Funds Transfer Pricing
ALMIS Webinar

20 December 2011

A way forward using ALMIS

Joe Di Rollo

Dean Carter

FTP Webinar

- Introduction
- FTP - What does it mean for firms
- A way forward using ALMIS
- Q & A

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Introduction

- What is ‘transfer’ pricing
- Banking crisis
  - Strengthening Liquidity
  - Risk adjusted cost of capital
- Regulation scrutiny
- Relevance for ALMIS

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FTP – What does it mean for firms

Dean Carter – Associate Director,
ALMIS International

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FTP - What is it?

Definition of 'Funds Transfer Pricing – FTP

'A method used to individually measure how much each source of funding is contributing to overall profitability.

The funds transfer pricing (FTP) process is most often used in the banking industry as a means of outlining the areas of strength and weakness within the funding of the institution.

FTP can also be used to indicate the profitability of the different product lines and each staff member, as well as act as a great medium for comparison between employees, branches, etc. (investopedia – 2011)

Or

A method of measuring the performance of mortgages, conducted by an internal model which determines the value or rate of return that each unit contributes to profitability.

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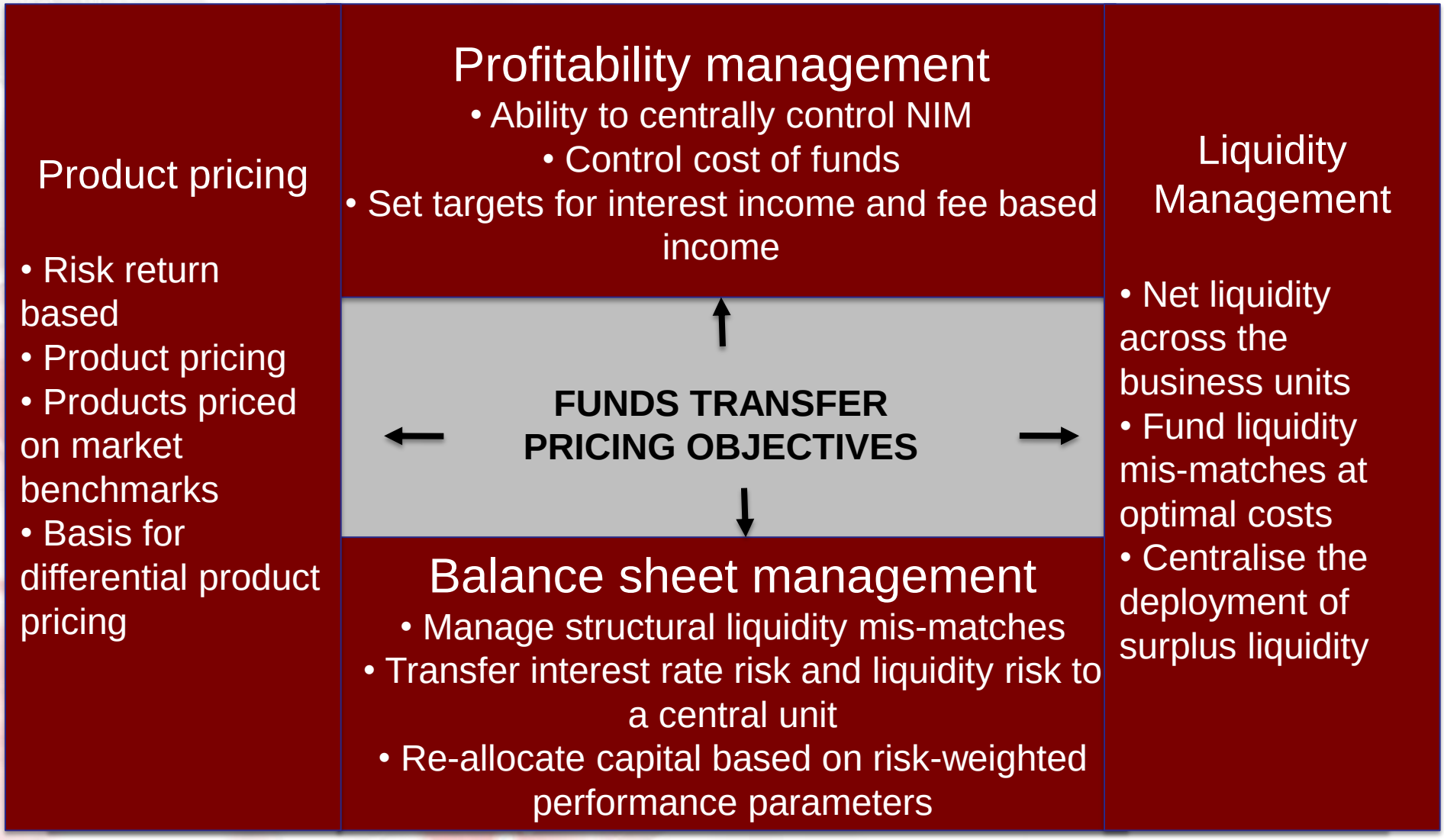
FTP – Ernest & Young



