



Investment Technology & Behavioral Investing

Quick Reference Guide



Investment Technology Platforms

Online Brokers

- **What:** Digital platforms for buying/selling securities
- **Examples:** Fidelity, Charles Schwab, E*TRADE
- **Fees:** \$0 commission for stocks/ETFs (most platforms)
- **Best For:** Self-directed investors

Robo-Advisors

- **What:** Automated investment management using algorithms
- **Examples:** Betterment, Wealthfront, Vanguard Digital
- **Fees:** 0.25% - 0.50% annually
- **Best For:** Hands-off investors, beginners
- **Features:** Auto-rebalancing, tax-loss harvesting

Investment Apps

- **What:** Mobile-first investing platforms
- **Examples:** Robinhood, Acorns, Stash
- **Minimum:** Often \$0 or very low
- **Features:** Fractional shares, round-ups, easy interface



Common Behavioral Biases

🔍 Confirmation Bias

Seeking information that confirms existing beliefs while ignoring contradictory evidence

😢 Loss Aversion

Preferring to avoid losses over acquiring equivalent gains (losses hurt ~2x more than gains feel good)

🐑 Herd Mentality

Following crowd behavior, especially during uncertainty (FOMO - Fear Of Missing Out)

💪 Overconfidence Bias

Overestimating knowledge and ability to predict outcomes

⚓ Anchoring Bias

Over-relying on first piece of information (the "anchor") when making decisions

📅 Recency Bias

Overweighting recent events while ignoring historical patterns



Strategies to Overcome Biases

General Strategies

- **Written Investment Plan:** Document strategy before investing
- **Diversification:** Spread risk across assets
- **Long-term Focus:** Avoid reacting to short-term noise
- **Regular Rebalancing:** Systematic portfolio adjustments
- **Decision Journal:** Record rationale for all decisions

Bias-Specific Tactics

- **Confirmation:** Seek contradictory information
- **Loss Aversion:** Use stop-loss orders, focus forward
- **Herd:** Ask "Would I buy if alone?"
- **Overconfidence:** Track successes AND failures
- **Anchoring:** Ignore purchase price, focus on value



Key Technology Features

Portfolio Management

- **Auto-Rebalancing:** Maintains target allocation
- **Dollar-Cost Averaging:** Automatic regular investments
- **Tax-Loss Harvesting:** Sell losers to offset gains
- **Dividend Reinvestment:** Auto-reinvest dividends

Research & Analysis

- **Real-time Data:** Live quotes and market info
- **Screening Tools:** Filter stocks by criteria
- **Charts & Analytics:** Visual analysis tools
- **News Integration:** Relevant market news

Security Features

- **Two-Factor Auth:** Extra login security
- **Encryption:** Protected data transmission
- **SIPC Insurance:** Up to \$500k protection
- **Account Monitoring:** Fraud detection



Platform Comparison

Feature	Online Broker	Robo-Advisor
Control	Full control	Limited control
Fees	\$0 trades	0.25%-0.50%
Minimum	\$0-\$500	\$0-\$5,000
Management	Self-directed	Automated
Research	Extensive	Limited



Algorithmic Trading

What It Is

- Computer programs execute trades based on predefined rules
- Accounts for ~60-75% of U.S. equity trading volume
- Executes trades in milliseconds

Types

- **High-Frequency Trading (HFT):** Extremely fast trades
- **Statistical Arbitrage:** Exploits price differences
- **Trend Following:** Follows market momentum

Impact on Markets

- **Pros:** Increased liquidity, tighter spreads
- **Cons:** Flash crashes, reduced transparency



Best Practices

Using Technology Wisely

- Don't let ease of trading lead to overtrading
- Be wary of "gamification" features
- Verify security features before opening account
- Understand all fees and costs
- Use limit orders to control execution price

Protecting Yourself

- Enable two-factor authentication
- Use strong, unique passwords
- Monitor account activity regularly
- Be skeptical of social media investment advice
- Never share login credentials



Red Flags - Behavioral Warning Signs

- Checking portfolio multiple times daily
- Making impulsive trades based on news
- Following "hot tips" from social media
- Refusing to sell losing investments
- Concentrating portfolio in trendy sectors
- Trading more frequently over time
- Feeling euphoria or panic about investments

Core Investment Principles

- **Diversify:** Don't put all eggs in one basket
- **Think Long-Term:** Time in market > timing market
- **Control Emotions:** Stick to your plan
- **Keep Learning:** Financial education is ongoing
- **Start Early:** Compound interest is powerful
- **Stay Humble:** Markets are unpredictable

Additional Resources

Investor Protection

- **SEC.gov:** Investor education
- **FINRA.org:** Broker verification
- **Investor.gov:** Complaint filing

Research & Education

- Platform demo accounts (practice trading)
- Investment simulators
- Educational courses (Khan Academy, Coursera)