The Behavioral Biases of Individuals

1. INTRODUCTION

Traditional finance theories typically assume that:

i. Individuals are rational
ii. Markets are efficient

Behavioral finance challenges these assumptions

2. CATEGORIZATIONS OF BEHAVIORAL BIASES

Behavioral Biases

Cognitive Errors

- faulty cognitive reasoning
- easy to correct than emotional biases

Emotional Biases

- stem from impulse or intuition.
- errors based on feelings and emotions
- are difficult to correct.
- can be adapted not moderated

3. COGNITIVE ERRORS

Belief Perseverance Biases

The tendency to cling to one's previously held beliefs irrationally or illogically.

Types of Belief perseverance biases:

i. Conservatism
ii. Confirmation
iii. Representativeness
iv. Illusion of control
v. Hindsight

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Processing Errors

irrational or illogical information processing in financial decision making.

Types of Processing Errors Biases:

i. Anchoring & Adjustment
ii. Mental Accounting
iii. Framing
iv. Availability

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3.1 Belief Perseverance Biases

3.1.1 Conservatism Bias

Maintaining their prior beliefs by not incorporating new information properly.

Consequences:
- Maintain prior views
- Slow to react to new info.

Guidelines
- Look carefully at new info to determine its value.
- Seek expert's advice.

3.1.2 Confirmation Bias

Focusing only on data that ***confirms their beliefs*** and ignoring info. that contradicts their beliefs.

Consequences:
- Focus only on confirmatory info.
- Develop biased screening criteria

Guidelines
- Look for contradictory info.
- Perform additional research

3.1.3 Representativeness Bias

Typecasting new info. based on past experiences or labels. Its two types are:
- Base rate neglect
- Sample size neglect

Consequences:
- Overreact to new info.
- Update beliefs based on simple classification

Guidelines
- Conduct more research

3.1.4 Illusion of Control Bias

Believing that they can ***control outcomes***, when in fact they can't.

Consequences:
- Excessive trading & poor results.
- Less diversified portfolio.

Guidelines
- Look for contradictory views
- accept that investing is a probabilistic activity.

3.1.5 Hindsight Bias

Overestimating 'afterwards' the likelihood of outcomes that have happened in the past.

Consequences:
- Unfair assessment of managers & performance
- Overrating one's own ability to predict

Guidelines
- Own up your investment mistake
- Maintain records.

3.2 Processing Errors

3.2.1 Anchoring & Adjustment Bias

Relying on **anchor** (initial info) to make subsequent decision.

Consequences:
- Stay close to their initial anchor value.

Guidelines
- Objectively examine new data.

3.2.2 Mental Accounting Bias

Dividing one sum of money into different mental accounts.

Consequences:
- Invest inefficiently
- Treat income returns different from capital appreciation.

Guidelines
- Focus on total return
- Combine all assets at one spreadsheet.

3.2.3 Framing Bias

Responding differently based on how questions are **framed**.

Consequences:
- Risk averse – when presented with a gain frame
- Risk-seeking – when presented with a loss frame

Guidelines
- Be neutral & open minded in investment related issues.

3.2.4 Availability Bias

Placing too much weight on evidence that is **available** or **easily recalled**.

Four sources of this bias are:

a) **Retrievability: info.** easily retrieved.
b) **Categorization:** categorize info by using familiar classes.
c) **Narrow range of experience:**
d) **Resonance:** overweight outcome that ***resonate*** with their thinking.

Consequences:
- Pay attention to few specific points

Guidelines
- Conduct through research analysis
- Focus on long-tern historical

4. EMOTIONAL BIASES

4.1 Loss-aversion

Preferring to 'avoid losses' as opposed to 'seeking gains

Consequences:
- holding losing positions too long & selling gaining positions too quickly. This is also called **disposition effect.**
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Guidelines
- Follow a disciplined investment strategy.

4.2 Overconfidence Bias

Overestimating one's own knowledge and ability.

Two types:
a) **Prediction overconfidence** – narrow confidence interval
b) **Certainty overconfidence** - Assigning too high probabilities to outcomes

Consequences:
- Poorly diversification
- Underestimating risks overestimating returns

Guidelines
- Critically review & calculate portfolio performance.

4.3 Self-Control Bias

Consuming today at the expense of saving tomorrow.

Hyperbolic discounting ⇒ Preferring small payoff now compared to larger payoffs in the future.

Consequences:
- Insufficient savings for the future
- Borrow excessively

Guidelines
- Develop an investment plan and budget plan.

4.4 Status Quo Bias

Prefer to "do nothing" instead of making a change

Consequences:
- Portfolio risk may deviate from investor's condition.
- Ignore opportunities

Guidelines
- Realize risk, return & diversification benefits.

4.5 Endowment Bias

Get emotional attachment to the owned assets.

Consequences:
- Inappropriate asset allocation
- Hold familiar assets
- Fail to sell assets

Guidelines
- Inherited cash should be carefully invested.

4.6 Regret Aversion Bias

Avoiding making decisions due to the fear of regret associated with unsuccessful decisions.

Consequences:
- Too conservative investment choices
- Herding behavior – following the crowd.

Guidelines
- Recognize diversification advantages and long-term benefits of adding risky assets

5. HOW BEHAVIORAL FINANCE INFLUENCES MARKET BEHAVIOR

5.1 Data-Mining Bias

- **Anomalies** are '*persistent*' returns that differ from zero and are predicable.
- The most persistent market anomalies are ***momentum effect, bubbles*** *and* ***crashes***
- Abnormalities from the following three sources are not considered 'persistent' and are not called market anomalies.

  a) **Choice of asset pricing model** –

  b) **Statistical issue** - small samples, survivorship bias, or data mining bias.

  c) **Temporary disequilibria** – anomalies that disappear after some period.

5.2 Momentum

Momentum refers to the future pattern of returns that is correlated with the recent past.

Momentum can be explained by various biases including:

- Availability bias
- Hindsight bias
- Loss aversion bias

5.3 Bubbles and Crashes

Bubble & crashes ⇒ respectively periods of unusual +ve or –ve return.

- Bubbles typically develop more slowly relative to crashes (due to difference in behavioral factor involved).
- A no. of cognitive & emotional biases during such periods are:
  - Overconfidence.
  - Confirmation & self attribution bias.
  - Hindsight.
  - Illusion of knowledge.
  - Disposition effect.
  - Anchoring.

5.4 Value & Growth

- Studies have identified that the value stocks have outperformed relative to growth stocks.
- **Halo affect ⇒** investor transfers favorable company attribute into thinking that the stock is a good buy.
- Behavioral explanations present the anomalies as mispricing rather than risk.
- Overconfidence in predicting growth rates (growth stocks over valuation).
- **Home bias anomaly ⇒** investors favor investing in domestic country as compared to foreign countries.