FTP – What does it mean to the FSA?

- The overriding focus of the FSA is to ensure firms have a sustainable business model
- Their current focus is on Funds Transfer Pricing
- They, as always, start from a position of 'best in class' – which means they look at very comprehensive models in big institutions (which may not always be relevant to all firms!)
- What they will want from building societies is;
  - Appropriate models proportionate to the businesses complexity, and Risk Profile
  - Engagement and understanding from Boards, ALCO's and senior management

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FTP – What is it?

- It means different things to different institutions…
- For HSBC it will mean many things and they will have many versions
- For a medium sized building society it will not be completely straight forward, but much less complicated than HSBC
- For a building society on the administered approach it will be a very simple structure, but will still be relevant

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FTP – What is it?

The following four types of FTP methodologies are utilized by the financial institutions:

1. Single Pool Rate Matching utilizes one rate to credit all fund providers and debit all fund users, respectively. This rate might be the weighted average cost of funds for the reporting institution, prime rate, or some other capital market rate. The single pool approach is simple, but does not take into consideration any maturity or imbedded risk characteristics.

2. Specific Matching is a mostly academic approach. The objective of specific matching is to match every specific liability with every specific asset of an equal amount, maturity and imbedded risk characteristic.

3. Multiple Pool Rate Matching is an extension of single pool rate transfer pricing. Essentially, each side of the balance sheet is split into pools of assets and liabilities sorted by criteria such as maturity characteristic, rate and yield, imbedded risk, or credit factors. Then the pools from each side of the balance sheet are matched to the opposite side of the balance sheet to establish a related funds charge or credit.

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FTP – What is it?

The following types of FTP methodologies are utilised by the financial institutions:

4. Matched Maturity is basically a gap approach. Each individual customer account is matched to a market driven index such as the Treasury Yield Curve, the swap curve, or LIBOR (London Inter-Bank Offer Rate) based curve. Transfer pricing rates should represent the alternative “opportunity” rate for the bank’s sources or use funds and vary according to repricing term and other attributes.

The Matched Maturity has become the preferred approach to Funds Transfer Pricing because:

- Business units are more willing to accept FTP when transfer prices have a transparent, rational basis and are applied consistently throughout the organizational structure and across timelines.
- Marginal spread for each product is accurately measured
- The earning attributable to interest rate mismatching is correctly identified
- Each product spread is independent of any other balance sheet element

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FTP – Why use it?

FTP helps financial institutions to allocate margin, better understand where profits come from, isolate and manage the interest-rate risk component of the margin. An effective FTP analysis enables a firm to increase profitability by:

1. Evaluating alternative investment/mortgage and funding decisions
2. Improving the strategic allocation of resources
3. Helping to identify high-performing products, segments, channels
4. Enhancing understanding of poor-performing products, segments, Channels
5. Making better pricing decisions
6. Evaluating the performance of the treasury group
7. Improving the planning budgeting process (Levey, 2008).
8. Ensure liquidity risk is priced into products and the decision making process

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FTP –
What needs to be addressed?

Building Societies need to ensure they remain competitive whilst retaining an adequate margin and controlling the risk – life is a compromise:

1. Margin Management – control over the margin including comprehensive reporting and forecasting help maintain Net Interest Income
2. Product Pricing – ensuring all elements of running the business are included in product pricing (Liquidity costs are central to the FSA's focus). Especially the cost of liquidity, the costs of managing risk and the relevant level of sustainable profitability
3. ALM – ensuring capital is deployed most effectively (in line with risk weighted performance measurements), and interest rate mis-matches are adequately controlled
4. Liquidity management – ever more important (since the credit crunch) and a current focus of the FSA. Ensuring borrowed short and lent long doesn't come home to bite you in normal times and stressed environments!!

