



How decisions are made: lessons from behavioural finance

Paul Craven,
Head of EMEA Institutional Business



**Asset
Management**

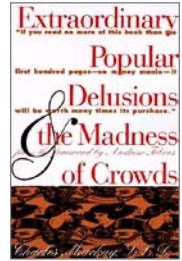


The Wisdom of Crowds?

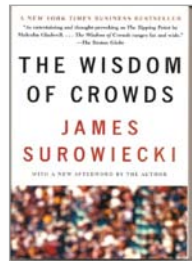
Behavioural finance seeks to explain the **psychology of markets and groups of people**

- The relationship between prices and people
- Irrational behaviour – greed, fear, emotional motivation?
- The herd instinct?

Are crowds ‘mad’ or ‘wise’?



1841



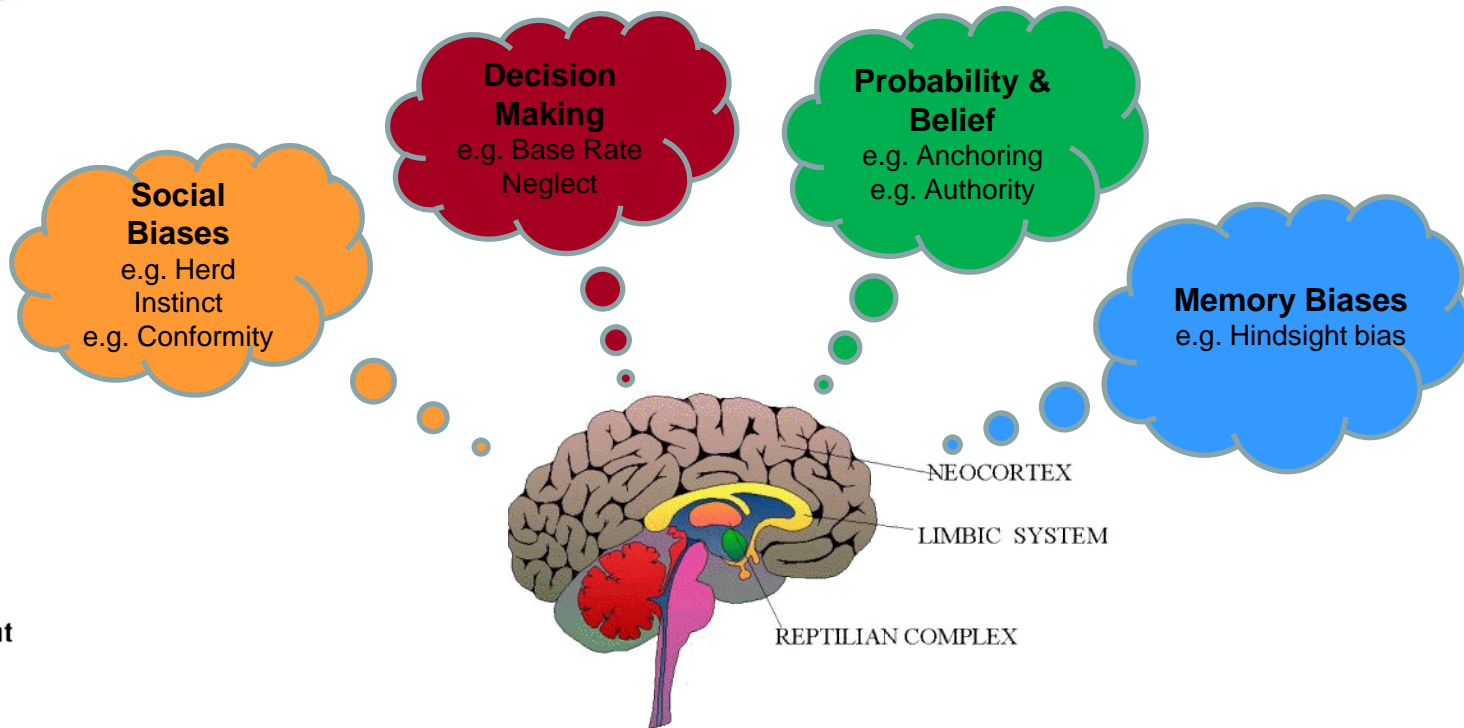
2004



Asset Management



Cognitive Biases – ‘Mental Shortcuts’



