

ASSET

CLASS

Spring Summer Collection 2011



REDINGTON 

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Letter from the Editor

Welcome to the Spring/Summer Collection 2011.

A year has passed since Redington's Asset Class Spring Collection 2010 and with the changing of the seasons, so the financial landscape facing long-term investors has also shifted. With a new Parliament came a Comprehensive Spending Review and a new "Age of Austerity", and now a backdrop of global political and economic uncertainty makes a less than rosy season.

There continue to be calls for pension funds and insurance companies to step into the funding gap created by the tightening of the public purse and capital-constrained banks. This is a great opportunity for long-term investors to capture the illiquidity premium¹ available.

Why not the government? Struggling with a substantial budget deficit, the government says it cannot afford to fund the planned volume of investment – in areas such as infrastructure and social housing projects – over the next few years.

Why not banks? Having previously driven traditional long-term investors out of the market by driving down spreads, banks are no longer willing to lend at such low margins. At present, banks are highly capital constrained and are trying to shrink their balance sheets rather than roll out more lending. In addition, new legislation regarding regulatory capital will increase their need for liquid assets.

Why not hedge funds? Hedge funds are typically not "buy and hold" investors and their return targets are generally too high to justify taking significant levels of illiquid assets.

How can pension funds benefit?

As **long-term investors** holding predominantly **liquid assets**, this Spring / Summer Collection 2011 looks at two ways in which institutional investors can attempt to capture this illiquidity premium.

- **"Flight Plan Consistent Assets" (FPCA)**

Our Spring Collection 2010 focused on this type of opportunity and we continue to develop the theme as part of this new collection. FPCA opportunities enable funds to capture a higher yield through the **illiquidity premium**, but also accessing assets that help meet a pension fund's **Flight**

¹ Spread above the risk-free rate (gilts) that cannot be explained by credit risk

Plan² in other ways. They also provide **predictable / long-dated cash flows**, typically **inflation-linked**, that can be usefully incorporated into a **Liability Driven Investment (LDI)** programme.

This edition of the Spring/Summer Collection 2011 will look more closely at **infrastructure** as an example of FPCA. Look out for future editions on **social housing** and **renewable energy**.

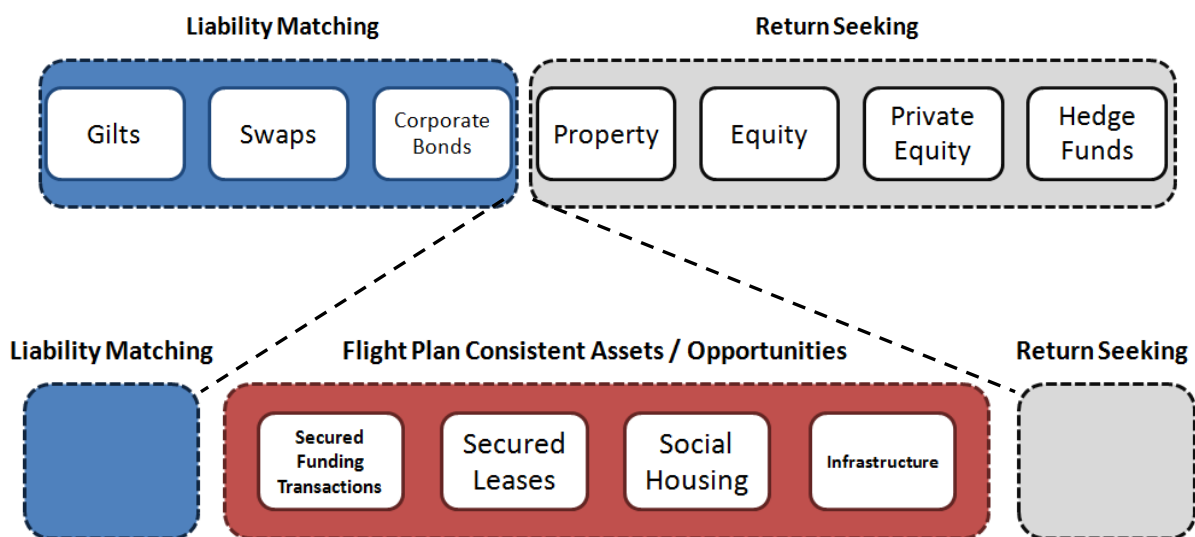
- **Providing liquidity to capital-constrained entities**

Pension funds need to ensure that they always have enough liquidity to make pension payments and to meet collateral requirements (if applicable). However, in many cases, pension funds will have considerable excess liquidity and can take advantage of this by lending their liquid assets (e.g. government bonds) to banks in return for a premium. Whilst this captures the **illiquidity premium**, it does not have the long-term cashflow benefits typical for Flight Plan Consistent Assets. However, it does provide a source of additional returns and we take a look at **secured funding transaction** as an opportunity in this edition.