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Typical Policy – Considerations?

- What is the minimum rate of return for a mortgage product?
- What is the minimum rate this product is profitable at?
- Who decides on the hurdle rate?
  - Should it be a Board policy decision?
  - FD or Executive Committee
- Who manages the process
  - Marketing, Treasury, FD, Finance Dept.?
  - Should it be a 'Margin Committee'?
- Does it pass a minimum hurdle rate?
- Will there be different pricing models for the different types of mortgages?
- Will there be different pricing models for the different types of channel?
- How will a Fixed Rate Mortgage be treated if the policy is not to hedge it?
- What happens if it is priced un-hedged and then hedged
- Can the pricing be adjusted relevant to business conditions?
  - For example, what happens if no more FRM can be written, but other types do not meet the hurdle rate
  - If the years profit target has been met, can the hurdle rate be lowered?

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Typical Model –

What is included in the price?

- Product type
  - During product
  - Post product
- Category
  - House purchase
  - Re-mortgage
  - Rollover
  - BTL
- LTV
- Term
- Base Rate
- SVR/Tracker Rate
- Product Rate
- Inflows
  - Expected
  - Actual
- Hedging
  - Swap rate
  - Percentage hedged
- Channel
  - % Direct
  - % Indirect
- Fee income/costs
  - Product fee
  - Application fee
  - Broker fee
  - Legal fees
  - Valuation fee
  - MIG fee
  - Expected loss charge
- Capital
  - Weighting
  - Amount required
- Funding
  - Type a /b split
  - Average v marginal
  - Liquidity costs
- Cash flows – Mortgage
  - Pipeline
  - Average balance
  - Income in / out
- Cash flows - Admin
  - Marketing costs
  - Admin costs
  - Branch costs
  - Sales costs

FSA View – Funds Transfer Pricing

The importance of pricing liquidity risk derives from our Principles for Businesses 3: 'a firm must take reasonable care to organise and control its affairs responsibly and effectively, with adequate risk management systems'.

- Importance for firms of focusing on FTP as part of the preparation for their Individual Liquidity Adequacy Assessment (ILAA).

- The need for the pricing of liquidity risk is set out in BIPRU 12.3.15 and this review yielded insights into current state and future development of firms' FTP processes.

- Liquidity stresses are low frequency, but extreme severity events, which firms have historically neglected, in the interests of short run efficiencies. We aim to reduce risks to the UK financial system by encouraging more resilient, sustainable business models.

- The thematic review covered FTP practices pertaining to liquidity and asset liability management (ALM) risk, NOT, other common uses of FTP, for instance fixed cost contribution accounting, taxation and credit and operational risk pricing.

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FSA View – Key Messages

The key messages for senior management are :

- FTP is a regulatory requirement and an important tool in the management of firms' balance sheet structure, and in the measurement of risk adjusted profitability and liquidity and ALM risk.

- By attributing the cost, benefits and risks of liquidity to business lines within a firm, the FTP process strongly influences the volume and terms upon which business lines trade in the market and promotes more resilient, sustainable business models.

- Whilst firms are making progress in addressing FTP shortcomings, there is still more to do before FTP is effectively utilised to drive business strategy in line with firm wide objectives.

- Good practice was most in evidence in firms where senior management took a direct interest in their firm's FTP regime, with a view to harnessing it to achieve strategic objectives.

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FSA View – Summary Conclusions

- P&L attribution

Many firms did not attribute some elements of the costs, benefits and risks of liquidity to business lines, instead holding costs at the centre. This acted to blunt the signalling of the same to business lines and thus compromised incentives and the progression of strategic objectives.

- FTP granularity

Of the costs, benefits and risks that were attributed, most firms did not apply FTP to a sufficiently granular level to effectively incentivise business transaction decision makers. This was observed both in the attribution of centrally generated funding costs and of the cost of holding liquid asset buffers. This again acted to blunt the signalling of costs, benefits and risks of liquidity to business lines.

- FTP consistency

Most firms did not apply consistent FTP methodologies across constituent businesses. Therefore an asset, liability or off balance sheet risk could be priced differently, simply on the basis of where it arose in the firm. In turn this skewed business incentives and behaviours to the detriment of the overall firm. In addition, this could convey confusing signals to the market, which in turn would harm the firm's franchise.

