
The Value of Visualization

OVERVIEW -- Capital Market Laboratories (CML) develops and markets innovative data visualization tools for retail and institutional investors and financial analysts. The firm's recently launched platform -- www.capitalmarketlabs.com -- allows subscribers to:

- **Construct** investment portfolios and peer groups without the limitation of generic peer groupings.
- **Create** visual art based on derived-ratio computations of corporate performance data.
- **Customize** visualizations incorporating financial statement items, derived ratios, earnings, growth measures and time series.
- **Visualize** custom peer comparisons on any financial and growth measures through living and animate scatter plots.

Visualizing Investment Risk and Relative Value

THE CML PLATFORM -- CML harnesses the power of living visual data to support investment decisions. Subscribers can use the CML platform to analyze a single stock, a handcrafted peer group, an economic sector or the entire database of more than 26,000 companies. The CML platform is organized into four analytic modules:

- **Financial Measures App:** Select any company and compare it to a customized peer group defined by sector, industry, market cap, total assets, total revenue, region of the world (or any other criteria). Then, analyze the peer group based on financial statement items, ratios, earnings, growth measures or time series to visualize areas of risk and opportunity.
- **Time Series App:** Analyze a 15-year history of any company's performance on any of the 210 measures of issuer risk.
- **Stock Charting App:** Use cutting-edge charting technologies combined with CML's unique data to identify drivers of equity returns and overlay any related financial or growth measures.
- **X-Y Factor App:** Build a portfolio and create highly intuitive visualizations that incorporate millions of data points. Map peer groups against two performance/financial metrics in a single image.

Strategic Vision: New Frontiers of Visual Finance

LONG-TERM VISION -- The founders of CML started the venture with a long-term vision to set a higher standard for the application of visualization technologies to the needs of decision-makers in capital markets. Through internal development and strategic partnerships, CML has developed a unique analytic platform that brings the power of visualization to all key aspects of investment research, including stock selection/rejection, portfolio risk assessment, fundamental industry analysis and quality-of-earnings research.

- **Current Platform:** The current functionality of the CML platform offers capital market participants a simple and intuitive way to translate large volumes of peer-group data into powerful visualizations. Instead of hours of manual data analysis, CML's visual data can inspire "Aha Moments" instantaneously.
- **Near-Term Development Plan:** Building on the current functionality, the CML team continues to develop enhancements that will more fully help investors and analysts: 1) Create Watch Lists and import custom lists of securities to use as a peer group, 2) Identify financial metrics most/least closely correlated to stock performance, 3) Identify outliers on scatter plots that incorporate millions of rows of data.

Leadership Team



James A. Kaplan -- Chairman and Co-founder
Formerly, founding director of MarketWatch, founder of CMS BondEdge, and CEO of GMI Ratings (now MSCI).



Ophir Gottlieb -- Co-founder and CEO
Formerly, option market maker on NYSE ARCA, Managing Director at Livevol, Inc, and Managing Director at GMI Ratings (now MSCI). Weekly contributor to MarketWatch and BUSINESS INSIDER.

Metrics for In-depth Analysis

210 Measures of Issuer Risk	
Category	Examples
Assets	<ul style="list-style-type: none"> Asset Turnover R & D Expense Written Off/Operating Expense
Cashflow	<ul style="list-style-type: none"> Stock Purchases/Total Assets Unlevered Free Cash Flow/Total Revenue
Current Earnings Margins	<ul style="list-style-type: none"> Earnings from Continuing Operations Margin % SG&A Margin %
Expenses	<ul style="list-style-type: none"> Amortization Expense/Gross Intangibles Labor Expenses/Total Revenue
Financial Condition	<ul style="list-style-type: none"> (EBITDA - Capex) / Interest Expense (FFO + Cash) to Short Term Debt (x)
Growth Earnings Margins	<ul style="list-style-type: none"> Cash from Operations, 1-Year Growth % Tangible Book Value, 1-Year Growth %
Liabilities	<ul style="list-style-type: none"> Accrued Expenses Payable/Interest Expenses Doubtful Accounts Allowance/Total Receivables
Revenue	<ul style="list-style-type: none"> Loan Interest and Fees/Gross Total Revenue/Number of Employees
Valuation	<ul style="list-style-type: none"> Book Value per Share Dividend Yield %