Asset allocation decisions

Many pension funds are beginning to introduce a third investment category in search of investments with the attributes described above. **Flight Plan Consistent Assets** typically lie in the crossover between liability-matching and return-seeking assets.

Figure 1: Broadening out the asset allocation



Source: Redington

² A Flight Plan is a pension fund’s path towards full funding. It will define a risk/return framework as outlined by the fund’s risk budget and required return to reach full funding. Within the framework, the fund’s investment should be dynamically adjusted over time.

Making the most of your governance budget

Following the format of the previous Collection, we have summarised and compared the opportunities by certain criteria. Please note that this summary is provided as a simplified framework for funds to illustrate how they might choose to focus limited governance time and resources on the aspects they are most interested in.

We classify the investment ideas on a broad scale according to the following criteria:

- **Yield Enhancement:** this metric refers to the extra return generated by each asset class/strategy (see tables at the end of each section)
- **Risk Mitigation:** the ability to manage risks (e.g. interest rate, inflation risk) versus a liability benchmark
- **Additional Risks:** arising from the underlying structure, counterparty exposure or operational matters
- **Complexity:** the nature of the investment and/or its structure, and the amount of governance and time required to transact and monitor
- **Accessibility:** the ability to access off-the-shelf solutions versus solutions which require specific structuring and / or the availability of suitable asset managers.

Table 2: Summary of investment ideas

Investment Ideas	Yield Enhancement	Risk Mitigation	Additional Risks	Complexity	Accessibility
Infrastructure	✓✓✓	✓✓✓	xxx	xxx	✓✓
Secured Funding Transaction	✓✓✓	n/a	x	xx	✓

Source: Redington

We hope you enjoy this first edition of Redington's Spring/Summer Collection 2011 and keep an eye out for future additions to the Collection. We hope that these investment themes will resonate with you. If you would like to find out about these ideas in more detail, we would be delighted to discuss them with you.

With best regards,



Robert Gardner
Co-Founder & CEO

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1. Infrastructure

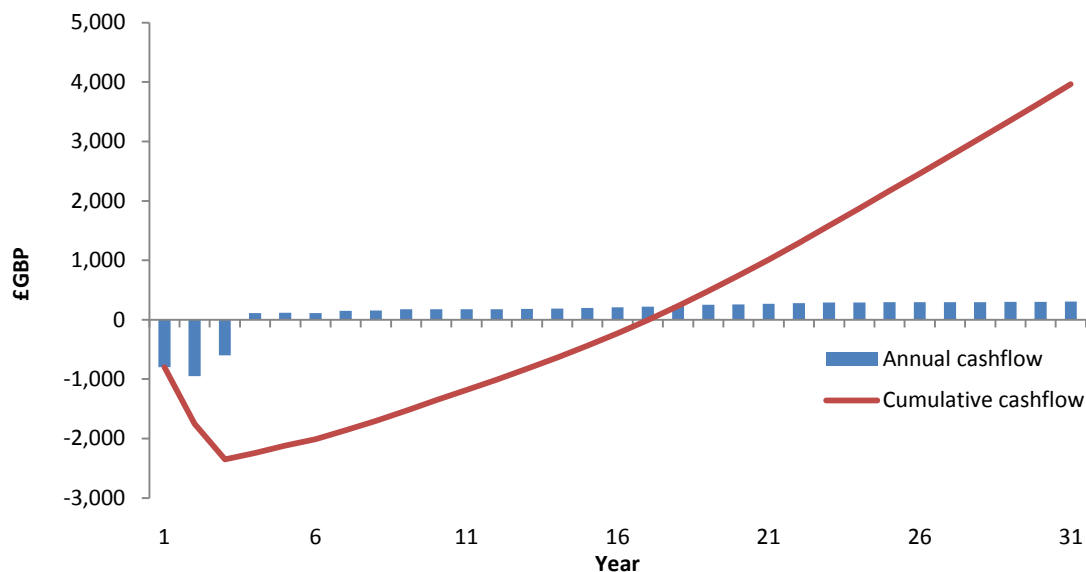
1.a. Introduction

In recent years, pension funds have become increasingly interested in infrastructure³ as a source of **liability-matching cashflows** with **prospects for real returns** and **diversification**.

