

# Unit Pricing Practices

by

The Unit Pricing Working Party

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# The Unit Pricing Working Party

- Anthony Brennan
  - Sean Casey
  - Adrian Cooper
  - Fiona Denvir
  - Tony Jeffery
  - Kevin Manning
  - George McCutcheon, Chairman
  - Brian Morrissey
- Includes people working directly for Life Companies, Consultancies and one Regulator.

# Agenda

- Background
- Unit-Pricing Survey
  - Valuation Methodology
  - Pricing Basis
  - Asset Transactions / Transactions between funds
  - Unit Pricing Controls
  - Unit Pricing Errors
  - Fund Operation
  - Tax Issues including Tax Losses
- Q&A

# Terms of Reference

- Set up by Life Committee
- TOR Vague – “Something to do with unit-pricing”
- No mandate to set down guidance
- Survey of current practice
- Irish Market – Domestic v Cross-Border
- Potentially a reference of best practice

# Regulatory Background

- Central Bank and Financial Services Authority of Ireland
- Insurance Legislation silent on Unit Pricing
- In July 2001 the IFSS of DETE issued Guidelines for Insurance Companies on various issues but not on Unit Pricing
- Consumer Protection Code
  - Chapter 2: Common Rules for all Regulated Entities

# Company Background

- Board is responsible for PRE
- Professional Guidance LA-4
  - AA – valuation – interpretation of PRE
  - Duty to advise Board of interpretation of PRE
  - Consider unit pricing when interpreting impact on PRE of use of discretion by Board
- IFIA Guidance Paper 6
- UCITS Notices

# Survey Context

- ABI Guide of Good Practice for Unit Linked Funds -June 2006
- Section 3 addresses use of Discretion
- Funds should be operated according to published criteria and standards
- Scope and Limit of Discretion documented and disclosed to policyholders and other relevant parties
- Codification provides a clear point of reference

# Approach

- A survey to Appointed Actuaries (as primary contact with the Society of Actuaries in Ireland)
- Covering areas of practice
- Intended to be a review of practical current issues
- Not intended to cover unit-pricing theory



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# The Survey

Questions covering:

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**Focus on areas with scope for discretion**

**Sent to Appointed Actuaries**

**Responses: 11 cross-border and 6 domestic**

# Valuation Methodology (1)

<b>UP policy is approved by:</b>	<b>N/A</b>	<b>Board</b>	<b>Parent Co.</b>	<b>Other*</b>
Domestic	1	2	0	3
Cross-border	2	1	2	6

\* For domestic companies other is typically the Appointed Actuary. For cross-border the other is mainly the Investment Committee or management.

# Who has delegated responsibility?



Appointed Actuary

Committee

Other

Oversight of Pricing



Fairness to customers



# Other questions

<b>Are stock valuation points disclosed externally?</b>	<b>Yes</b>	<b>No</b>	<b>For property funds - Yes</b>	<b>For property funds - No</b>
Domestic	1	5	0	4
Cross-border	6	5	0	4

<b>Is rounding applied...</b>	<b>Neutrally?</b>	<b>In favour of company?</b>
Domestic	4	2
Cross-border	8	3

# The Survey

Questions covering:

