



Institute of Actuaries of Australia

**4th Financial Services Forum**

*Innovation in Financial Markets*

19 and 20 May 2008 – Melbourne

# **Developing a Fair and Reasonable Unit Pricing Restitution Policy**

***Anthony Asher***

***Trang Duncanson***



Institute of Actuaries of Australia

**4th Financial Services Forum**  
*Innovation in Financial Markets*  
19 and 20 May 2008 – Melbourne

## Contents

- The trustees' responsibility
- Nature of unit pricing
- Determining materiality
- Applying materiality



Institute of Actuaries of Australia

**4th Financial Services Forum**  
*Innovation in Financial Markets*  
19 and 20 May 2008 – Melbourne

## The trustees' responsibility

- What is fair?
- Reasonable expectations
- Materiality
- Administration contracts



# The trustees' responsibility

## - What is fair?

Blindfolded - to  
personal and  
vested interests

Swathed  
woman with  
scale  
emphasises  
process

Sword  
indicates  
power to  
exercise  
discretion



"Justice is the bond of society  
... the condition under which I  
and every man can identify  
with society, feel at one with it,  
and accept its rulings as my  
own." JR Lucas

### **In the scales:**

- All the stakeholders
  - Unitholders
  - Management
  - Shareholders
  - Regulators
  - Public
- Major criteria
  - Just deserts
  - Liberty (non domination)
  - Equality
  - Individual need
  - Efficiency
  - Status





# The trustees' responsibility

## - Reasonable expectations

- legislation and legislative practices;
- the governing rules of the fund, past and present;
- past practices of the trustee or manager;
- what has been indicated to investors in the past by both employers and trustees and
- practice by other funds

## Disclosure



# The trustees' responsibility

## - Materiality

- 'De minimis' (immateriality)
  - “the law does not concern itself with trifles”  
(CCH Macquarie Concise Dictionary of Modern Law)
  - “1. trifling; minimal. 2. (of a fact or thing) so insignificant that a court may overlook it in deciding an issue or case.” (Black's Law Dictionary)
- APRA: “The level of materiality to apply in a particular case is not therefore decided by the regulators”



# The trustees' responsibility

## - Administrative contracts

- There is a legal obligation to ensure that trustees pursue members' interests
- There is a short run benefit in recovering errors from administrators
- The administrators will in the long run charge fully for the additional costs and the additional risks
- A pragmatic approach is called for



Institute of Actuaries of Australia

**4th Financial Services Forum**  
*Innovation in Financial Markets*  
19 and 20 May 2008 – Melbourne

## Contents

- The trustees' responsibility
- **Nature of unit pricing**
- Determining materiality
- Applying materiality





## Nature of Unit Pricing

- Approximations and estimates
- Common causes of errors
  - Incorrect prices of underlying assets
  - Backdating
  - Interest and dividends have not been accrued
  - Tax related (incl. IC, DTA)
  - Computer programs and data
  - Fees and charges



## **Nature of Unit Pricing**

### **- Regulatory and Industry Guidance**

- ASIC and APRA Unit Pricing Guide
  - Nov 2005
- IFSA Standard No 17 - Incorrect Pricing of Scheme Units
  - *Correction and Compensation* Oct 2006
  - 30 bps and \$20 for all members



# Nature of Unit Pricing

## - Industry case studies

- Dollar levels
- Basis point levels
- PDS wording samples
  - Credit Suisse/Tremont Index Strategies Fund (PDS, 31 May 2007) – assessment 30bps, \$20
  - AMP Flexible LifeTime Super (PDS, 1 July 2007) – correction 30bps, \$5
  - MLC Masterkey Super (PDS, 22 June 2007) – correction 30bps (or 5bps cash), \$20



