enhancement Portfolio, the portfolio manager should calculate the amount of its maximum possible liquidity call during a prescribed period *before* determining the appropriate allocation amount to be made to an Enhancement Portfolio. Simply put, the maximum Enhancement Portfolio value is equal to the maximum value of qualifying liquid assets in the Core Portfolio *l*ess the maximum cash call that might arise, or, expressed mathematically:

EPV = LAV - MLC

wherein: EPV = Enhancement Portfolio Value

LAV = Core Portfolio's Liquid Asset Value

MLC = Maximum Possible Liquidity Call

The foregoing fosters broader portfolio liquidity and greater flexibility that incentivizes allocating a larger portion of the Core Portfolio to liquid marketable securities without sacrificing yield (as described in "Impact of an Enhancement Portfolio" immediately below). In this light, pensions may be well-served to consider the merits of establishing an internal scale "Implicit Liquidity" quantifying Enhancement Portfolio has been incorporated into the broader pension fund strategy. The objective of this exercise being to translate the current maximum portfolio tolerance for illiquid assets in a Core Portfolio as it exists today (without the introduction of the Enhancement CPC) into the maximum amount of illiquid assets that may be carried on a holistic portfolio when illiquid assets are relegated to an Enhancement Portfolio once the Core Portfolio has been optimized for liquidity - essentially, increasing liquid assets in the Core Portfolio up to a level of as much as 100% of investable cash. This determination would likely have a direct impact on the formulation of investment guidelines when an Enhancement Portfolio is made a part of the pension fund's larger strategy, inclusive of being a consideration in determining the

maximum permitted principal value of investments attributable to the Enhancement Portfolio relative to total capital under management.

Ideally, regardless of the encumbrance of that portion of the Core Portfolio directly underlying the of an independent Enhancement Portfolio, the decision by a pension manager to increase liquid investments on its Core Portfolio and reposition illiquid assets into an enhancement -based "cashless" segment of its macro-portfolio should result in the recognition of some form of "Liquidity Credit" that would create more favorable treatment of some portion of the illiquid assets then on portfolio. The implications of such a method of quantifying the Implicit Liquidity of a broader portfolio will be very useful to portfolio managers in producing а portfolio-wide measurement of liquidity when assessing investment allocations and their respective compliance with adopted investment guidelines. This type of strategy can also be instrumental in bridging the liquidity gap while the CPC marketplace is evolving from an OTC brand of liquidity into a reliable and consistent form of exchange-based market liquidity. Using this approach, portfolio managers can position their long-dated and illiquid assets in their Enhancement Portfolio, which does not cause a drain of capital from day-to-day investment management and operations and, arguably, does not tax available liquidity. Ultimately, once a liquid trading marketplace in CPCs is firmly established in the next 18 months, portfolio managers will find themselves in an enviable position of having investments on book that were once deemed illiquid or too long-dated but can now be traded efficiently.

In the meantime, the development of an alternative method for measuring portfolio liquidity will help portfolio managers act with confidence in making and repositioning illiquid and long-dated investments into an Enhancement Portfolio, increasing investment performance by driving additional and previously unavailable sources of yield into portfolio, and incentivizing increases in

cash-based investments in a Core Portfolio to be put to work in current income producing fixed income investments that better assure a fund's predictability in matching its fixed liabilities.

Impact of an Enhancement PortfolioTM

The introduction of an Enhancement Portfolio to a pension fund's overall strategy embeds a whole new source of yield that need not be correlated to any other aspect of the broader portfolio. An Enhancement Portfolio can be used to house (i) long-dated and illiquid investments, (ii) alternatives and hedge fund exposure, (iii) private equity exposure, whether direct investment or via a fund, and (iv) any other project or investment that is complementary to the underlying Core Portfolio strategy. Along these lines, certain preexisting pension investments can also be repositioned from an illiquid portion of the Core Portfolio into an Enhancement Portfolio, such that previously invested capital can be recaptured by the pension fund and redeployed into current income producing assets as a recharacterized Core Portfolio.

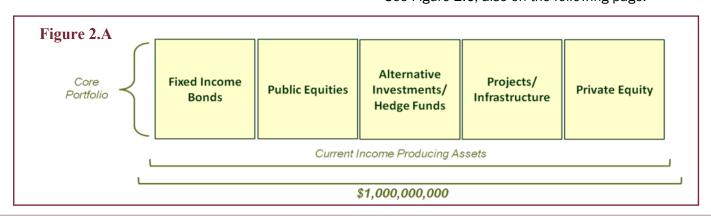
"... certain pre-existing pension investments can also be repositioned... such that previously invested capital can be recaptured by the pension fund and redeployed into current income producing assets."