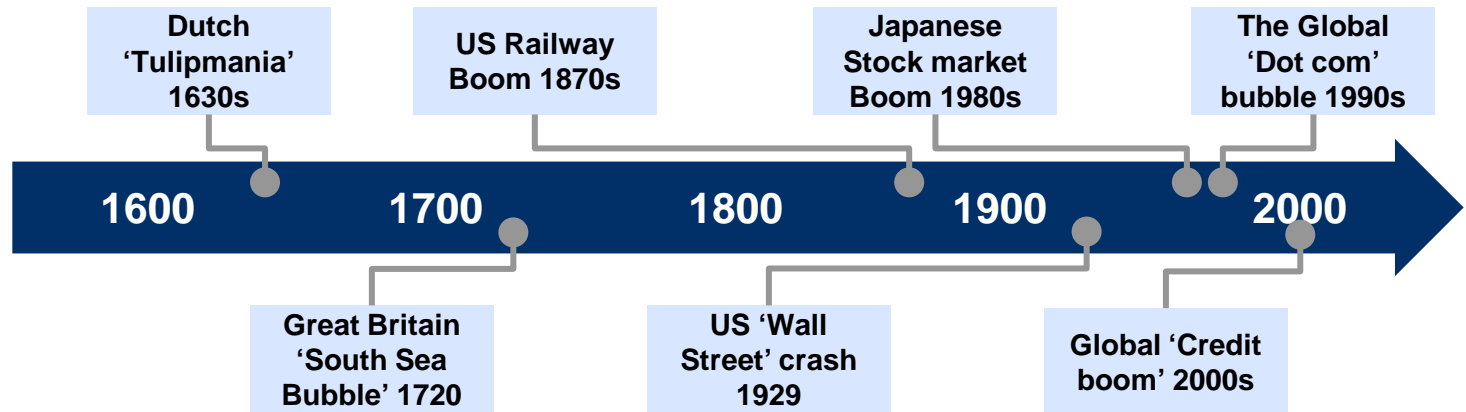
Asset Management



Five Behavioural Biases

1. Herd Instinct – ‘Information cascades’

- You observe other’s actions before you make your own decision
- An ‘**information cascade**’ arises if it becomes optimal to ignore your own information in favour of the (inferred) information of others



Asset Management



2. Conformity

The Asch experiment

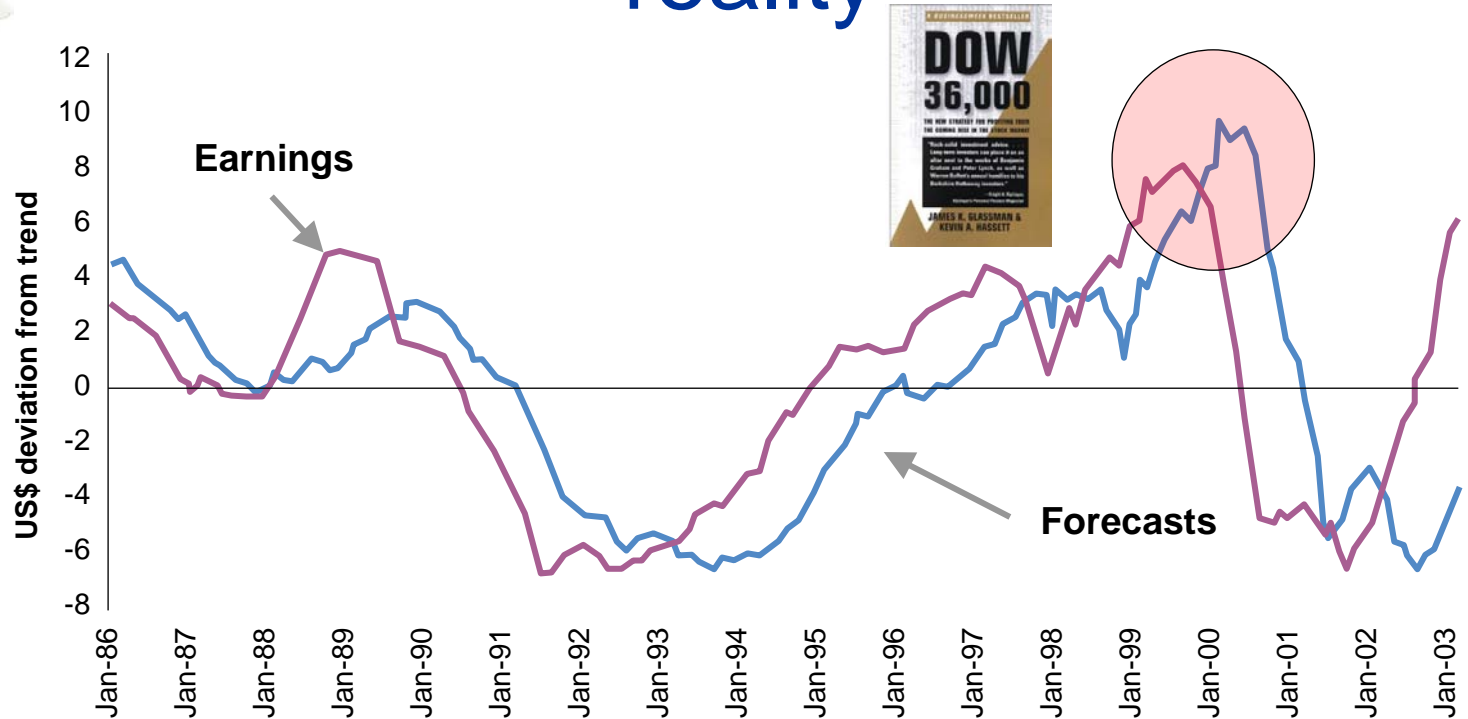
- In the 1950s, Solomon Asch developed a series of experiments examining whether perception could be influenced by social pressure.
- Asch showed cards with pictures like this to groups of 8 to 10 college students:



