



# FTP - White Paper

## **Funds Transfer Pricing for banks and building societies, who are not operating profit centre treasuries**

### *Introduction*

This White Paper has been produced by ALMIS Consulting to help clients implement their own individual approach to Funds Transfer Pricing (“FTP”).

It is based on views and experiences of both our own consultants and also eight different banks and building societies who participated in our FTP Workshop held on 25th January 2012.

Our aim is to provide some guidance as to the structure and what needs to be considered when client firms are developing their FTP policies, methodologies and models.

In this paper, we give some background, explain the definition and objectives of FTP and then provide a technical road map for calculating pricing, taking account of the main components as identified.

### *Background*

For many years, FTP has been used by a significant number of UK based banks and building societies, particularly the large Firms.

Techniques have differed, but in the main, it has been used to reflect and transfer the “true” market cost of funding between divisions and/or subsidiaries.

The banking crisis in 2008 and 2009, and subsequently, has highlighted material weaknesses in the approach adopted by many of the large Firms, who did not properly assess the cost of liquidity, maturity transformation and the cost of expected credit losses.

This led the FSA, the UK regulator, to review these practices at UK based Firms; and following a thematic review of FTP at eleven banking Firms (only one smaller than £5bn), the FSA sent a “Dear Treasurer” letter to all Firms.<sup>1</sup>

This Letter requires all Firms to put in place an effective FTP process to manage balance sheet structure, risk-adjusted profitability and liquidity, and ALM risk.

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<sup>1</sup> [http://www.fsa.gov.uk/pubs/international/ftp\\_treasurer\\_letter.pdf](http://www.fsa.gov.uk/pubs/international/ftp_treasurer_letter.pdf)



Smaller Firms, without profit centre treasuries, are also affected by this and, for the vast majority of Firms this will result in a fresh review and implementation of new approaches and methodologies to FTP.

This will have wide-reaching implications for the UK banking and building society sectors, particularly as it will ensure that all Firms must now fully take account the cost of liquidity following the new “Strengthening Liquidity Standard”.

### ***Objective and Definitions***

A key overarching principal for all banking and building society firms is long-term business sustainability.

FTP is a policy framework to help Firms achieve this.

As each Firm will have its own particular business model, reflecting its size, customers, types of lending, funding and capital structure, each will need to develop its own individual approach to FTP.

There are perhaps three different definitions of what the collective term FTP may mean and we can describe each definition separately in terms of Transfer pricing (TP), more specific Funds Transfer Pricing (FTP) and Product Pricing (PP).

The individual Firm can then decide if it is TP, FTP and/or PP that it really needs to adopt.

#### **1. Transfer Pricing (TP)**

A Transfer Price (“TP”) is the price at which goods or services are bought and sold within a company (the internal price) or the intra/inter-company price.

Setting TP’s raises a number of issues:

- Incorrect prices can distort reported performance, by making some departments more profitable at the expense of others.
- Artificial pricing within the model can be used to ‘make the product work’ and therefore produce artificially profitable products.

A TP will include all costs, including a charge for the cost of capital.

It may be that for a smaller Firm, there is no need to set up a system of TP and that performance can be adequately measured for the firm or entity as a whole.

The majority of our working party did not want to adopt “full” Transfer Pricing.



## **2. Funds Transfer Pricing (FTP)**

FTP is a process normally used in banking and building society sectors to measure the performance of different business units of a Firm.

The most important aspect is the relationship between deposit raising and lending.

In its truest meaning, FTP means surplus funds in one area are lent to other areas that have deficits (at the internal price).

FTP is a mechanism to measure the relative contributions to the Firm's profitability and hence shareholder's or 'member' value according to whether the Firm is a commercial bank or a mutual building society.

It is usually the treasury function that becomes the intermediary or pricing facilitator.

Unlike TP, FTP does not usually include a charge for capital. It does however involve a mechanism for measuring performance of individual business areas.

## **3. Product Pricing (PP)**

A Pricing Mechanism - to ensure all the costs and risks have been captured in the pricing of new retail products to new customers.

A Product Pricing ("PP") Mechanism is therefore perhaps more relevant than FTP for organisations that treat their departments as simple cost centres and treat the whole business as one profit centre.

