



Risk, uncertainty and the credit crisis – could we have known better?

Presentation to PortfolioConstruction Conference 2008



“Don’t worry,
it’s only mist”

Beijing Official

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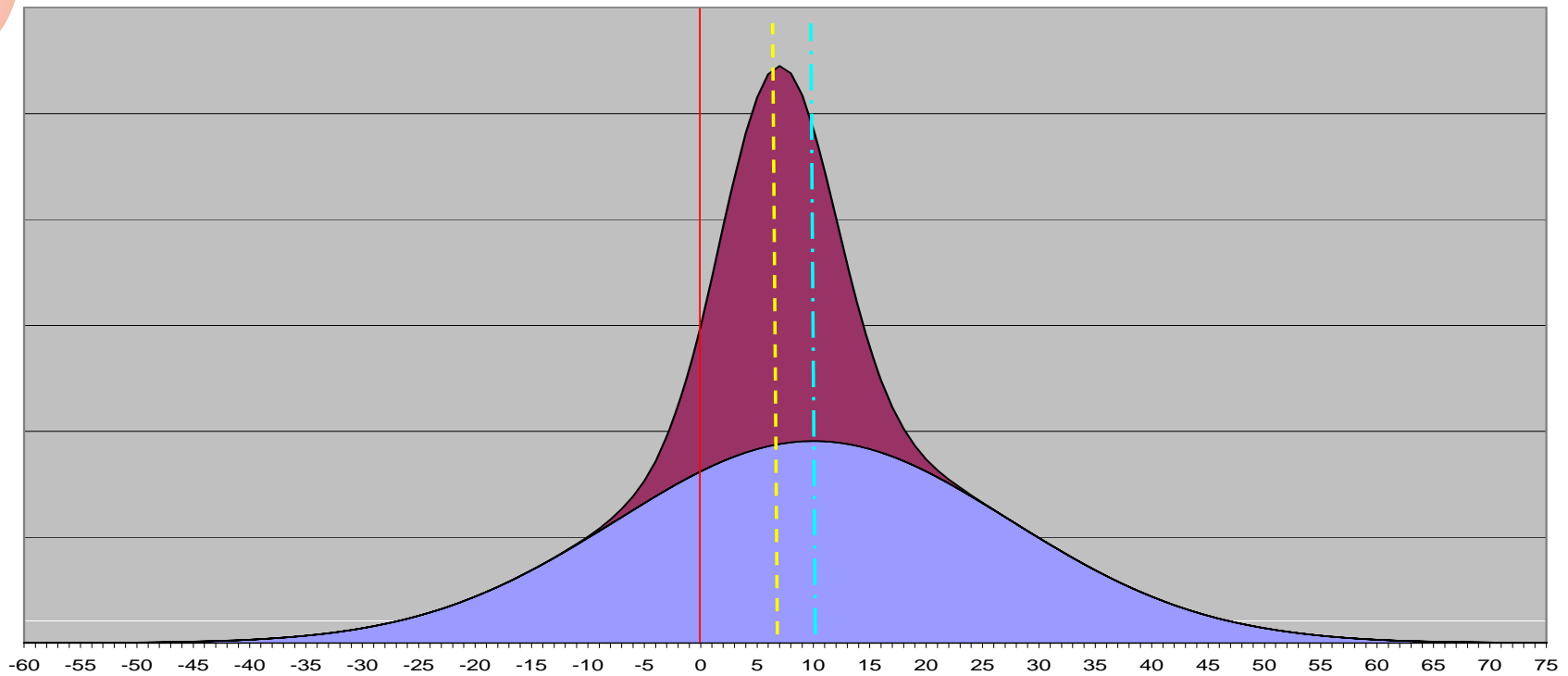
Constancy

- Education and experience
- Evidence and compulsion
- The human paradox
- The risk return trade off



Education and Experience

Normal Distribution



Investments



Mandelbrot's Madness

- “Clouds are not spheres, mountains are not cones, coastlines are not circles, and bark is not smooth, nor does lightning travel in a straight line”
- A few very big, many very small, not very many medium sized movements
- But there are patterns – if price changes start to cluster they have a tendency to do so for a while and then unexpectedly they stop.
- Bubbles are inevitable