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FSA View – Summary Conclusions

- Responsiveness of FTP

Many firms relied on offline systems requiring manual intervention or simplistic assumptions in order to implement their FTP regime. Offline processes make the FTP system less amenable to effective oversight and less responsive in volatile markets, due to the time taken to generate information manually. This heightened the risk of inaccurate pricing of liquidity and weakened the signalling of the costs, benefits and risks of liquidity to business lines and the FTP regime's impact on business line behaviours.

- FTP as a business signalling and strategic tool

Many firms charged FTP by reference to the weighted average cost of funding already on balance sheet or weighted average cost of funding projected in annual budgetary processes. There was no additional overlay allowing senior management to adjust FTP rates to incentivise or discourage particular business activities based on a forward looking management view or in response to current inventory or risk levels. Furthermore, there was no consideration regarding the marginal cost of funding for the firm when appropriate. The cost was expressed as a reference rate + spread, which was then applied to business line balance sheets. Attribution did not differentiate between long and short dated balance sheet items.

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FSA View – Summary Conclusions

- FTP as a business signalling and strategic tool (contd.)

These features risked mispricing liquidity, particularly in volatile markets, leaving firms vulnerable to conditions witnessed in the past two years. Effective use of FTP as a business signalling and strategic tool was most in evidence in firms where senior management took a direct interest in their firm's FTP processes, with a view to harnessing it to further strategic objectives.

Furthermore the use of a weighted averaging methodology applied to business line balance sheets, irrespective of duration, entailed the cross subsidisation of longer dated risk at the expense of shorter dated risk, since the weighted average cost did not discriminate between these. All other things being equal, longer dated assets present greater risk than short dated assets, yet the weighted averaging methodology makes no distinction between them. This therefore has the potential to skew business incentives and behaviours to the detriment of the overall firm.

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FSA View – Summary Conclusions

- Stress testing processes and off balance sheet risk

Some firms either did not price all undrawn off balance sheet contingent commitment types to which they were exposed, or else applied unsubstantiated charges to them. Therefore, business lines risked writing options for customers at levels where the risk was not commensurate with rewards, skewing business incentives and behaviours to the detriment of the overall firm. This was at least in part borne out of: the lack of comprehensive stress and scenario testing to inform risk appetite for undrawn off balance sheet commitments; and an ad hoc approach to reviews of behavioural models.

Our Conclusion

- FTP is firmly on the FSA radar, and is good strategic and risk management practice
- However, it needs to be clear, well thought out and appropriate for the size and type of business
- There is no right answer, nor is there a simple generic model to employ, but there is a common theme

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Objectives of an FTP system

- Highly flexible to fit in with institutions own business model / business strategy
- Robust calculation of cost of liquidity, cost of capital and term structure of interest
- Forward looking
- Capable of back testing

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ALMIS Report Writer Overview

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Objectives

- Allow users to view summary data from multiple portfolios, multiple currencies, multiple reports in one customisable document.
- Allow it to be easily updated every day, week or month with different data, including forward data
- Allow it to show trends in data
- Allow ALMIS clients to easily share reporting templates

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Quick Guide

- Report Writer takes data from ALMIS reports
- Using OLE and Excel's Names to dynamically link ALMIS data into a spreadsheet template.
- Uses Excel to present data