Our working party of Firms and consultants believed that for smaller Firms, the requirement is more simply along the lines of:

*"The lending rate that includes ALL internal costs (and those costs are calculated relative to the risks)"*

### **Essentials**

Our working party identified several essentials, or 'givens', that need to be included in the process:

1. The firm must have a sustainable business model.
2. The concept, policy and framework must be 'Board Approved'.
3. The CEO must be engaged in the process and 'on-side'.
4. Senior management must work together towards an agreed common aim.
5. The TP, FTP or PP model must be robust and fit within the ethos and complexity of the business, i.e. it must be 'fit for purpose'.



## ***Price / Cost Components***

In this section we describe the price and cost components and considerations that should be taken into account in developing a TP, FTP or PP model.

Our working party discussed several alternative methods which we believe are valid.

Individual firms can use this 'roadmap' to develop their own particular approach. We have considered two types of costs - balance sheet costs and overhead costs.

### **1. Balance Sheet Costs**

There are a number of balance sheet costs associated with lending decisions.

These are:

- a) the funding cost itself, including any market risk and the cost of liquidity to support the funding model
- b) the cost of providing a loan commitment; and
- c) the cost of capital (FTP may exclude the cost of capital).

### ***Funding Costs***

A key consideration for assigning a Funding Cost is to consider the maturity of the lending, so that the funding cost is based on the funding cost over the maturity of the loan – 'maturity transformation'.

- ***Maturity Transformation***

The consensus amongst the working part was that the maturity of lending would be based on the 'expected life' rather than the 'contractual life' of any lending.

In the case of mortgage lending, historically the contractual life could be longer than 25 years, whereas the actual life is only around three to five years.

Expected life is normally the most probable. However this should include a risk contingency for the possible maturity which could be considerably longer.

Some firms will adopt sophisticated expected life models, others will take industry averages for the type of lending involved.

It is good practice for the expected life assumption to be based on available and supportable data. Which ever used, the expected life consideration is a key component.



- **Based on a Market Funding Cost**

One approach to address maturity transformation is to price the loan against the market cost of funding based on an 'equivalent maturity'.

Most of our working party felt this was not practical as, simply, there is no funding available to them at that equivalent maturity.

- **Average v Marginal Costs**

For many institutions the marginal cost of funding is considerably more expensive than the average cost. This is because the average cost includes legacy products which revert to lower rates.

Proponents of the average cost model argue that it is reasonable to assume that, over the life of a loan, a component of new funding will revert to a lower cost and it is right for the funding model to take account of this.

Marginal cost advocates argue this is the only way to reflect the cost of *new* lending. The regulator also specifically highlights this method so some see this as a key requirement

Many of our working party did feel a simple marginal cost model was however not necessarily appropriate to their business models, but did acknowledge that an average cost model did not necessarily fully reflect the maturity mismatch with lending.

Perhaps the answer to marginal vs average cost of funding is: *'The expected marginal cost of funds over the future expected life of the loan'*. This would then require the firm to calculate a forward expected funding cost.

- **Cost of Liquidity**

It is now essential that the full cost of liquidity, based on the "Strengthening Liquidity Standard" (BIPRU 12) is adequately assessed.

The three cost elements most relevant to today's liquidity issues in the FTP pricing world are:

- a) Having to hold more of it.
- b) Having to hold liquidity in both BAU<sup>2</sup> liquidity and in HQLB<sup>3</sup> – it would be wrong to only include the cost of buffer.
- c) The low liquidity returns relative to the high cost of funds.

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<sup>2</sup> Business as Usual

<sup>3</sup> High Quality Liquidity Buffer



The working party considered a very simple model to cover liquidity costs as part of the total cost of funds.

| EXAMPLE<br>Product (Pool) Type | Liquidity Requirement |     | Funding<br>Cost | Liquidity Cost |        | Total<br>Cost |
|--------------------------------|-----------------------|-----|-----------------|----------------|--------|---------------|
|                                | HQLB                  | BAU |                 | HQLB           | BAU    |               |
| Type A – (eg) Retail Instant   | 20%                   | 5%  | 1.25%           | 0.40%          | 0.075% | 1.725%        |
| Type B – (eg) Retail Bond      | 10%                   | 2%  | 2.50%           | 0.20%          | 0.030% | 2.730%        |
| SME                            | 20%                   | 10% | 1.00%           | 0.40%          | 0.150% | 1.550%        |
| Cost of buffer                 | 2.00%                 |     |                 |                |        |               |
| Cost of non buffer             | 1.50%                 |     |                 |                |        |               |

In the above example the total cost of funding can be calculated by adding both the cost of buffer and non buffer liquidity. The 'Product (Pool) Type' would need to reflect the Firms own individual assessment of what is Type A or B and product pools with different BAU liquidity requirements.