Typical cashflow profile

With infrastructure projects, the source and cost of finance is the biggest concern in the development phase where there is an initial period of large negative cashflows required to finance the development. However, once development is complete, the cashflows become positive as the project becomes operational and starts to bring in revenues. The profit is distributed to equity holders, after taking into account costs such as ongoing maintenance and debt servicing. The ensuing cashflow profile from the project can be **stable, predictable, secure, long-term** and often **inflation-linked**. This makes infrastructure attractive to pension funds.

Figure 3: A simplified cashflow profile from an infrastructure project



Source: Redington

Other favourable investment characteristics of infrastructure assets include:

- Potential diversification benefits
- Socially responsible investment

³ Defined by OECD as the system of public works in a country, state or region, including roads, utility lines and public buildings

Background

One of the challenges when adding infrastructure to a portfolio is accessibility. In the past, access has been limited, with most assets being owned by the government. In our Spring Collection 2010, we explored opportunities for investments in public sector infrastructure projects through *Private Finance Initiatives (PFIs)* where **private firms provide some funding and are contracted to build and manage public sector projects** (such as hospitals and schools).

The 2008-09 credit crisis has changed the investment scenario for infrastructure and led to a shortage of affordable private finance for infrastructure projects from traditional sources such as banks. This created **new opportunities for pension funds**. The change in the supply-demand dynamics has opened up the infrastructure industry and there are now a **variety of vehicles through which investments can be made**.

The UK's National Infrastructure Plan 2010 identified a funding requirement of some £200 billion over the next 5 years. Given the government's budget deficit, a significant proportion of this figure will need to be raised through private finance. Currently, the level of infrastructure investments by UK pension funds is estimated to be less than 1% of total assets compared to 8%-15% in Australia or Canada. By investing in appropriately structured infrastructure projects, pension funds can benefit from **long-term, usually inflation-linked revenue streams**, in some cases backed by a **quasi-government guarantee** (*note: this is only the case when accessing the correct part of the capital structure and avoiding undue leverage*).

*"The financing of infrastructure has never been an easy process and the credit crunch made it harder. But there are options available for plugging the country's infrastructure funding gap ... [including] encouraging **pension funds to invest more in the sector**, to ensure Britain has the infrastructure it needs and deserves."*

Richard Abel, Macquarie, Business Infrastructure Commission Report

It is apparent that there are many potential opportunities available in this still relatively untapped market. In this section, we take a look at different ways and investment vehicles through which pension funds can access this asset class.

1.b. Accessing infrastructure

Equity vs. debt finance

PFI projects typically use around 90% of debt finance and 10% equity funding⁴. Traditionally, investors would seek equity participation e.g. via private equity. On the debt side, bank loans have tended to dominate but with new investment vehicles, pension funds can increasingly take exposure

⁴ Source: *Private Finance Projects – October 2009, National Audit Office*

to a range of debt-based instruments including: hybrid debt/equity instruments, structured products and mezzanine debt.

Primary vs. secondary market

Over the life of the project, its debt/equity profile changes and there may be further refinancing in the form of debt or equity finance. For example, completion of the project may enable better financing terms to be obtained. There is also a developing secondary market for PFI assets which enables investors to acquire shares in PFI projects which are already in progress.

In the table below, we list the key differences between investing in the primary and secondary phase:

Table 4: Comparing primary and secondary phases of infrastructure

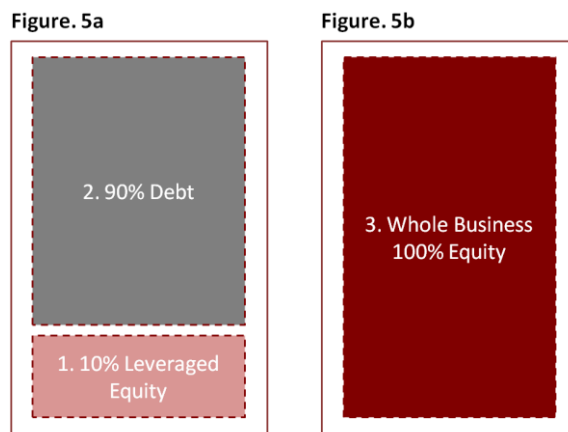
Primary phase (“Greenfield Project”)	Secondary phase (“Brownfield Project”)
Financing the start-up phase of the project e.g. building a school	Investing in the operational phase of an infrastructure project e.g. a toll bridge in operation
Investors’ main interest is in the project’s growth potential	Investors’ main interest is in high and stable income
Typically higher risk and requires higher return expectations	Relatively low risk and return

Source: Redington

1.c. The importance of capital structure

New ways of investing in infrastructure are emerging as new funds are developed, structures evolve and alternative sources of financing are considered. However, the way in which these investments are structured can result in big differences in their characteristics (e.g. volatility, cashflow profile). Not all routes of access may be consistent with a pension fund’s objectives. Although funds could be ostensibly holding “infrastructure” in their portfolios, the way in which it is accessed could make all the difference: it could mean holding an equity-like investment or a liability-matching investment.