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Types of Name

- Cell
- Range
- Whole Report

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Naming Convention

A001C01N01

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Naming Convention

A001C01NXX

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Row Titles

A001C01RTotal_Assets

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Row Titles

A001C01RTotal_Assets

P01A001C01RTotal_Assets

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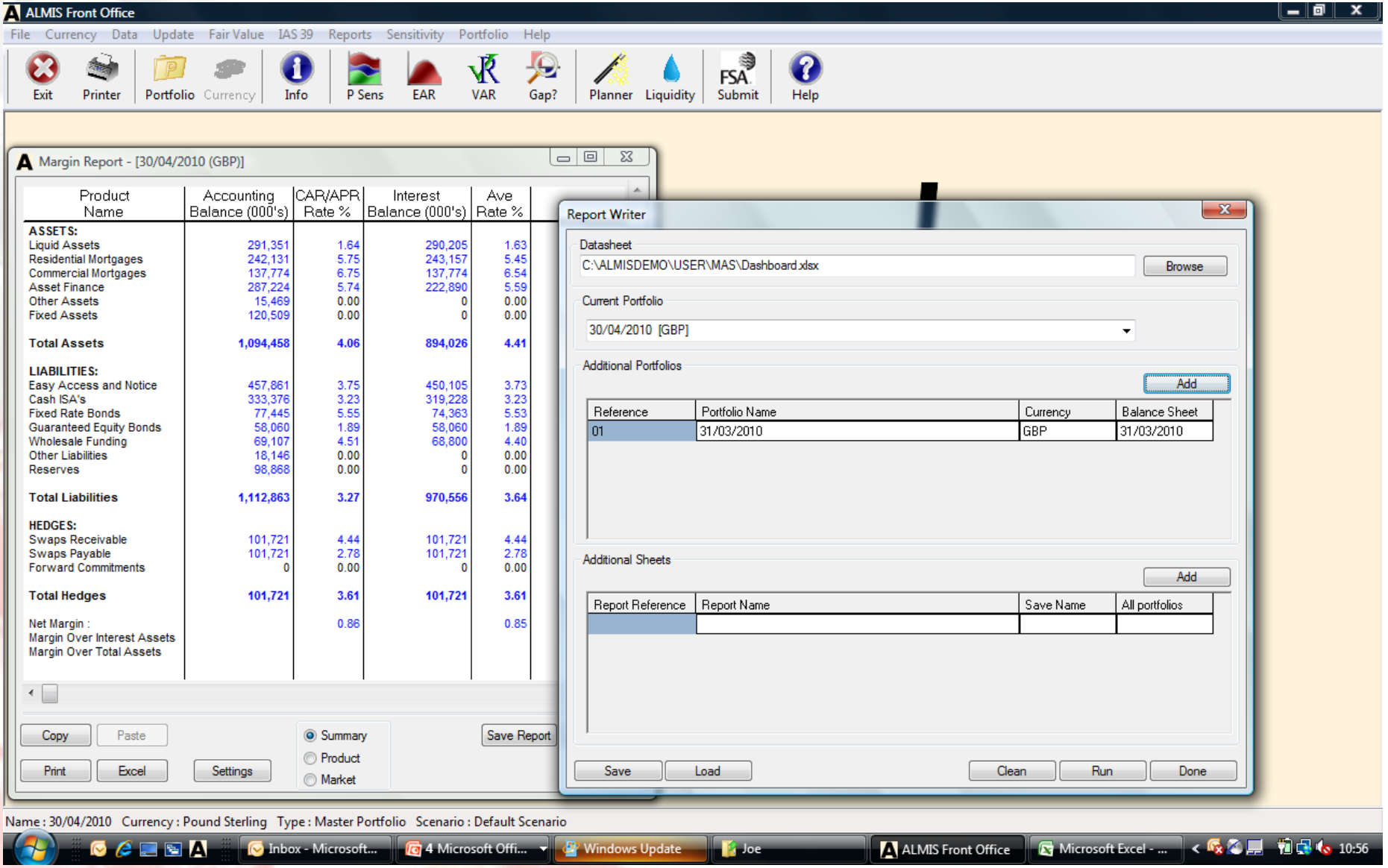