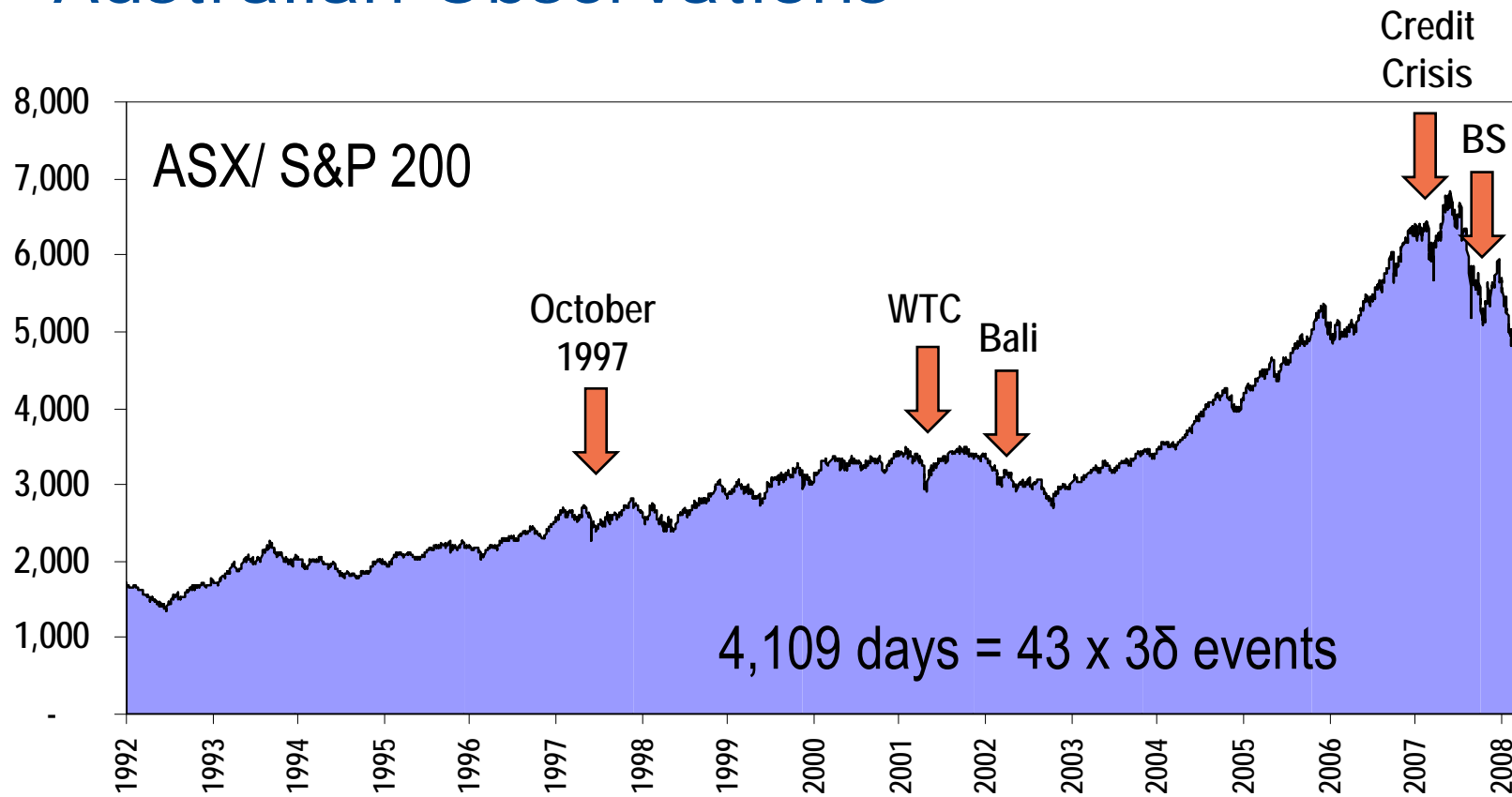




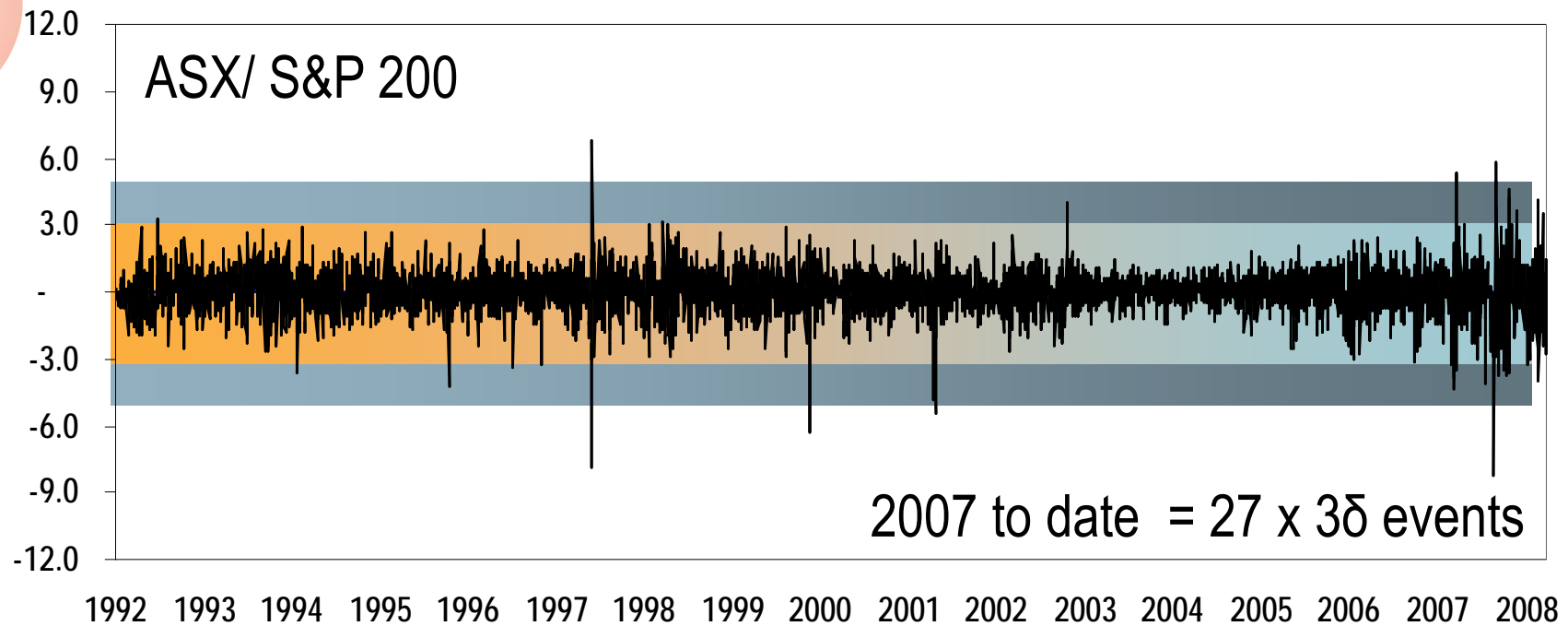
Observations

- Dow Jones Industrial Average from 1916 to 2003:
 - >3.4% movement in a day expected 58 times, but witnessed 1,001 times
 - >7% expected once every 300,000 years, but we've seen 48
- Foreign exchange markets USD/ Yen
 - 7.9% daily change, 10.7 times the standard deviation
 - Between 1986 and 2003 – dollar fell substantially, but nearly half that decline occurred on 10 (out of 4,695) days
- Market bust of 1987
- Collapse of the internet bubble late 90's