Figure 5: Alternative capital structures

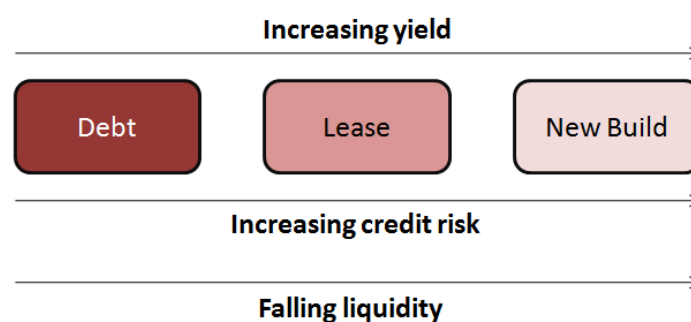


Source: Redington

1. Infrastructure investments have frequently been structured in a similar way to private equity – **low equity** and **high debt**, i.e. **highly leveraged**. Figure 5a illustrates this type of financing vehicle in which banks often provided the majority of the debt while pension funds would participate by buying into the leveraged equity. Equity is the least secure tranche of the capital structure meaning that in the case of the project failing, investors holding equity are lower in priority to creditors and most likely lose their investments. Returns are dependent on capital growth so for pension funds, the investment behaves like a growth asset, with typical target internal rate of returns of 15%-20%.
2. With the onset of the credit crunch, pension funds have started to show greater interest in the debt part of the investment structure (Figure 5a), in the gap left by banks. Debt investors enjoy a higher priority than equity holders and the payment profile from the investment is more likely to be secure, regular and long-dated.
3. Larger pension funds are beginning to recognise that there may be a third option – investing in **100% of the full capital structure** (Figure 5b) thereby obtaining outright ownership of the whole asset or project and associated benefits. The most recent and notable example was the acquisition of the 30-year concession to run the UK High Speed One project by two of Canada's largest pension funds.

In addition to attractive, stable cashflows, other considerations will contribute to the decision of which investment structure to choose. Position in the debt / ownership hierarchy can be ordered in tranches, ranging from lower yielding debt, through to higher expected return participation in new developments with higher risk.

Figure 6: The position in the hierarchy will determine risk/return on the investment



Source: Redington

1.d. Vehicles to invest in infrastructure

Direct vs. indirect investment

Direct Investments

Under this approach, pension funds directly invest in infrastructure assets/companies rather than through a third party fund or limited partnership. This allows them to have direct access to infrastructure projects and to match allocations to their specific needs. Usually, although the

investment is direct, it is made as part of consortium so that an individual fund holds a partial interest in the ownership of the asset. Equity participation is the preferred mode of investment, however in some cases it can be through subordinated debt with some equity characteristics.

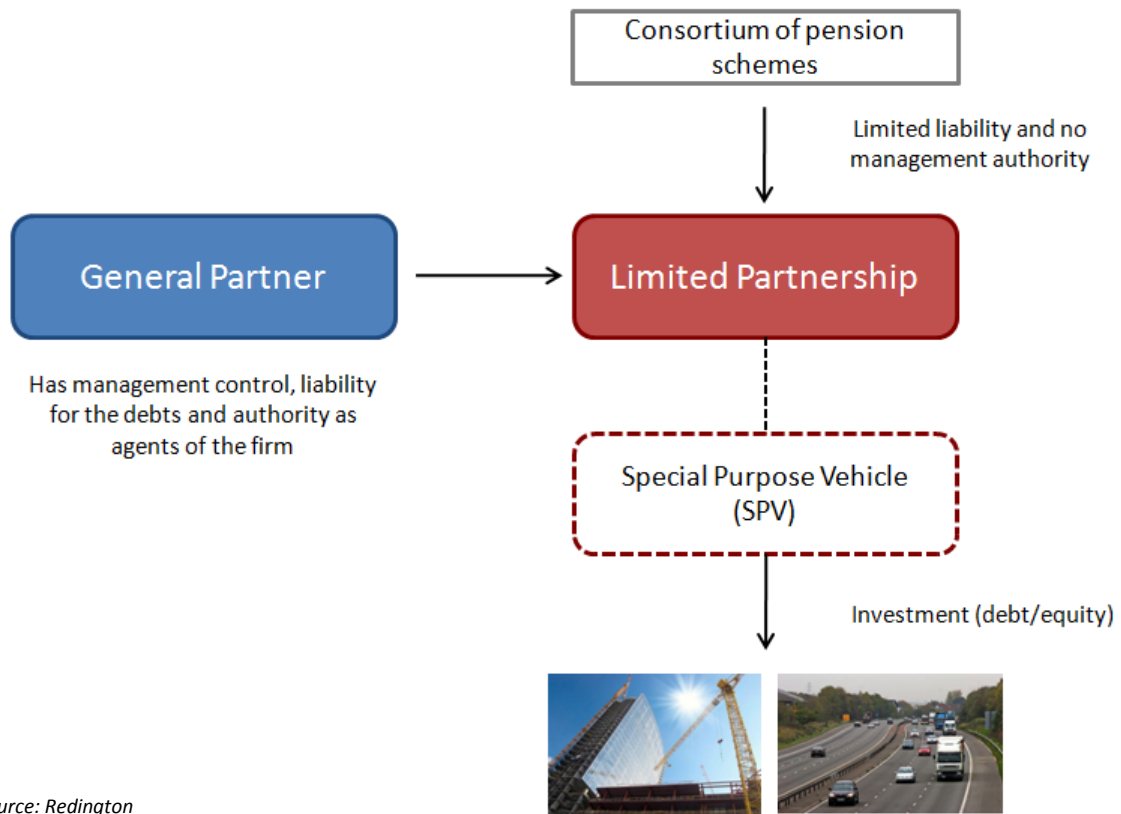
Direct investments require expertise and resources that makes it difficult for smaller funds. In-house experts or consultants are required to make and manage the acquisitions. For example, in Canada, the Ontario Municipal Employees Retirement System (OMERS) set up its subsidiary **Borealis Infrastructure** in 1998 to invest in infrastructure, and currently has several billion Canadian dollars invested in the fund. This approach may therefore only make sense for the large self-invested pension funds.

