Investment Research Capabilities Plan

Plan: Investment Research Capabilities

Date: 2026-02-17 **Status**: Draft — awaiting review

Context

Add investment research capabilities to this project so we can pull company financial statements, stock metrics, and perform valuation analysis. This involves two things: new research skills and MCP servers for structured financial data access.

What We're Adding

4 New Skills (in `skills/`)

Skill	File	Purpose
Financial Statements	`financial-statements.md`	Pull and analyze income statement, balance sheet, cash flow
Stock Metrics	`stock-metrics.md`	Valuation ratios (P/E, P/B, EV/EBITDA), performance metrics, analyst consensus
Competitor Analysis	`competitor-analysis.md`	Compare company against 3-5 sector peers on financial metrics
Valuation	`valuation.md`	Estimate intrinsic value via DCF and comparable company analysis

2 MCP Servers (in `.mcp.json`)

Server	Source	What It Provides
yahoo-finance	yahoo-finance-mcp	

Server	Source	What It Provides
		Stock prices, financials, metrics, news, options, analyst ratings. Free, no API key.
sec-edgar	sec-edgar-mcp	Official SEC filings (10-K, 10-Q), XBRL-parsed financials, insider trading. Free, requires user-agent string.

Why both? Yahoo Finance covers ~80% of use cases (fast, comprehensive). SEC EDGAR adds authoritative regulatory filings for verification and deep due diligence. Skills prioritize Yahoo Finance for speed, fall back to SEC EDGAR or WebSearch when needed.

1 New Slash Command

Command	File	Purpose
`/analyze-stock`	`.claude/commands/analyze-stock.md`	Full investment research report — orchestrates all 4 skills in sequence

MCP Server Configuration

Yahoo Finance MCP

Setup: 1. Clone: `git clone https://github.com/Alex2Yang97/yahoo-finance-mcp.git` 2. Note the clone path

Config (add to `.mcp.json`):

```
"yahoo-finance": {
  "command": "uv",
  "args": [
    "--directory",
    "/path/to/yahoo-finance-mcp",
    "run",
    "server.py"
  ],
  "env": {}
}
```

Available tools: `get_stock_info`, `get_historical_stock_prices`, `get_financial_statement`, `get_yahoo_finance_news`, `get_stock_actions`, `get_holder_info`, `get_recommendations`, `get_option_chain`

SEC EDGAR MCP

Setup: 1. Set env var: `export SEC_EDGAR_USER_AGENT="YourName your.email@example.com"` 2. No clone needed — runs via uvx

Config (add to `.mcp.json`):

```
"sec-edgar": {
  "command": "uvx",
  "args": ["sec-edgar-mcp"],
  "env": {
    "SEC_EDGAR_USER_AGENT": "YourName your.email@example.com"
  }
}
```

Available tools: Company/CIK lookup, 10-K/10-Q/8-K filings, XBRL financials (balance sheet, income statement, cash flow), insider trading (Forms 3/4/5)

Skill Details

financial-statements.md

When to use: Researching a company's financial health, profitability, liquidity, or capital structure.

Instructions: 1. Get ticker symbol 2. Pull statements via Yahoo Finance MCP `get_financial_statement` (or SEC EDGAR for regulatory filings) 3. Extract key line items: Revenue, gross profit, operating income, net income, EPS, total assets/liabilities, equity, cash, debt, operating/investing/financing cash flows, free cash flow 4. Calculate derived metrics: gross/operating/net margins, current ratio, debt-to-equity 5. Analyze multi-year trends (3 years) 6. Flag red flags (declining margins, rising debt, negative cash flow)

Output: Multi-year tables for income statement, balance sheet, cash flow, with calculated ratios and trend analysis.

stock-metrics.md

When to use: Quick fundamental screening, valuation comparison, or initial research on a stock.

Instructions: 1. Pull data via Yahoo Finance MCP `get_stock_info` 2. Extract valuation metrics: P/E (trailing + forward), P/B, EV/EBITDA, PEG, dividend yield 3. Extract performance metrics: market cap, beta, 52-week range, volume, revenue/earnings growth 4. Extract profitability: gross/operating/net margins, ROE, ROA 5. Get analyst consensus via `get_recommendations`

Output: Tables for valuation, size/risk, performance, profitability, and analyst consensus with interpretation notes.

competitor-analysis.md

When to use: Evaluating competitive position, relative valuation, or market share.

Instructions: 1. Identify target company 2. WebSearch for competitors, select 3-5 direct peers 3. Pull metrics for all companies via Yahoo Finance MCP 4. Build comparison matrix across: size (market cap, revenue), valuation (P/E, P/B, EV/EBITDA), profitability (margins, ROE), growth, risk (beta, D/E), performance (1-year return) 5. Identify leaders in each category

Output: Multi-company comparison matrix with "Leader" column, strengths/weaknesses per company, competitive positioning summary.

valuation.md

When to use: Determining if a stock is overvalued or undervalued for investment decisions.

Instructions: 1. Gather data using `financial-statements` and `stock-metrics` skills 2. Run DCF: project free cash flows 5-10 years, apply discount rate (WACC), calculate terminal value 3. Run comparable company analysis: apply peer median multiples (P/E, EV/EBITDA) to target's financials 4. Calculate weighted average fair value 5. Compare to current price for margin of safety 6. Document all assumptions, include sensitivity analysis

Output: DCF projection table, comps valuation table, summary valuation range, investment recommendation (buy/hold/sell), key risks and catalysts.

/analyze-stock Command

Orchestrates all 4 skills into a single comprehensive report:

1. Run `stock-metrics` — current price, valuation, key metrics
2. Run `financial-statements` — 3-year financials
3. Run `competitor-analysis` — peer comparison
4. Run `valuation` — intrinsic value estimate
5. Gather news (`get_yahoo_finance_news`) and ownership (`get_holder_info`)
6. Write full report to `output/research/YYYY-MM-DD-TICKER-analysis.md`

Report sections: Executive Summary, Company Overview, Financial Analysis, Competitive Position, Valuation, Investment Thesis (bull/bear case), Recent Developments, Ownership & Sentiment, Recommendation.

Files to Create

#	File	Type
1	`skills/financial-statements.md`	Skill
2	`skills/stock-metrics.md`	Skill

#	File	Type
3	`skills/competitor-analysis.md`	Skill
4	`skills/valuation.md`	Skill
5	`.claude/commands/analyze-stock.md`	Slash command
6	`commands/setup-investment-research.md`	Setup reference doc

Files to Modify

#	File	Changes
1	`.mcp.json`	Add `yahoo-finance` and `sec-edgar` server entries
2	`CLAUDE.md`	Add investment skills, MCP servers, and `/analyze-stock` to workflow
3	`skills/README.md`	Add investment research skills section

Implementation Order

1. **MCP servers** — Update `.mcp.json`, clone yahoo-finance-mcp, set SEC EDGAR env var
2. **Skills** — Create all 4 skill files (can be done in parallel)
3. **Command** — Create `/analyze-stock` command
4. **Docs** — Update CLAUDE.md, skills/README.md, create setup reference
5. **Test** — Run `/analyze-stock` AAPL end-to-end, verify MCP connections and output quality

Sources

- Yahoo Finance MCP — GitHub repo
- SEC EDGAR MCP — GitHub repo
- SEC EDGAR MCP on PyPI — Package
- Financial Datasets MCP — Alternative option (not selected)
- Alpha Vantage MCP — Alternative option (not selected)