Institute of Actuaries of Australia

# 4th Financial Services Forum

*Innovation in Financial Markets*  
19 and 20 May 2008 – Melbourne

## FUND

Benchmark

Type Super

Number of Zero Changes 1

Reduction of SS 96%

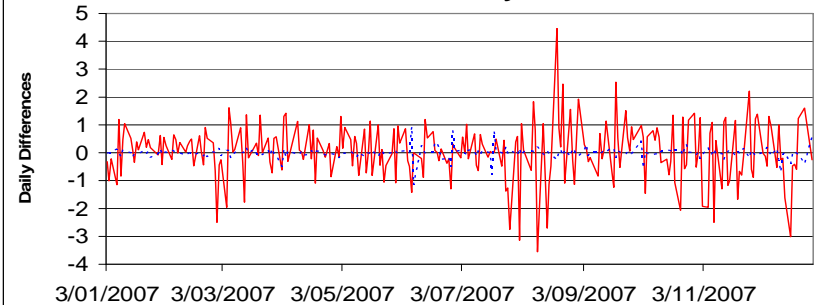
### Estimated Asset Allocation

- 7% UNALLOCATED & CASH
- 2% ASX 500 LAG 1
- 0% Aus Small Cap
- 0% ASX 200 Resources
- 58% ASX 300
- 10% ASX 200 Fins
- 1% ASX 300 indust.
- 13% Aus Growth
- 0% Aus Value
- 0% Europe
- 0% Japan
- 2% North America
- 0% Asia x Japan
- 0% Emerging Markets
- 0% World x Aus LAG 1
- 0% World x Aus LAG 2
- 0% World Growth
- 0% World IT x Aus
- 0% World Small Cap x Aus (Pindex)
- 0% Aus Bonds
- 0% Aus Bills
- 9% World Bonds
- 1% Aus Dollar
- 0% Aus Property

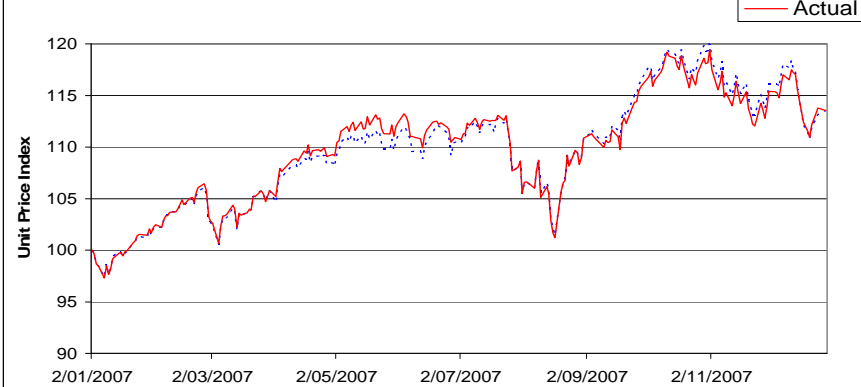
- 0.45% Annual Gross Overperformance (Unadjusted)
- 1.00% plus Annualised MER
- 0.45% less Annualised interest on unallocated
- 2.42% plus Annualised Tax on Fund
- 0.82% less Imputation Credits
- 1.70% Estimated Actual Overperformance

# Nature of Unit Pricing - ADUP unit price movements

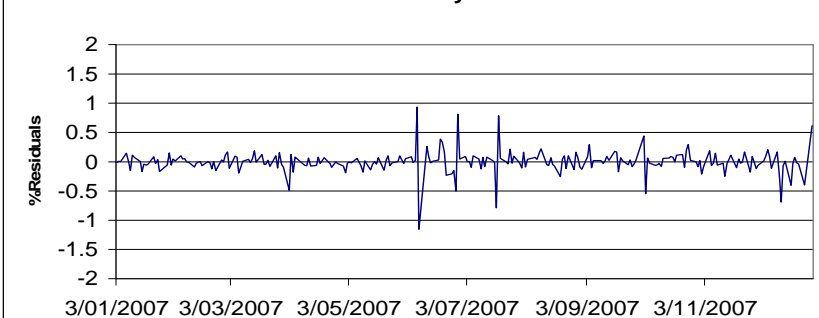
### Residual vs Actual Daily Differences



### Fitted vs Actual Price Indices



### Residual of Daily Differences







Institute of Actuaries of Australia

**4th Financial Services Forum**  
*Innovation in Financial Markets*  
19 and 20 May 2008 – Melbourne

## Contents

- The trustees' responsibility
- Nature of unit pricing
- **Determining materiality**
- Applying materiality



# Determining materiality

- The process
  - Is there discretion?
  - Are the judges disinterested?
- Determining reasonable expectations
  - Industry standards
  - Past internal practice
  - General accounting standards