Indirect Investments

Under this approach, the pension fund invests in infrastructure projects through a third party i.e. either a listed or an unlisted infrastructure fund. These funds are set up to take advantage of opportunities quickly and efficiently and can commit large amounts of capital in a short period of time. We expect to see more of these funds becoming available.

Unlisted infrastructure funds involve pooled capital arrangements, typically limited partnerships (see figure below for an example structure), through which investments are made in a variety of infrastructure assets or operating companies.

Figure 7: An example structure



Source: Redington

These funds are usually large and require a substantial investment to join and involve complex transactions with both debt and equity arrangements. Unlisted funds may be closed or open-ended.

Table 8: Comparing closed and open-ended funds

Closed Funds	Open Funds
Have specific maturity dates e.g. a 10-year term and so may not match pension funds' investment horizon	Have an indefinite term and so more in line with pension funds' objectives
Illiquid with no withdrawals until the fund is liquidated	Better liquidity
Limited fund size and diversification potential	More potential for diversification
Market based methodology with returns calculated as realised cash vs. invested cash	Valuations are estimates and subject to error

Source: Pension Fund Investment in Infrastructure: A Resource Paper - Larry W Beeferman - Harvard Law School; Redington

Listed infrastructure funds are publicly listed entities that invest in a portfolio of securities of infrastructure-related companies or other funds. They offer investors a quick and easy way to gain exposure to infrastructure. Unlike unlisted funds, they provide a great level of liquidity. However, they are generally more volatile than unlisted funds due to their valuation mechanism which makes them highly correlated with the equity market.

The global listed infrastructure market has grown in the last decade with the number of listed vehicles open for investment increasing from 10 in 2000 to 48 in 2010⁵. The majority of these funds are managed by firms located in Australia, Canada or the UK.

1.e. Pension fund investments in infrastructure

Currently, the majority of pension fund investments are through listed infrastructure funds. However, the development of markets and investment structures described in the earlier sections mean that pension funds of increasing sophistication have started to invest via unlisted funds or even directly, with Australian, Canadian and Dutch pension plans leading the way. While UK asset allocation weightings are still low on average, a number of single big pension funds have made substantial allocations to infrastructure.

Below are some examples of pension funds that have already invested in infrastructure or are looking to do so:

Canada

- The Ontario Municipal Employees Retirement System (OMERS) invests in infrastructure through its subsidiary Borealis Infrastructure, set up in 1998. The most notable recent acquisition is the successful bid for the UK High Speed Rail 1 for £2.1 billion. Split with the Ontario Teachers Pension Plan (OTPP), the fund possess a 30-year concession to own and operate the rail line.