- The subject was told he was studying visual perception – his task was to decide which of the bars on the right was the same length as the one on the left.
- (All the other students voted the same way for a wrong answer before the subject gave his answer).



3. Anchoring – analysts lag reality



Asset Management



4. Authority

The Milgram experiment

- One of the best known experiments in social psychology is that of **Milgram** (1961).
- In this set of experiments, carried out at Yale in the early 1960s, Milgram studied the influence of ‘**authority**’ on decision making.



Asset
Management



5. 'Base Rate Neglect'

Stories:

- Are universal, crossing boundaries of language, culture and age – sense of continuity
- Mirror human thought (we think in narrative structures e.g. past, present, future)
- Define who we are (easier to identify with an individual than a 'statistically average person')

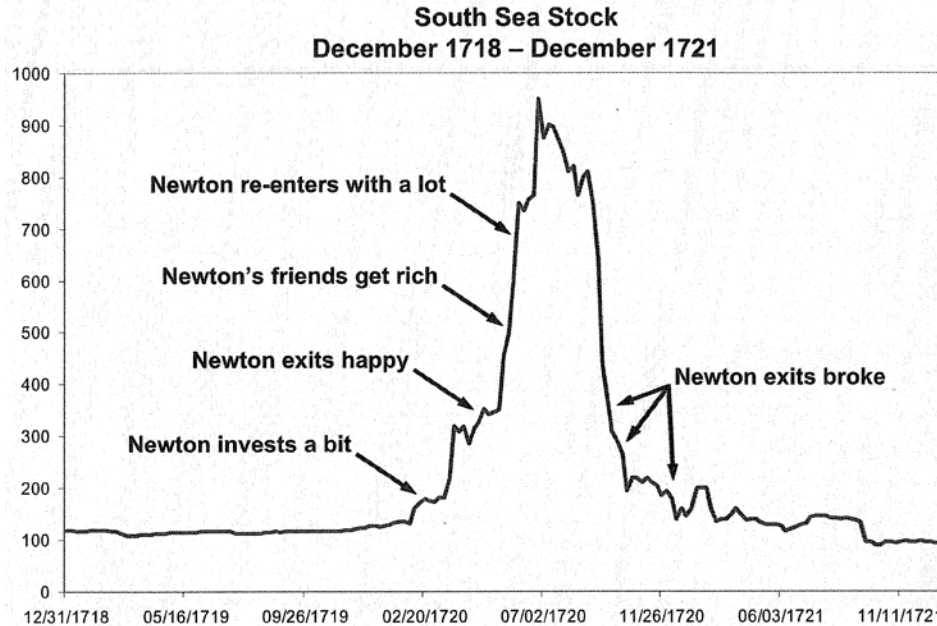


Asset
Management

Stories generate emotion!



Sir Isaac Newton liked the South Sea story and rejoined the herd...



**Asset
Management**

The herd instinct, conformity, anchoring and the power of stories...



Conclusions

Recognising your biases should allow you, to be a more effective decision maker

These include *'mental shortcuts'* such as:

1. the **herd instinct**
2. the influence of **conformity**
3. **Anchoring**
4. the influence of **authority**
5. the power of **stories**



Asset
Management

**“I can calculate the motion of heavenly bodies, but not the madness of people...”
(Sir Isaac Newton).**



Exploring Behavioural biases at work



**Asset
Management**



Markets and decision making

"In the short-run, the market is a voting machine but in the long run, the market is a weighing machine".