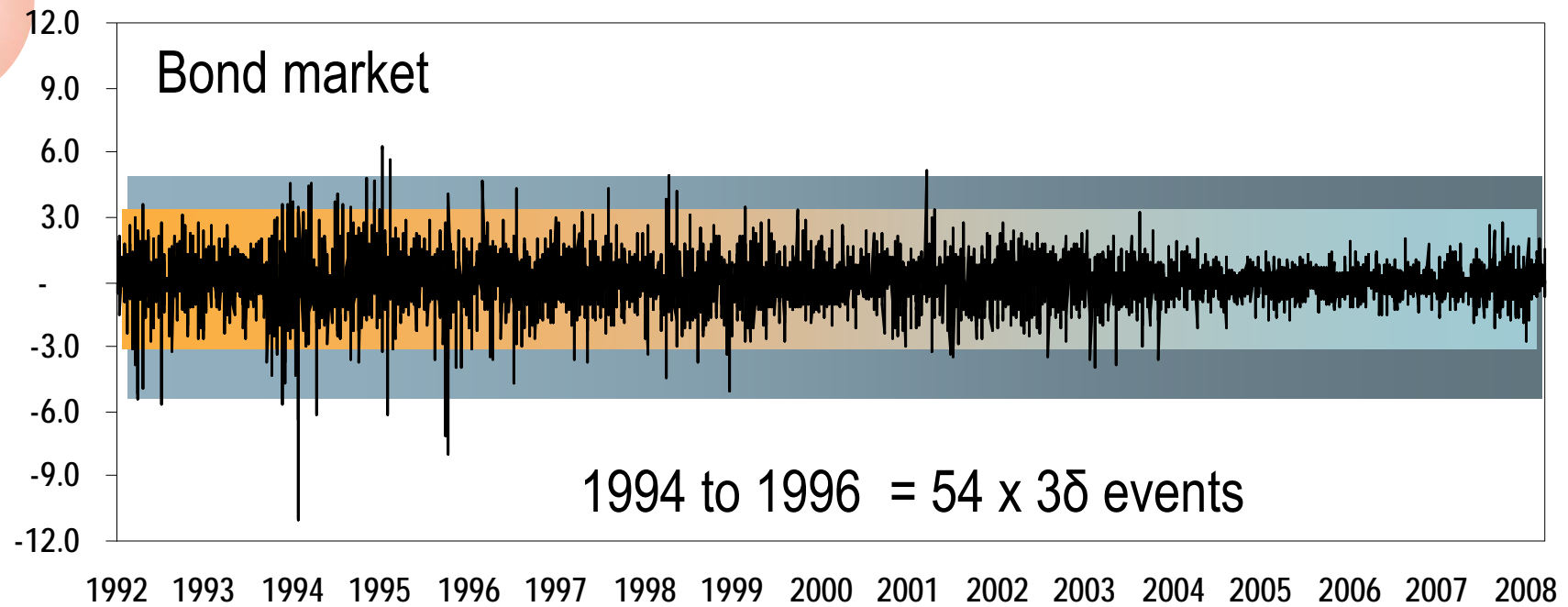
Australian Observations



Australian Observations



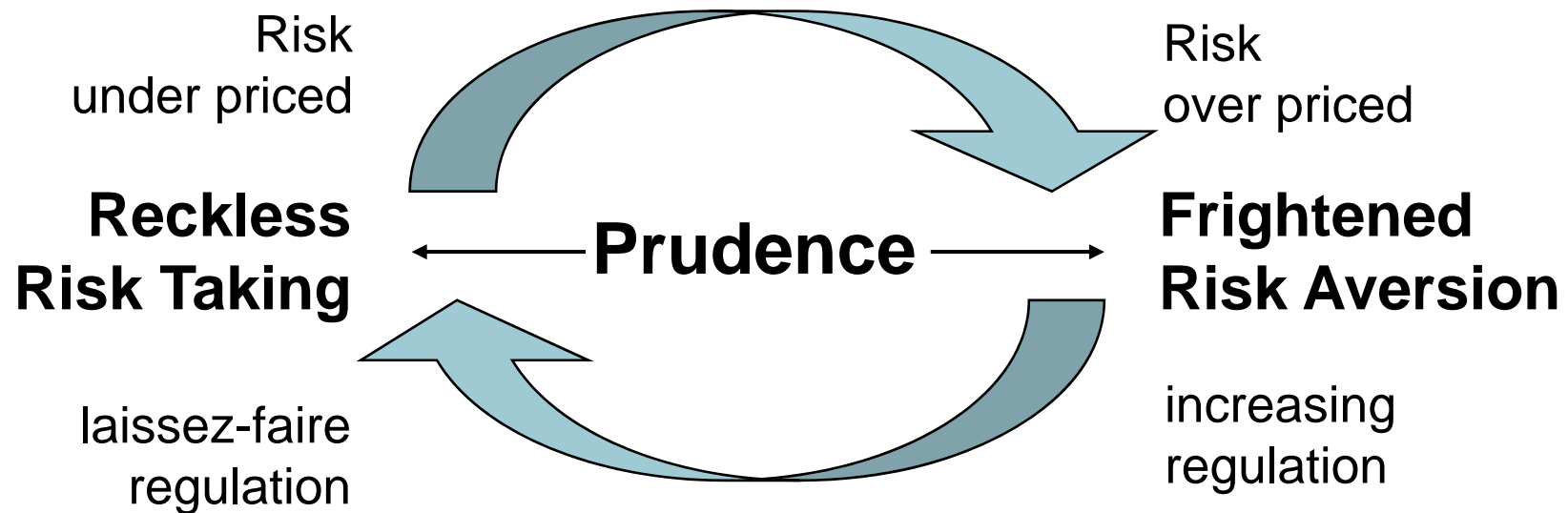
Australian Observations





Evidence and Compulsion

A Prudent (but elusive) Equilibrium



Financial Instability is Inherent

Market Status

Instability



Stability

Investor Behaviour	Frenzy	Optimisation	Conservative
Marginal debt unit	'Ponzi'	'Speculation'	'Hedge'
Balance sheet effects	Income < interest coverage, borrow (or sell assets) to pay interest	Asset income = interest payments	Asset income = interest payments and loan principal amortization