⁵ 2011 Prequin Global Infrastructure Report

US	<ul style="list-style-type: none"> • The largest US pension fund, the California Public Employees Retirement System (CalPERS), adopted a new investment policy in 2008 with a target 3% allocation of assets, or US \$7.2bn in infrastructure. • Other pension funds invested in infrastructure include the California State Teachers' Retirement System (CalSTRS), Washington State Pension Plan, Alaska Permanent Fund Corporation and Oregon PERD.
UK	<ul style="list-style-type: none"> • A number of large pension funds have announced the intention to invest in infrastructure in recent years: Universities Superannuation Scheme (USS), BT Pension Scheme, Railways Pension Scheme (RailPen). • In addition, several local authority schemes have already started the process, e.g. London Pensions Fund Authority (LPFA).
Continental Europe	<ul style="list-style-type: none"> • ABP, the Dutch pension fund for government and education employees is the largest fund in the Netherlands with c.€242bn (April 2011) assets under management, and also one of the largest funds in the world. Through its subsidiary, APG, ABP allocated an asset allocation target of 2% for infrastructure in its Strategic Investment Plan 2007-2009. • Other big pension investors in Continental Europe include the Danish ATP and PKA, Dutch PGGM, Finnish VER.

Source: OECD Paper on "Pension Fund Investment in Infrastructure" January 2009, Redington

Summary

The risk-return profile of infrastructure as an asset class is highly dependent on the type of investment, particularly the underlying asset involved, the stage of investment, the position in the capital structure and the use of leverage. At the underlying infrastructure project level, cash flows are usually long-dated and inflation-linked and offer both matching and growth potential for a pension fund. However, the potential sources of risk (e.g. liquidity, pricing, timing, governance, management) are much wider than for traditional investments and need careful assessment.

Table 9: Summary of infrastructure

	Yield Enhancement	Risk Mitigation	Additional Risks	Complexity	Accessibility
Infrastructure	✓✓✓	✓✓✓	xxx	xxx	✓✓

Source: Redington

2. Secured Funding Transactions

2.a. Background

The financial crisis of 2008 was as much about liquidity as it was about credit. Liquidity in the financial markets vanished rapidly following the Lehman collapse as banks stopped lending to one another. It took the massive intervention of central banks on an unprecedented scale to prevent a global financial meltdown.

Liquidity is a priority for the banking sector which is coming under increasing pressure to shore up liquidity reserves. With Basel III in the pipeline, which includes more stringent liquidity and capital guidelines, the next few years could come to be remembered as the “*great scramble for liquidity*”.

Bank liquidity

Liquidity for a bank means having enough cash or very liquid assets available to meet its financial obligations as they come due. The implications of not having enough liquid assets (e.g. cash or government bonds) can be severe as exemplified by the collapse of Lehman Brothers in 2008. As a result of this, Basel III will force banks (from 2012) to hold a 1-year liquidity buffer as well as enough liquid assets to withstand a 30-day period following a “shock” scenario (from 2015).

Consequently, banks are actively seeking to improve their liquidity ratios to meet their obligations. One way of achieving this is by sourcing liquid assets and banks are willing to pay a premium for them.

The opportunity

Banks currently hold longer maturity, illiquid assets on their balance sheets for which they are seeking to diversify funding sources by seeking new providers of **term financing**.

The assets that banks are seeking to fund are typically illiquid and cannot be used as collateral for traditional open market funding operations such as **repurchase agreements (repos)**⁶. But while the price of these assets may have fallen, they are, most importantly for banks, performing as expected and banks wish to hold these assets to maturity.

Banks could try to sell these assets on the market to buy liquid assets, but due to their current pricing levels and large bid-offer spreads, banks are unwilling to dispose of these assets as this would incur substantial mark-to-market losses.

Historically, banks have funded these assets through securitisation. This process enabled them to monetise illiquid assets on their balance sheets by effectively selling them on to third parties as part of a package. However, in the aftermath of the financial crisis, the securitisation market has all but disappeared, meaning that banks are now choosing to hold these assets to maturity and are seeking to broaden and diversify the means of funding them.

⁶ The sale of securities with an agreement for the seller to buy back the securities at a later date. For holders of liquid instruments such as gilts, repos can be used as a form of short-term borrowing.

One of the avenues banks are exploring is **secured funding**.

2.b. Secured Funding Transactions

Pension funds and insurance companies are amongst the UK's largest holders of nominal and index-linked gilts and are therefore a huge potential source of liquidity for banks. Both groups hold gilts primarily for their liability-matching characteristics and high creditworthiness, and not for their liquidity. Thus pension funds and insurance companies now have an opportunity to monetise this "liquidity premium".

What are banks proposing?

Banks are looking to borrow gilts, which the banks then use these as collateral to borrow cash from the gilt repo market. They will do so on a **secured basis** by offering up a pool of collateral until the eventual return of the gilts. Since banks are seeking to finance illiquid assets on their balance sheets in this way, the assets posted as collateral will be much more illiquid than the gilts they receive.