This simple model can be modified. The working party had different approaches to calculate the cost of buffer and non buffer, with issues arising, such as:

Should the buffer cost be, for example;

- a) Base Rate less LIBOR (or non buffer investment return), or
- b) The buffer return less the marginal cost of new funding, or even the buffer cost less the opportunity cost of new lending?

The above model can also be extended to ensure that the total HQLB and BAU is all allocated.

- **Market and Basis Risk**

Consideration must also be given to Market Risk if the interest basis of the lending does not exactly match the basis of the funding.

Fixed lending versus variable funding should generally take account of the cost of hedging, ie the hedged rate (the cost of that fixed term rate based on a yield curve).

Complexity can be built in to reflect the practical reality of over / under hedging, for example the difference between the amounts of fixed lending forecasted versus actual. Also some account can be made of the difference between the fixed rate at product inception and the rate when the product is transacted. More complexity could be built in to cover early redemptions (pre-payments).



Further, consideration should be given to any difference in interest basis between lending and funding, in particular 3 month LIBOR or equivalent may no longer be a relevant benchmark for many firms as it does not represent the cost of their funding or interest income.

### ***Loan Commitments***

The liquidity and any other implications (including any market risk) of providing a short or long term future loan commitment needs to be taken into account.

### ***Capital and Credit Risk***

Consideration should also be given to factoring in the cost of capital and the credit risk associated with a loan.

The working party discussed:

- a) If capital should be priced in at all (is it free reserves?) or perhaps,
- b) Should it be based on how much it would cost to raise additional regulatory capital from the capital markets, eg the current Nationwide PIBS yield plus a credit spread (the marginal cost of capital)?
- c) Capital requirements under BASIL 3, eg will PIBS still be allowable?

The amount of capital required to support lending will vary based on the credit risk and that credit risk can be factored in based on:

- a) Either, the cost of regulatory capital to support that lending;
- b) Or, as an alternative, an expected lifetime Probability of Default (“PD”) over the expected life of a loan.

IFRS Accounting is set to adopt an expected credit loss model, and therefore FTP may best be consistent with external accounting.

## **2. Overheads**

Most TP, FTP or PP models will take account of overheads and any additional income associate with products.

Overheads relate to both the lending and the funding side of a Firms business and both need to be considered.

Overheads associated with funding will increase funding costs, and similarly, overheads associated with lending will increase lending costs.

Overheads can include the distribution, marketing, advertising and other associated overheads.





Many overheads are incurred:

- a) When, a product is launched; or,
- b) Not directly linked to the amount of product that is lent.

Therefore an issue is: Should overheads only include the variable costs and ignore fixed costs?

Many firms receive very low funding rates from, e.g. current accounts and branch based instant access savings accounts, but these require large fixed costs to operate. Does the true funding cost take account of this fixed cost? Should the allocation of fixed overhead be different if a Firm funds or lends products which are on best buy tables in Sunday newspapers?

Any FTP model needs to carefully consider the allocation of overheads and any non interest income.

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**ALMIS Consulting is a premium management consultancy service for clients, designed to help firms adopt best practice in Asset Liability Management.**

#### **Services include:**

ALCO terms of reference, framework and reporting, ALM, Interest Rate Risk & Treasury Management Training for NED's, Board & Executives and new entrants, Development of product pricing and funds transfer pricing methodology, Treasury Management System (TMS) requirements, selection and implementation, Assistance with ILAA & ICAAP, Developing Forward Looking Analysis, General advice with funding facilities and plans, Management of banking relationships.

#### **Consultants:**

**Joe Di Rollo** has over 25 years experience in bank and building society financial risk management, particularly in the fields of interest rate, liquidity and credit risk modelling. Joe is also an experienced trainer. Joe is an accountant and member of the association of corporate treasurers.

**Dean Carter** is an experienced Building Society Treasurer and Risk Professional having worked in both London and Paris and formerly as Head of Treasury at the Nottingham Building Society. He has also held the post of General Manager - Operational Risk and Compliance. Dean has recently moved into treasury consultancy practice and will be working exclusively for ALMIS International and King & Shaxson.

**Graham Bond** - We have negotiated to retain the external consulting and training services of Graham Bond at Leeds based Treasury & Risk Management Limited. Graham has had an extensive career in corporate treasury management and is a Fellow and Member of Council of The Association of Corporate Treasurers. Graham has for many years worked together with ALMIS International on treasury management workshops and training.

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