Risk Spectrum

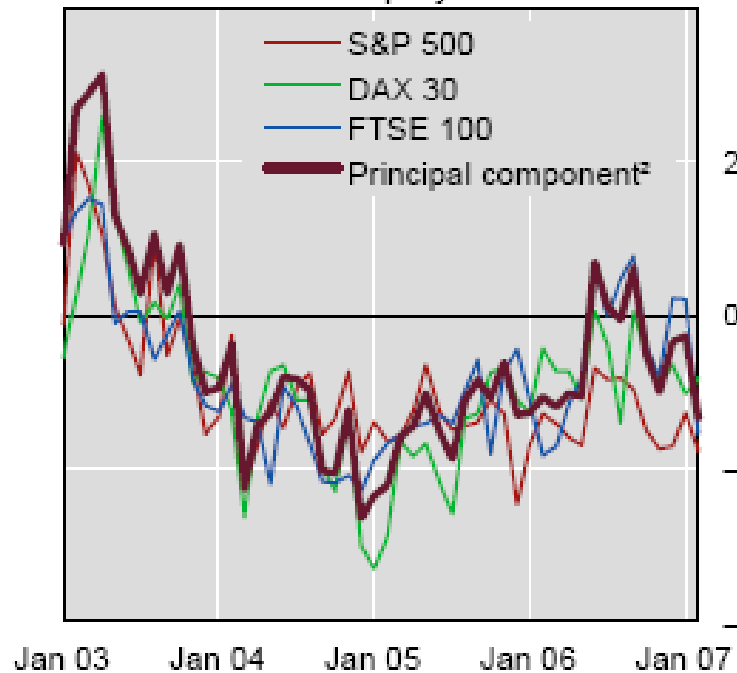
Risk taking



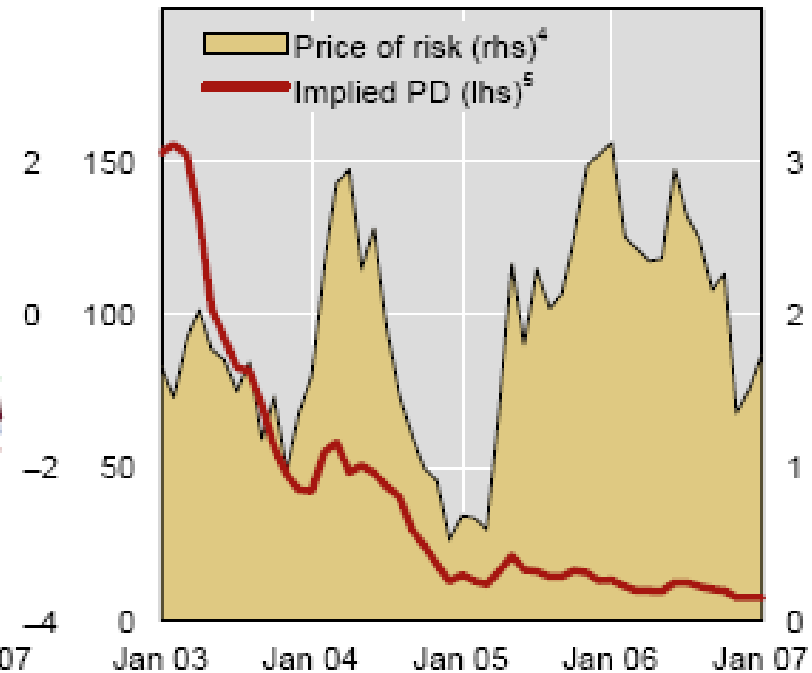
Risk averse

Risk Aversion, Sentiment, Madness

Risk aversion in equity markets¹



Price of default risk³



The Human Paradox



Misbehaviour of the Human Psyche

- Examples of iteration and their corrosive influence
- Miss market trends
- Intuit market trends where none exist
- Price departures from fundamentals

Mainstream Tested

Products		Uptake		Abandon
Capital stable		bear markets disinflation		bull markets inflation
Balanced Funds		rangebound markets low conviction		trending markets high conviction
Passive Management	Mid 2000's	bull markets	Late 2000's	bear markets
Multi manager		inefficient markets low transparency		efficient markets high transparency
Hedge funds	Early 2000's	high volatility, low return, net inflow environments		during or after crisis
Infrastructure		PPP all the rage		PPP debacle
Portfolio Protection		bear markets		bull markets
IT funds	90's	new wave	00's	crashes to shore
Emerging Markets		low volatility		high volatility
Exotic Credit	2002	low risk aversion increasing regulation	2007	heightened risk aversion increasing scrutiny



The Allure of Growth

- Money is cheap and available
 - Superannuation fund flows
 - Cost of debt
- The corrosive power of success
 - Asymmetry of returns
 - Boom mentality
- Diminishing view of risk
 - Erosion of due diligence