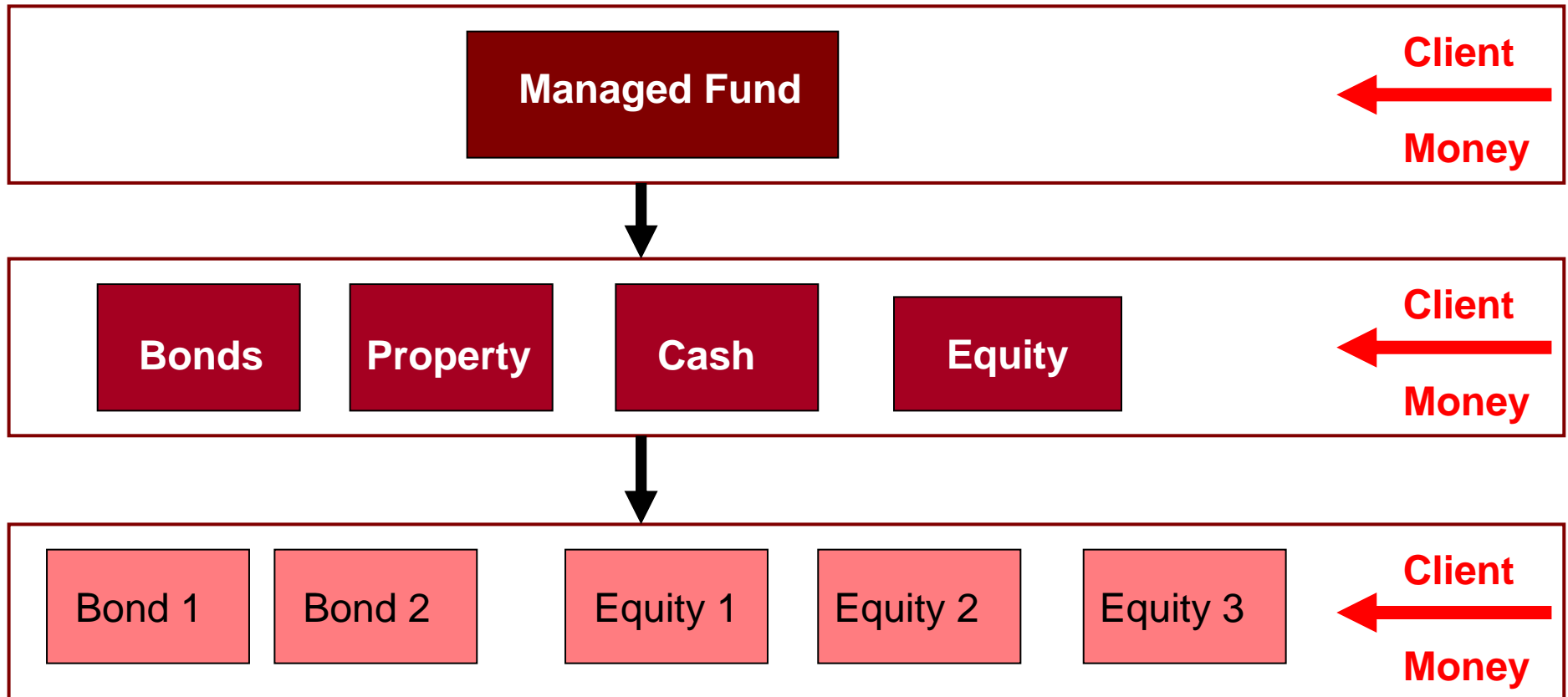
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# Pricing Basis

<b>Are there formal pre-set guidelines for determining whether the pricing basis for a fund should be cancellation, creation or other?</b>	<b>Yes</b>	<b>No</b>
Domestic	3	3
Cross-border	7	3

<b>At what level in the organisation is the decision on the appropriate unit-pricing basis taken?</b>	<b>Committee</b>	<b>Appointed Actuary</b>	<b>Other</b>
Domestic	1	5	0
Cross-border	5	1	2

# Pricing Basis – Tiered Funds



Questions – 1. pricing basis 2. basis for tactical asset allocations at managed fund



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# Asset Transactions / Transactions between Funds

- Asset transactions between funds
- Seeding of new funds
- Points specific to property transactions

# Asset Transactions / Transactions between Funds

- Generally transactions between funds happen at mid price
- In most cases buying / selling cost savings are shared
- Same rules apply for transfer between shareholder and unit fund

# Seeding of New Funds

- New funds generally seeded by shareholder
- In domestic market some companies used managed fund to seed other funds if deemed appropriate
- In cross-border, the view was more comprehensive that funds would be seeded by the shareholder

# Property Valuation – Forced Sale

- Property Fund currently holds €100m made up of €95m of property (neutral pricing basis) and €5m of cash.  
Price is 100
- 20% of unit-holders in queue to surrender
- You determine that you can sell two properties to meet the demand for liquidity. The properties are currently valued at €30m but you expect to receive only €15m for them in a forced sale (after costs)
- What is the price for exits?