# Determining materiality

## - the criteria

- Efficiency
  - Inherent volatility in fund prices
  - Measurement errors
  - Costs of remediation
  - Costs to process information
- Just deserts
- Equality
- Need

# Determining materiality

## - the criteria

### Efficiency

- Inherent volatility in fund prices, measurement errors
- Costs of remediation
- Costs to process information
- Recoupment of costs from members

### Indicative volatility (average daily movements)

- Buy/sell decisions over periods of days
- Acceptable part of investing in the market
- Level of precision in making operating decisions

	Mean absolute change
Short term fixed interest	0.02%
Conservative	0.40%
Shares and property	0.80%



# Determining materiality

## - the criteria

### Efficiency

- Inherent volatility in fund prices, measurement errors
- Costs of remediation
- Costs to process information
- Recoupment of costs from members

### Approximations in allocation of tax

- Tax accrual estimates - the differences in the columns show how much approximations can vary

Return in year	Simple Approach @ 5% Shares Fund [A]	Simple Approach @ 10% Balanced Fund [B]	Accurate CGT=10% [C]	Accurate CGT=15% [D]
-10% (with deferred tax assets)	-0.50%	-1.00%	-2.00%	-2.75%
-10%	0.00%	0.00%	-0.50%	-0.50%
-5%	0.00%	0.00%	-0.50%	-0.50%
0%	0.00%	0.00%	-0.50%	-0.50%
5%	0.25%	0.50%	-0.50%	-0.50%
10%	0.50%	1.00%	0.00%	0.25%
13%	0.65%	1.30%	0.30%	0.70%
17%	0.85%	1.70%	0.70%	1.30%
20%	1.00%	2.00%	1.00%	1.75%

# Determining materiality

## - the criteria

### Efficiency

- Inherent volatility in fund prices, measurement errors
  - **Costs of remediation**
  - Costs to process information
  - Recoupment of costs from members
- Overhead cost
    - Order of amounts remediated (up to 10 times costs remediated)
    - > \$1million for relatively simple errors
  - Marginal cost of paying compensation
    - \$20 out-of-force; \$5 in-force
  - Long term costs in higher administration charges

# Determining materiality

## - the criteria

### Efficiency

- Inherent volatility in fund prices, measurement errors
- Costs of remediation
- **Costs to process information**
- Recoupment of costs from members

Administrative burden from reading correspondence, banking, tax returns etc.

Indicative costs might be

- \$5 opportunity cost of reading literature
- \$5-\$20 when receiving cheques, banking
- \$50 where another super fund is being credited (flow back costs)
- \$500 or more, where receiving fund has to perform its own remediation exercise (flow back costs)

# Determining materiality

## - the criteria

### Efficiency

- Inherent volatility in fund prices, measurement errors
- Costs of remediation
- Costs to process information
- Recoupment of costs from members
- Recoupment of costs from other members or from some reserve set up for the benefit of members
- Efficiency vs precision - loss of reputation, litigation
- Law might allow (in some circumstances) costs being deducted from restitution – see cases on unjust enrichment



# Determining materiality

## - the criteria

- Efficiency
- Just deserts
  - Deserve to get the returns earned
  - Arbitrage profits
- Equality
  - Systematic biases
  - Random errors
  - Dollar materiality
- Need



# Contents

- The trustees' responsibility
- Nature of unit pricing
- Determining materiality
- **Applying materiality**



# Applying materiality

## - a pragmatic approach

- Major principles not infringed
  - Manager has not benefited from fee errors
  - No arbitrage or unfair biases in prices
- Trigger point
  - Cumulative impact of error more than mean absolute deviation (up to 100bp for volatile equity funds)
  - This is consistent with our ability to detect errors
- Restitution
  - Restitute errors more than 50% of the trigger value
  - Limits of \$10 for existing members, \$100 for exits
  - Other money paid into the fund



# **Developing a Fair and Reasonable Unit Pricing Restitution Policy**

## **- Conclusion and discussion**

- Trustees are being fair when they disclose a reasonable error rectification methodology and keep costs down
- A more robust approach to materiality would better serve our clients
- Where to from here?