Destruction of Conviction

- The internet will drive revolutionise the market
- The commodity boom will ride on the tail of the Chinese dragon
- Evolution of property management benefits shareholders
- Central banks are more experienced



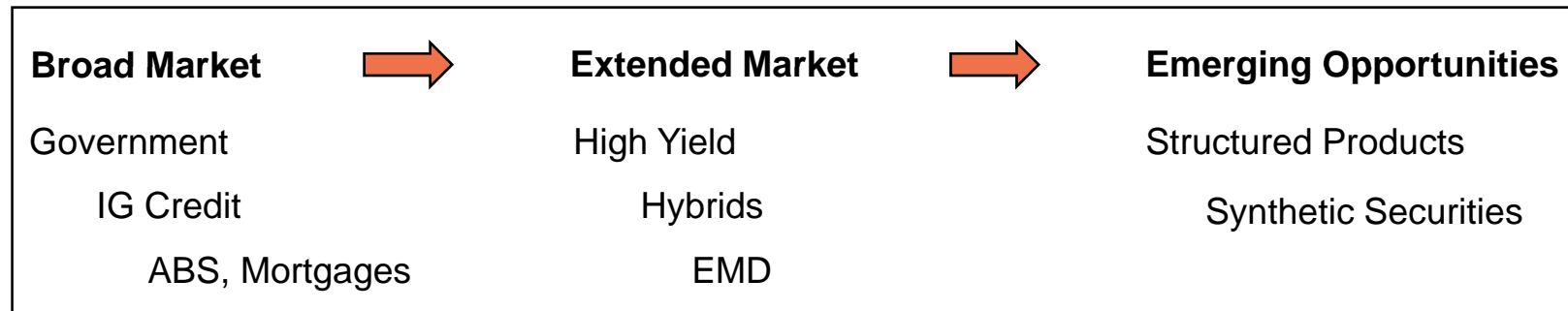
Normality, Myopia and Amnesia

- \$AUD at parity
- Oil at \$200 a barrel
- Trading range of ASX 4300-5000?