As an added level of security to the gilt lender, the transaction will be over-collateralised (i.e. the market value of the collateral will be higher than that of the gilts). This additional amount, or **haircut**, acts as a buffer to protect the lender in the event that the value of the collateral falls on liquidation. The size of the haircut will reflect the illiquidity, volatility and credit risk profile of the collateral.

In exchange for lending gilts, a pension fund or insurance company can expect to receive a periodic fee, usually expressed as "**x basis points (bps)**" of the market value of the gilts. Secured funding transactions have terms of at least 13 months, reflecting the 12-month liquidity buffer Basel III will require for banks.

Economic exposure

For the duration of the agreement, both parties continue to receive the returns from their assets, thus retaining their respective **economic exposure**.

The net result is that a pension fund or insurance company receives the fee from the secured funding transaction as well as the returns generated from its gilts (i.e. they receive gilts + "x bps").

Fees (premium)

The fee offered by banks will vary and depends on a number of factors including:

- **Marginal funding costs** – i.e. the cost to the bank of other sources of funding on the open market (e.g. bonds or covered bonds). If this is relatively low, the fee will also be lower.
- **Credit Default Swap (CDS) levels** – i.e. the market price of credit risk of the bank. If this is higher than other banks, this will likely increase the fee (relative to others).
- **Collateral Type** – i.e. the fee will depend on the nature of the collateral. If the assets are very volatile/risky or extremely illiquid this will increase the fee.

- **Term** – i.e. the longer the term, the more banks will be willing to pay. The “sweet spot” will depend on the individual bank’s funding requirements.
- **Nominal vs. index-linked gilts** – there is a general preference for nominal gilts (which are more liquid than index-linked gilts) and the fee may be higher if nominal gilts are provided.
- **Collateral Substitution** – banks would like the option to choose and change the collateral posted in the agreement over time. This would mean higher risk for the counterparty but also a higher fee.

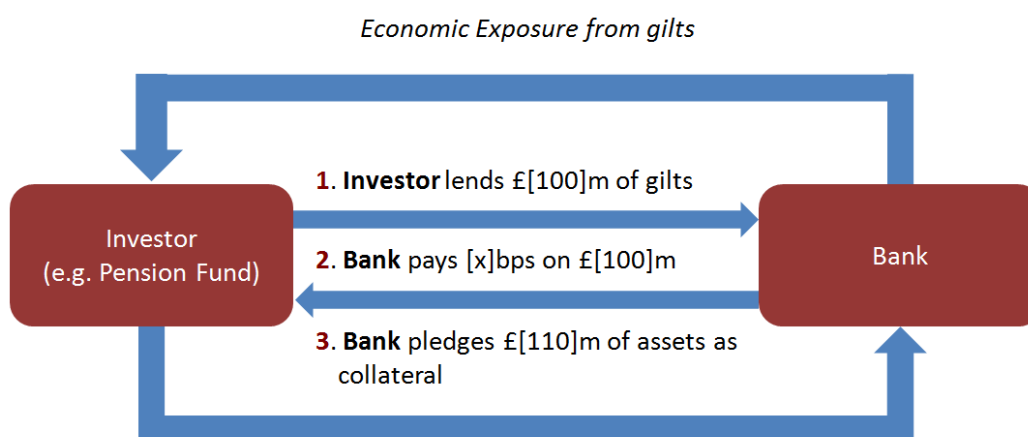
Many factors contribute to the fee but, ultimately, the crucial variable will be the risk appetite of the pension fund or insurance company as it sets the constraints around the transaction (e.g. 2 years, 100% nominal gilts, only AAA-rated assets as collateral).

2.c. Structure

Banks are proposing a number of different structures for secured funding transactions. Each will have its own advantages and disadvantages and require independent analysis but the objective is always the same. Proposed structures include:

- Securities Lending Agreements (SLA)
- Total Return Swaps (TRS)
- Collateral Swaps
- Sale and repurchase facilities (Repo)
- Credit Linked Notes
- Risk Sharing

Figure 10: An example structure: Securities Lending Agreements (SLA)



Source: Redington

Economic Exposure from collateral

In the example above gilts with a market value of £100 million are lent to a bank for a pre-defined term. The bank will pay the pension fund an annual fee of $(x \text{ bps}) \times £100 \text{ million}$. As security, a pension fund or insurance group will receive £110 million of collateral as security (i.e. the haircut

applied to the collateral in this instance is 10%). The return earned by the gilts and collateral are returned to the appropriate parties as and when they fall due.

At maturity the bank returns the gilts to the pension fund, which in turn returns the collateral.