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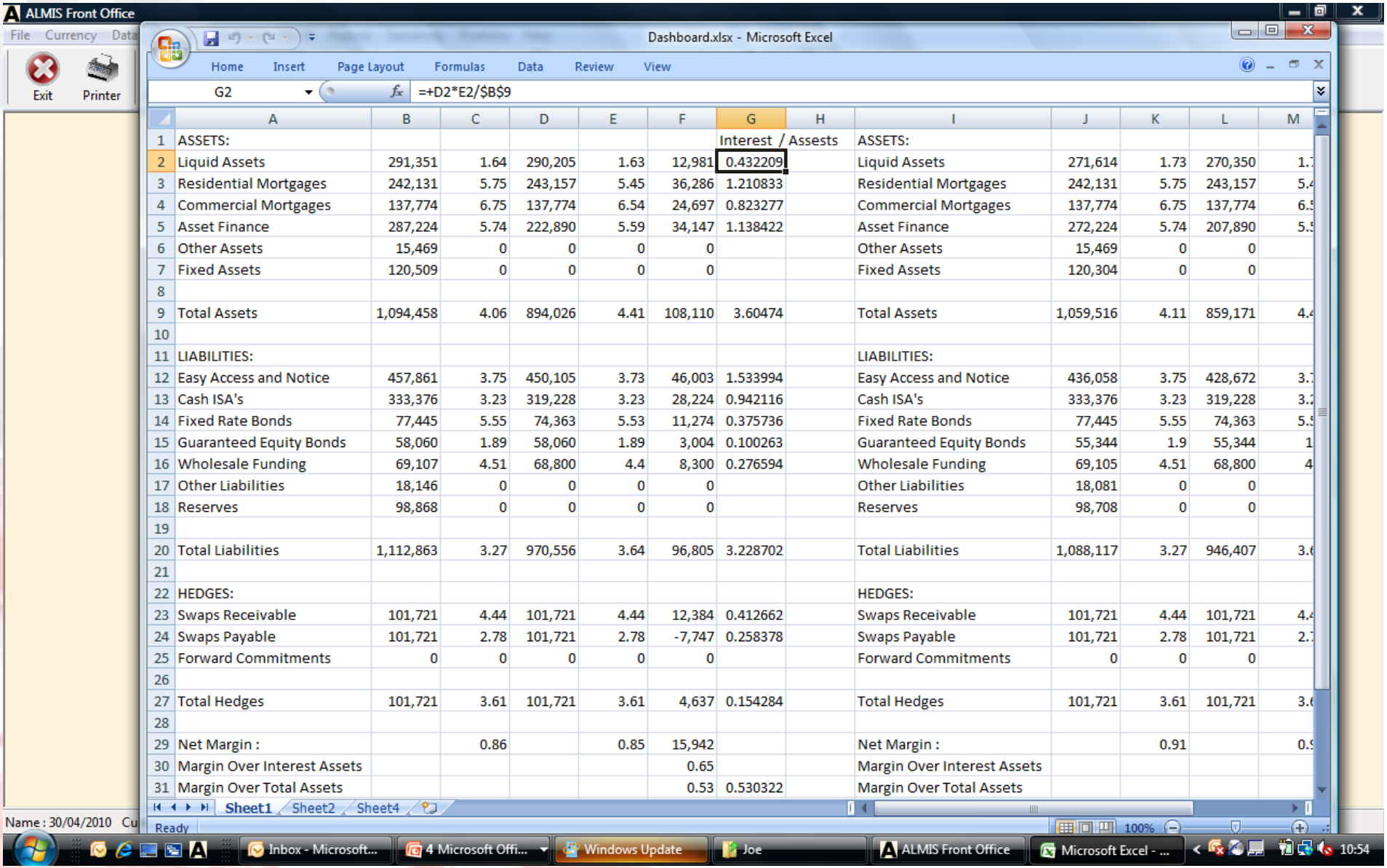

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	ASSETS:						Interest / Assests		ASSETS:				
2	Liquid Assets	291,351	1.64	290,205	1.63	12,981	0.432209		Liquid Assets	271,614	1.73	270,350	1.7
3	Residential Mortgages	242,131	5.75	243,157	5.45	36,286	1.210833		Residential Mortgages	242,131	5.75	243,157	5.4
4	Commercial Mortgages	137,774	6.75	137,774	6.54	24,697	0.823277		Commercial Mortgages	137,774	6.75	137,774	6.5
5	Asset Finance	287,224	5.74	222,890	5.59	34,147	1.138422		Asset Finance	272,224	5.74	207,890	5.5
6	Other Assets	15,469	0	0	0	0			Other Assets	15,469	0	0	
7	Fixed Assets	120,509	0	0	0	0			Fixed Assets	120,304	0	0	
8													
9	Total Assets	1,094,458	4.06	894,026	4.41	108,110	3.60474		Total Assets	1,059,516	4.11	859,171	4.4
10													
11	LIABILITIES:								LIABILITIES:				
12	Easy Access and Notice	457,861	3.75	450,105	3.73	46,003	1.533994		Easy Access and Notice	436,058	3.75	428,672	3.7
13	Cash ISA's	333,376	3.23	319,228	3.23	28,224	0.942116		Cash ISA's	333,376	3.23	319,228	3.2
14	Fixed Rate Bonds	77,445	5.55	74,363	5.53	11,274	0.375736		Fixed Rate Bonds	77,445	5.55	74,363	5.5
15	Guaranteed Equity Bonds	58,060	1.89	58,060	1.89	3,004	0.100263		Guaranteed Equity Bonds	55,344	1.9	55,344	1
16	Wholesale Funding	69,107	4.51	68,800	4.4	8,300	0.276594		Wholesale Funding	69,105	4.51	68,800	4
17	Other Liabilities	18,146	0	0	0	0			Other Liabilities	18,081	0	0	
18	Reserves	98,868	0	0	0	0			Reserves	98,708	0	0	
19													
20	Total Liabilities	1,112,863	3.27	970,556	3.64	96,805	3.228702		Total Liabilities	1,088,117	3.27	946,407	3.6
21													
22	HEDGES:								HEDGES:				
23	Swaps Receivable	101,721	4.44	101,721	4.44	12,384	0.412662		Swaps Receivable	101,721	4.44	101,721	4.4
24	Swaps Payable	101,721	2.78	101,721	2.78	-7,747	0.258378		Swaps Payable	101,721	2.78	101,721	2.7
25	Forward Commitments	0	0	0	0	0			Forward Commitments	0	0	0	
26													
27	Total Hedges	101,721	3.61	101,721	3.61	4,637	0.154284		Total Hedges	101,721	3.61	101,721	3.6
28													
29	Net Margin :		0.86		0.85	15,942			Net Margin :		0.91		0.9
30	Margin Over Interest Assets					0.65			Margin Over Interest Assets				
31	Margin Over Total Assets					0.53	0.530322		Margin Over Total Assets				