The Risk/ Return Trade-off

Fixed Interest Evolution

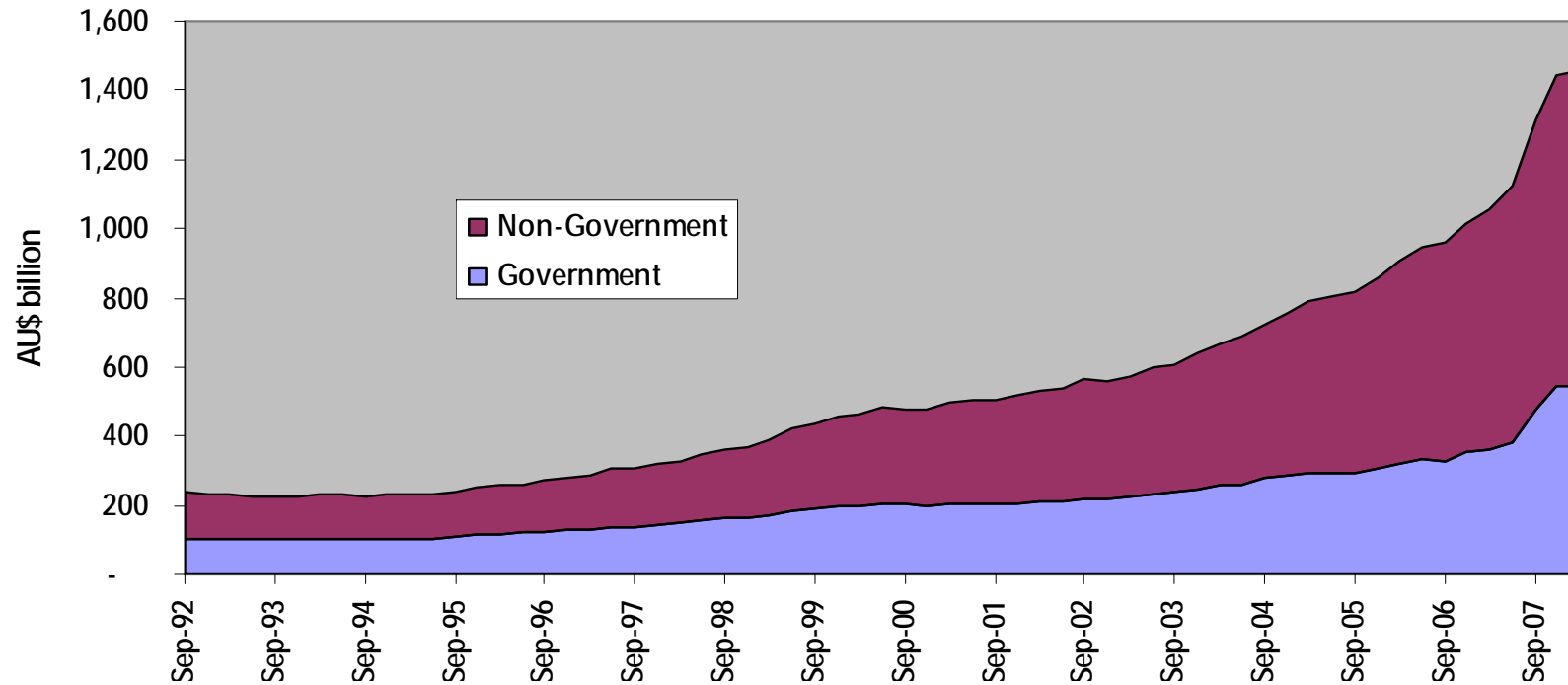
Return



Risk



Risk and Intention



Probability of Loss → Absolute Volatility → Relative Volatility → $\alpha\beta\delta\epsilon\theta\lambda$

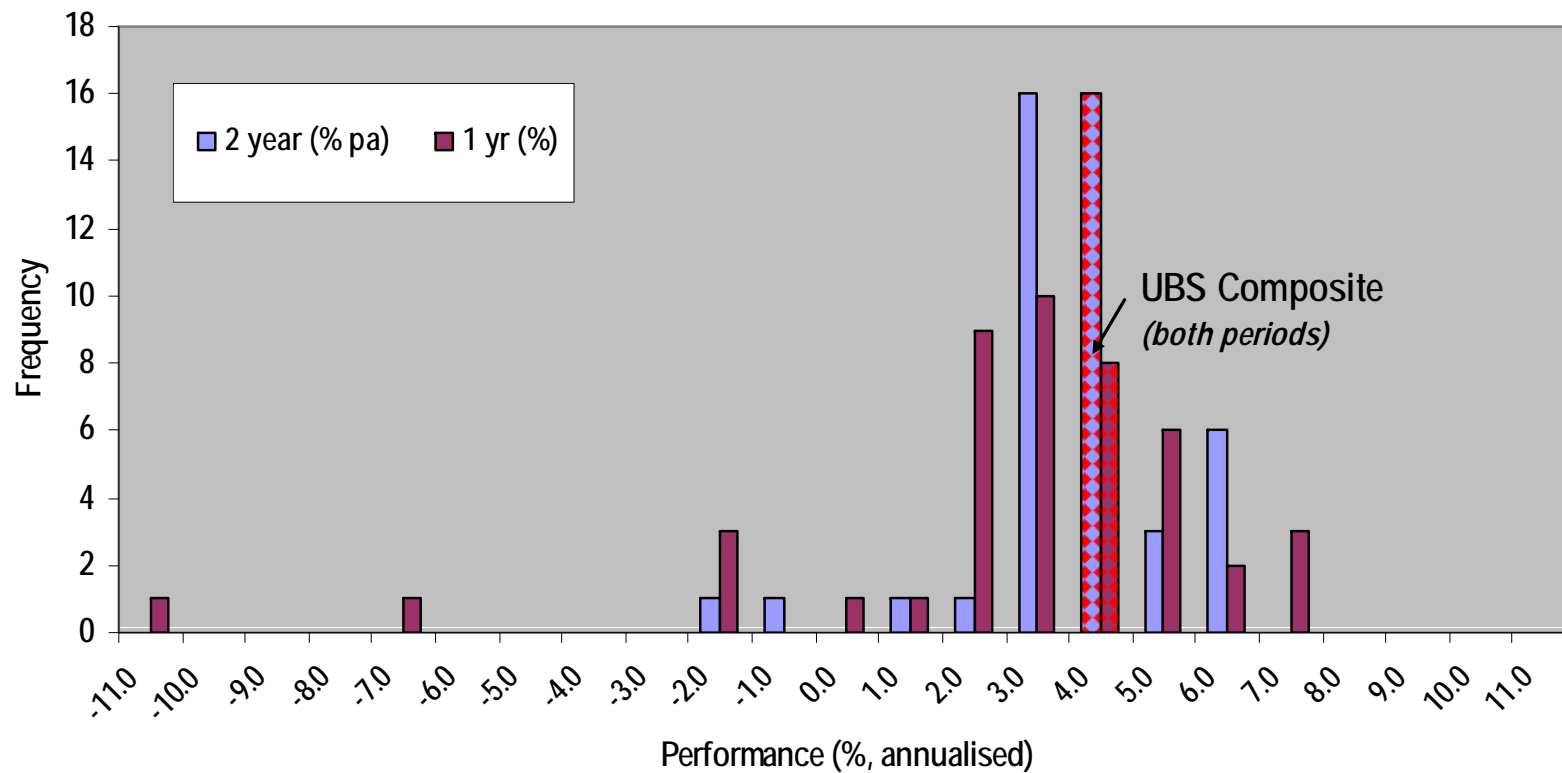
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Fixed Interest