By way of example, let's say that a certain pension fund has US\$1 billion under management and an estimated 50% of the portfolio is in an assortment of largely illiquid and long-dated assets (such as alternatives and hedge funds, infrastructure and project finance, and private equity investments), and the remaining investable capital is placed in an array of straight-forward marketable securities (such as sovereign bonds, various fixed income securities, and public equities). It would be reasonable to assume

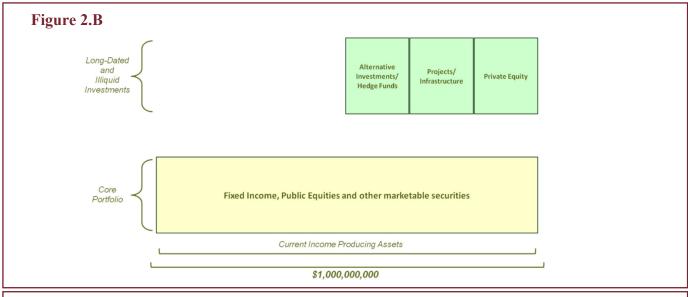
that most scheduled current income is being derived from 50% of the assets under management, or US\$500 million, generating an average of 5% per annum, or approximately US\$25 million. The remaining portion of the portfolio is producing long-term returns, but not on a current and reliable basis, of say, 15% per annum. See Figure 2.A below.

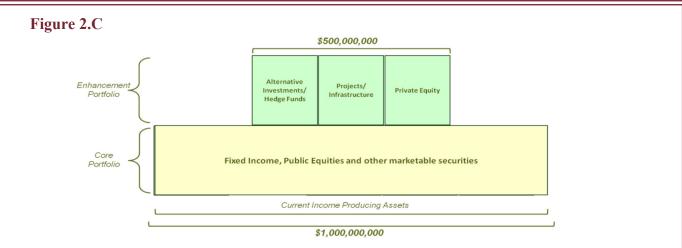
Now, let's say the fund elects to reposition its portfolio to include the introduction of an Enhancement Portfolio. The alternatives, project/infrastructure and private equity are going to be moved to the Enhancement Portfolio, permitting all investable (or recaptured) capital to be invested in fully liquid, current income producing fixed income assets, public equities, and other similar securities. This means that the fund will now enjoy the full US\$1 billion of capital producing current returns at the same 5% per annum, or US\$50 million per year – a 100% increase in current income when compared to the original pension fund portfolio model. See Figure 2.B on the following page.

It can be assumed that the US\$500 million of assets previously allocated to long-dated and illiquid assets can now be moved seamlessly into the Enhancement Portfolio. There the returns may be slightly lower than those earned while purchased with cash (due to some additional fund/project-level carrying costs) and would be further adjusted for the pension fund's cost of the letters of credit required to purchase the Enhancement CPCs™ (approximately 0.75% per annum). Ultimately, an adjusted net annualized return of approximately 12% per annum could be expected in the present example. However, that return is generated with no cash funds invested. Plus, upon the adoption of an Enhancement Portfolio enabling additional liquid assets to be placed on the Core Portfolio, a substantial amount of additional investment capacity will be created. See Figure 2.C, also on the following page.



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In evaluating this management approach, a pension that incorporates an Enhancement Portfolio into its broader investment strategy can minimally increase predictable sources of current income at a level commensurate with that percentage of its portfolio which it now dubs "illiquid" or long-dated and simultaneously access "dry investment powder" to power increased investment capacity without direct increases in AUM. This lets a pension manager readily and patiently tolerate investing in alternative investments, project funding, and private equity over a longer term with a view to either growing assets or enhancing returns to improve asset-liability matching. The birth of the Enhancement CPC™ opens the door for pension managers to access a whole new set of

asset management and portfolio building tools that will near-term change the way a pension fund can position investable capital, interpret portfolio liquidity, and drive yield discovery.

For more information about the CPC: www.uftcf.com

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Joanne Marlowe is a Director of UFT Commercial Finance and a structured product specialist. She has been instrumental in the design of a variety of credit-linked products in the trade and commercial finance sectors.