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	Title		Title		Title
001	Margin and Balance Sheet by Summary	021	Interest Repricing Exposure Detail P1	061	Counterparty Risk report by Sector - Summary
002	Margin and Balance Sheet by Product	022	Interest Repricing Exposure Detail P2	062	Counterparty Risk report by Sector - Detail
003	Margin and Balance Sheet by Market	023	Interest Repricing Exposure Detail P3	063	Loan to Value by Lend Code
004	Basis Risk	024	Maturity Exposure Summary P1	064	Loan to Value by Category
005	FSA Basis Risk	025	Maturity Exposure Summary P2	065	Loan to Value by Product
006	FSA Gap Report	026	Maturity Exposure Summary P3	066	Value in Arrears by Lend Code
007	Custom Repricing Gap report	027	Maturity Exposure Detail P1	067	Value in Arrears by Category
008	Custom Maturity Gap Report	028	Maturity Exposure Detail P2	068	Value in Arrears by Product
009	FSA017 Gap Report	029	Maturity Exposure Detail P3	069	Percentage of Loans in Arrears by Lend Code
010	FSA047	030	Repricing Break Even Cumulative Summary P1	070	Percentage of Loans in Arrears by Category
011	FSA048	031	Repricing Break Even Cumulative Summary P2	071	Percentage of Loans in Arrears by Product
012	Exposure Summary Report	032	Repricing Break Even Cumulative Summary P3	072	Fair Value Swaps - Summary
013	Repricing Gap Cumulative	033	Repricing Break Even Cumulative Detail P1	073	Fair Value Swaps - Detail
014	Repricing Gap Periodic	034	Repricing Break Even Cumulative Detail P2	074	Fair Value Swaps by Counterparty - Summary
015	Maturity Gap Cumulative	035	Repricing Break Even Cumulative Detail P3	075	Fair Value Swaps by Counterparty - Detail
016	Maturity Gap Periodic	036	Repricing Break Even Periodic Summary P1	076	Fair Value Swaps by Counterparty - More Detail
017	Basis Gap	037	Repricing Break Even Periodic Summary P2	077	Liquidity Stress report - Daily
018	Interest Repricing Exposure Summary P1	038	Repricing Break Even Periodic Summary P3	078	Liquidity Stress report - Weekly
019	Interest Repricing Exposure Summary P2	039	Repricing Break Even Periodic Detail P1	079	Liquidity Stress Report - Daily No totals
020	Interest Repricing Exposure Summary P3	040	Repricing Break Even Periodic Detail P2	080	Liquidity Summary

ALMIS Approach – a way forward

- ALMIS FTP January workshop
  - To develop a suitable standard ‘pricing’ template(s)
- ALMIS FTP March Seminar, presented jointly with FSA
- ALMIS Consulting to provide ‘individual’ approach training / workshops with CEO involvement to implement ‘individual’ approach (February – June)

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Joe Di Rollo
Founder & Managing Director
ALMIS International Limited
0131 452 8898

www.almis-int.com | info@almis.co.uk

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