Collateral types

The universe of assets that banks are looking to post as collateral is varied. Below is a small sample:

Table 11: Example assets offered as collateral

Asset	Example
Asset Backed Securities (ABS)	Residential and commercial mortgage-backed securities Consumer credit (e.g. credit cards) Collateralised Debt and Loan Obligations (CDOs and CLOs)
Loans	Large cap loans Small to medium enterprise loans (SME) Export Credit Agency (ECA) - guaranteed loans Education loans Private Finance Initiative/Infrastructure loans (PFI) Social housing loans
Bonds	Corporate, sovereign, covered bonds etc.

Source: Redington

Tri-party vs. bilateral transactions

Secured funding transactions can be structured as **bilateral** or **tri-party** agreements.

Under a **bilateral agreement** the collateral is **posted directly** to the pension fund or insurance group, who will assume operational control and will be responsible for valuation and monitoring. An asset manager would normally be mandated to manage this responsibility. Still, this can often be operationally intensive and will require considerable expertise.

Under a **tri-party arrangement** a **third-party custodian** will be used to hold the collateral on behalf of the pension fund or insurance company. The custodian will value, monitor and hold the collateral in exchange for a fee.

2.d. Execution

Collateral valuation

On day one, the pension fund or insurance company will receive an over-collateralised pool of assets (i.e. their market value is higher than that of the gilts it has lent). However, establishing a market-

consistent value for these assets can sometimes be difficult either due to their illiquid nature or complexity.

Pension funds and insurance companies must make sure that, in the absence of observable pricing in the market, the assets are valued correctly and in a manner that will reflect their actual price in an environment where the bank defaults and the pension fund or insurance company has to sell the collateral to raise the cash needed to repurchase its gilts. Depending on the actual assets, this can be very complicated.

To limit the risk of holding assets whose theoretical value does not correspond to its actual sale price, stringent and expert valuation is required. This can be outsourced to a third-party specialist valuation agent (for a fee) or alternatively a valuation methodology can be agreed beforehand and used to monitor the collateral during the term of the transaction.

Valuation challenge & resolution

The counterparty maintains the right to challenge the bank's valuation of the posted collateral. The valuation method should be defined and agreed at the outset of the arrangement, however, should the parties be unable to agree, the pension fund / insurer may approach other market makers to ascertain a fair and sensible value for the proposed assets.

Ongoing monitoring

To ensure that the value of the collateral remains at the agreed level, it needs to be valued on an ongoing basis. Should the value of the collateral fall, the level of security will decline as well. To counteract this, a bank will post additional collateral so that the value of the collateral remains at the market value of gilts (plus haircut).

In theory this should mitigate the risk, but in a falling market (like in 2008) receiving more of the same collateral might not actually decrease risk. There are ways to mitigate this, but discussing this is beyond the scope of this Collection.

2.e. Benefits and risks for a pension fund or insurance company

Benefits

Secured lending transactions enable a pension fund or insurance company to **monetise the current liquidity premium** banks attribute to gilts. In other words, it offers an opportunity to enhance the returns earned on the gilt portfolio while maintaining exposure to their liability-matching characteristics and returns – though with some additional risk.

Secured funding transactions are agreements between the bank and an interested party. Depending on risk appetite, the transactions can be structured to offer attractive returns for a low level of additional risk and similarly, it could be tailored to provide higher returns with added risk.

Risks

Secured funding transactions are not without risk. The level of risk a pension fund or insurance company is exposed to will depend on the parameters of the transaction (e.g. collateral type, term, counterparty etc.). We summarise the main risks below:

Table 12: Main risks of secured funding transactions

Factor	Risk
Counterparty	The bank might default on its obligation to return the gilts to the original owner.
Collateral	The value on liquidation of the collateral falls below the replacement cost of the securities lent to the bank.
Liability implications	If the bank defaults, the pension fund or insurance company might be left with a duration mismatch, if the collateral provide an inferior match for the liabilities.
Collateral reserves	Pension funds and insurance groups hold a reserve of liquid assets to service any potential collateral calls arising from their existing derivative positions. It is therefore crucial to understand the potential effects of a secured funding transaction on this reserve.

Source: Redington

2.f. Summary

Secured funding transactions offer pensions funds and insurance groups the opportunity to **monetise gilts' liquidity premium**. These transactions **require specific expertise, skill and rigorous risk analysis** – but when properly structured and implemented they provide attractive additional returns whilst allowing funds to retain the liability-matching benefits of gilts.

Table 13: Summary of secured funding transactions

	Yield Enhancement	Risk Mitigation	Additional Risks	Complexity	Accessibility
Secured Funding Transaction	✓✓✓	n/a	✗	✗✗	✓

Source: Redington

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