(Benjamin Graham 1894–1976)



**Asset
Management**



Wise Crowds- combat 'groupthink'

Making sure the right people are involved	<ul style="list-style-type: none">• Ensure there are a diversity of backgrounds, roles, interests and personality types.
Assign homework	<ul style="list-style-type: none">• Due diligence based on independent facts.
Create the right atmosphere	<ul style="list-style-type: none">• Encourage all members to speak up and have a 'Devils Advocate'
Manage the debate	<ul style="list-style-type: none">• Set an agenda, devise a voting system, have clear goals and review your process regularly
Follow up	<ul style="list-style-type: none">• Commit yourself to the decision and communicate them to the group.



Asset
Management



“Winning the Loser’s Game”

Investment lessons from sport

Golf: “The way to win is by making fewer bad shots...” (Tommy Armour)

Tennis: “The victor in a game of tennis gets a higher score than the opponent, but he gets the higher score because his opponent is losing even more points.” (Charles D. Ellis)

- Play your own game
- Keep it simple
- Concentrate on your defences
- Don’t take it personally



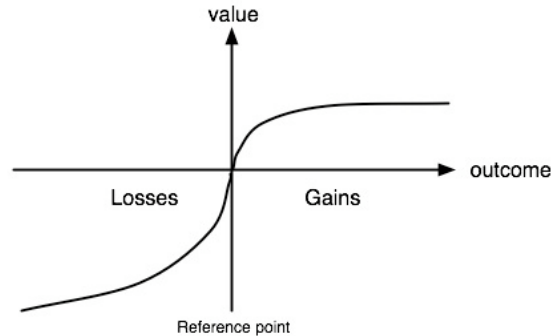
Asset
Management

**This can apply to waging war,
campaigning for office, flying a plane...and investment**



Prospect Theory

- Tendency to prefer avoiding losses than acquiring gains
- Risk aversion, sunk cost and endowment effects
- Important consequences for marketing e.g. price framing



Asset
Management

Investors tend to hold on to losing stocks too long and sell winning stocks too soon.



Biography



Paul Craven

Head of EMEA Institutional Business,
Goldman Sachs Asset Management

Paul is head of EMEA Institutional Business. He joined Goldman Sachs Asset Management in 2007 as a managing director. Prior to joining the firm, Paul worked at PIMCO Europe Ltd for four years, where he was head of UK Business Development. Previously, he spent seventeen years at Schrodgers as a portfolio manager and latterly as head of UK Institutional Sales. Paul has an MA (Hons) in History from St. John's College, Cambridge University and is a member of the CFA Institute, the UK Society of Investment Professionals and the Magic Circle



**Asset
Management**



Additional notes

This material is provided at your request solely for your use. This material is provided for educational purposes only and should not be construed as investment advice or an offer or solicitation to buy or sell securities.

Views and opinions expressed are for informational purposes only and do not constitute a recommendation by GSAM to buy, sell, or hold any security. Views and opinions are current as of the date of this presentation and may be subject to change, they should not be construed as investment advice.

These examples are for illustrative purposes only and are not actual results. If any assumptions used do not prove to be true, results may vary substantially.

No part of this material may be (i) copied, photocopied or duplicated in any form, by any means, or (ii) distributed to any person that is not an employee, officer, director, or authorised agent of the recipient, without GSAM's prior written consent.

Economic and market forecasts presented herein reflect our judgment as of the date of this presentation and are subject to change without notice. These forecasts do not take into account the specific investment objectives, restrictions, tax and financial situation or other needs of any specific client. Actual data will vary and may not be reflected here. These forecasts are subject to high levels of uncertainty that may affect actual performance. Accordingly, these forecasts should be viewed as merely representative of a broad range of possible outcomes. These forecasts are estimated, based on assumptions, and are subject to significant revision and may change materially as economic and market conditions change. Goldman Sachs has no obligation to provide updates or changes to these forecasts. Case studies and examples are for illustrative purposes only.

The economic and market forecasts presented herein have been generated by GSAM for informational purposes as of the date of this presentation. They are based on proprietary models and there can be no assurance that the forecasts will be achieved. Please see additional disclosures at the end of this presentation.

Although certain information has been obtained from sources believed to be reliable, we do not guarantee its accuracy, completeness or fairness. We have relied upon and assumed without independent verification, the accuracy and completeness of all information available from public sources.

This material has been communicated in the United Kingdom by Goldman Sachs Asset Management International which is authorised and regulated by the Financial Services Authority (FSA).

© 2011 Goldman Sachs. All rights reserved.. All rights reserved. **48193.OTHER.OTU**



**Asset
Management**