# Property Valuation – Forced Sale

- Option 1 – Price = 85 (i.e. write down property values by 15)
- Option 2 – Price = 52.5 (i.e. write down prop values by half)
- Option 3 – Price between 85 and 52.5
- Option 4 – Price < 52.5

# Property Questions

<b>Appropriate for Managed Funds to buy units in Property Funds?</b>	<b>Yes</b>	<b>No</b>
Domestic	2	1
Cross-border		

# Property Questions

- N/A for most cross-border companies
- Small number of domestic replies so difficult to draw conclusions
- Broad views around appropriateness of managed funds buying units in property funds
- Who takes decision, decides appropriate price?
  - Fund manager / CIO / Appointed Actuary takes decision
  - Appointed Actuary / Board / Investment Manager / CIO decides the price



# Geared Property Fund

- Assets bought for €100m – LTV 80%
- Loan is non-recourse
- Property is let and Rent exceeds Loan Repayment
- Loan is performing
- Lender hasn't sought additional security
- Independent Valuation gives current value as €70m
- What is the price for exits?

# Property Warehousing

- Is it appropriate for other unit funds to warehouse a property?
- Is that just provision of finance or is it also underwriting of investment risk?
- If the latter, how is unit fund rewarded for risk?
- Broad views around appropriateness of managed funds (or other property funds) providing short-term finance for acquisition of a property for syndication
- What are entry and exit prices? Who decides?

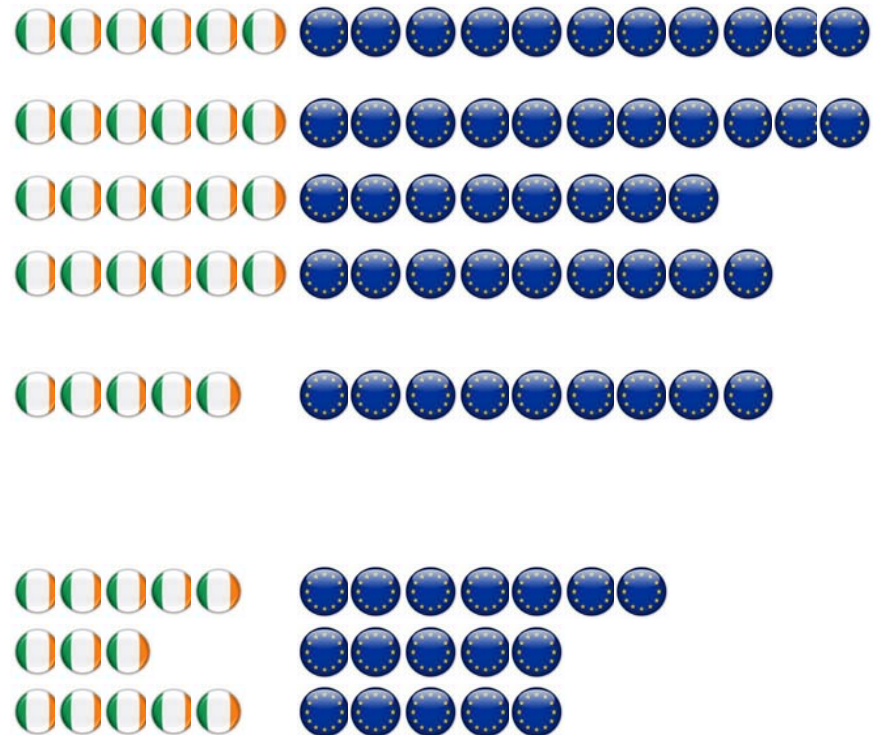
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# Unit-pricing controls

- Formal daily sign off
- Reasonable % price movement
- Comparison with a benchmark
- Reconciliation to previous price
- Check new unit creations have not impacted on current price
- Limits set for movements in:
  - Individual stock prices
  - FEX rates
  - Income, expense, tax accruals



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# Unit Pricing Errors – key questions

- What is an error?
- When does an error require compensation?
- When should an error be notified to the regulator?
- What processes are in place for dealing with unit-pricing errors?

# Error – Suggested Definition

Dublin Funds Industry Association Guidance defines a pricing error as....

*“one or more errors in the computation of a net asset value which, when considered cumulatively, result in a difference between the original computed NAV and the corrected NAV of at least 0.01% per share”*

Agree  

Disagree  

# Compensable Error – Suggested Definition

Dublin Funds Industry Association Guidance defines a compensable pricing error as....