- The Noise
 - "Australia Rides Commodity Boom Wave"
 - "Shares Set to Rise"
 - "Wall Street Back on High"
- The Environment
 - Global financial system awash with liquidity
 - Consumer confidence (and spending) healthy
 - Long term yields at historic lows
- The Decision
 - Extrapolate, speculate, sit on the fence

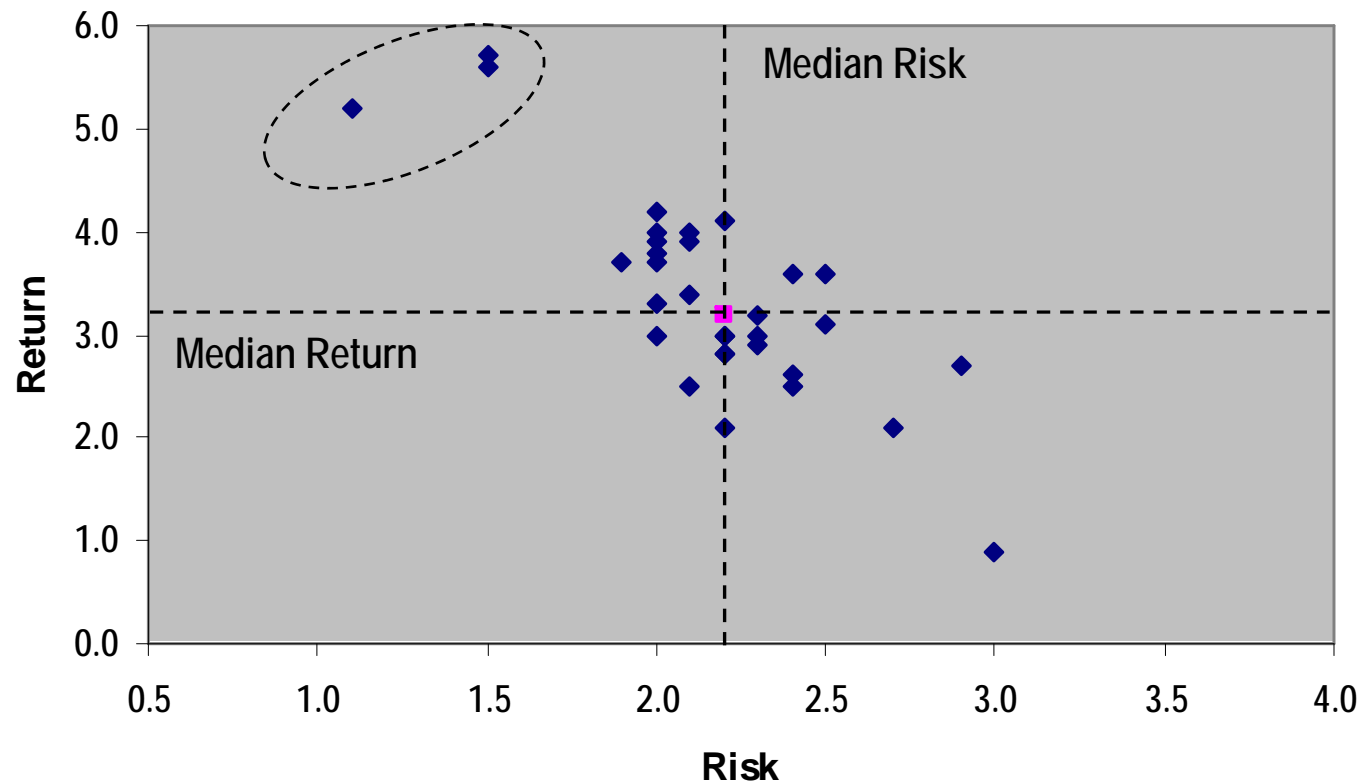
Fixed Interest

- The Outcome



Fixed Interest

- The Outcome – risk dispersion



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Active Management

- Role
- Objective
- Facility

Conclusion

Let's start thinking about...

This session was:

- 1. awful**
- 2. mediocre**
- 3. good**
- 4. excellent**

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Time's Up!

Let's start thinking about...

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