*“one resulting from a mistake or negligence on behalf of the Manager, Directors, the Registrar, the Administrator or their respective delegates involved in the NAV calculation.*

*Examples of mistakes could include incorrect input of data, improper checking, incorrect interpretation of data, the adoption of an interpretation that would not be considered reasonable by another professional. Negligence would include an inadequate control environment or incompetent staff”*

Agree



Disagree





# What is a unit pricing error - continued

Almost universal agreement (1 domestic dissenter) that an error of fact or invalid assumption is a unit pricing error, regardless of scope for discretion or other subjective basis elements.

*If compensable error threshold is 0.5% and an error of 0.6% arose and the discretionary elements of the pricing basis might change the price by 0.2% say – this should not allow the error to be classified as non-compensable.*

Agree   
Disagree 

# Compensable errors

*What is the % error threshold (tolerable pricing error) below which no compensation recalculations will be processed?*

5 basis points	
10 basis points	
20 basis points	
50 basis points	
Other*	

\* Other answers included “Depends on circumstances” and “No percentage applied – monetary limit if error is above £10”.

*Q re shareholder benefit*

# Error logs / Regulator notification
















- Standard practice in both markets to log all errors
- Varying practice around notification to Regulator
- Most common approach is to apply a 50bps threshold, but significant variation around this.

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# Costs charged to the fund

What costs are charged to the unit funds in addition to specified company charges such as AMC?	N/A	Yes	No
Custodian Charges			
Acquisition and Disposal Costs			
Property maintenance expenses			
Price Publication Fees			
Stock Lending Fees			

# Guarantees – default risk

<b>If a bank defaulted on a deposit, then who would bear the loss?</b>	<b>Policyholder</b>	<b>Shareholder</b>
Domestic	5	0
Cross-border	8	1

<b>Who bears the loss in the event of the default of a third party guarantee provider?</b>	<b>Policyholder</b>	<b>Shareholder</b>
Domestic	6	0
Cross-border	6	0

Some qualification on this last point e.g. “as long as clearly set out in policy docs” and “policyholder bears risk “legally”, but may be reviewed case by case.”

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# Tax issues – domestic and cross-border

- Significant majority have policy that value from tax losses within a unit fund will accrue to shareholder only in exceptional circumstances
- Majority do not actively seek to transfer tax losses (at an appropriate price) between internal funds or from internal funds to the shareholder
- Majority do not set % limits on the proportion of a fund value that can be represented by tax assets
- Where the company gets tax benefits that originate in the unit funds – the benefit tends to be passed back to the fund.
- In practice how do you value tax losses and when do you ascribe a zero value?



# Tax Losses: Approach 1

- Philosophy: Pooled fund is indivisible.
  - Determine likely future exits on prudent basis
  - Project future investment return
  - Compute [Value of Tax Losses] as [PV of Tax Charge (without losses)] - [PV of Tax Charge (with losses)]
  - Err on the side of prudent assumptions
  - Include [Value of Tax Losses] as fund asset
  - Place limit on [Value of Tax Losses] as % of [Fund Value] for prudent reasons
- Value attributed over all policyholders

# Tax Losses: Approach 2

- Philosophy: There are two groups of policyholders - continuing and exiting –split existing tax losses pro-rata
- [Value of Tax Losses] represents a consideration paid by continuing to exiting for tax losses passed on
- Project investment return and withdrawals over future lifetime of fund
- Consideration based on estimated value received
- Compute [Value of Tax Losses] as [PV of Tax not Paid] due to tax losses passed on

# Value of Tax Losses

- A taxable Equity fund has equities worth €50m, and tax losses with a face value of €30m (tax rate of 20% = €6m in tax)
- The €30m losses have value to the extent that they can be used to offset future taxes (income tax, cgt)
- The fund is closed to new business and priced on a cancellation basis (some RP going in, but outflows consistently exceed inflows)
- How do you decide what value to attribute to the €30m losses?
- Suppose with perfect foresight that future investment return is 40% and say 30% allowing for withdrawals

# Options?

- What is value of tax losses?
  - Option 1 –  $0.2 * 0.3 * 50 = \text{€}3\text{m}$  (6% of fund assets)
  - Option 2 – Zero
  - Option 3 – Somewhere between zero and €3m

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■ Q&A