Global Coverage: More than 26,000 Companies

Number of Issuers	
By Region	
North America	5,601
Europe	4,272
Asia (ex. Japan)	11,747
Japan	3,041
Latin America	624
ROW	1,783
By Economic Sector	
Consumer Discretionary	4,491
Consumer Staples	1,867
Energy	1,411
Financials	4,178
Healthcare	2,022
Industrials	4,991
Information Technology	3,856
Materials	3,270
Telecommunication Services	300
Utilities	682

Summary of Product Features

Financial Measures App	Time Series App	Stock Charting App	X-Y Factor App
<ul style="list-style-type: none"> Select "Subject" company and construct a peer group defined by financial and fundamental performance characteristics. Use scatter plots to navigate living and animate data that automatically recalculates peer-group averages as the user applies inclusion and exclusion criteria. Identify clusters and outliers and select the most relevant peers. 	<ul style="list-style-type: none"> Display 15 years of historical data for the selected metric. Save and edit display settings. Download and share data and images for presentations and further analysis. 	<ul style="list-style-type: none"> Display historical data for the selected metric along with the company's trading history. Identify ratios most/least strongly correlated with stock performance. 	<ul style="list-style-type: none"> Build a portfolio and create highly intuitive visualizations that incorporate millions of data points. Map peer groups against two performance/financial metrics in a single image. Gauge portfolio exposure to financial and operating risks.

User Interface and Functionality

- Adjust scatter plot settings to display absolute values or 1-year percentage changes.
- Single sign-on to entire platform.
- Save, edit and share peer group settings.
- Download underlying data into Excel files.
- Download visualizations into PDF files or images.

James A. Kaplan*Chairman and Co-founder*

For the past 20 years, James A. Kaplan's research interests and entrepreneurial ventures have focused on innovations designed to improve the predictive and explanatory power of classical finance theories and portfolio management philosophies. Before he co-founded CML, Mr. Kaplan served as Vice Chairman and Chief Executive of GMI Ratings (now part of MSCI). In this role, Mr. Kaplan developed novel risk modeling methodologies to help capital market participants mitigate the impact of what he has dubbed "routine anomalies"; the term refers to high-impact events stemming from variables typically overlooked in classical economic theories.

Earlier in his career, Mr. Kaplan has advanced groundbreaking applications of quantitative techniques and technology-driven solutions for equity and fixed-income portfolio analytics. In 1979, he founded Capital Management Sciences (CMS) and established the firm as the world's top purveyor of fixed income portfolio analytics. During his tenure, the firm introduced CMS BondEdge, the chief independent source of research and valuation tools for the global bond market.

Following the sale of CMS to Interactive Data Corporation, Mr. Kaplan was a founding director of MarketWatch, a pioneer in using the Internet to deliver real-time news and data. In the wake of the notorious corporate scandals after 2000, he founded Audit Integrity, one of the three firms that merged to form GMI Ratings.

Mr. Kaplan received his BA from the University of Colorado and an MBA from California State University. Mr. Kaplan is a Chartered Financial Analyst.

Ophir Gottlieb*CEO and Co-founder*

Ophir Gottlieb is the CEO and Co-founder of Capital Market Laboratories and the author of the most widely read independent options trading blog in the world (OptionVol). He is a weekly contributor to MarketWatch and BUSINESS INSIDER and a daily contributor to TheStreet.com.

He has been cited more than 500 times in Reuters, Bloomberg, Wall Street Journal, Dow Jones Newswire and, through re-publications, in Barron's, Forbes, SF Chronicle, Chicago Tribune and Miami Herald.

Mr. Gottlieb's experience includes working as an option market maker on the NYSE ARCA exchange floor (CBOE remotely), as Managing Director of Client Services and Algorithmic Trading for Livevol, Inc, and as the Managing Director of Quantitative Research for GMI Ratings (now MSCI).

His background includes machine learning, stochastic differential equations, measure theory, trade structuring, software development and research. Ophir holds an M.S. in Financial Mathematics from Stanford University, an MBA from the USC Marshall School of Business and a B.S. in Quantitative Economics with an Area of Focus in Pure Mathematics from the University of California.

Illustration -- Mapping Peer-Group Exposure to Non-Performing Loans

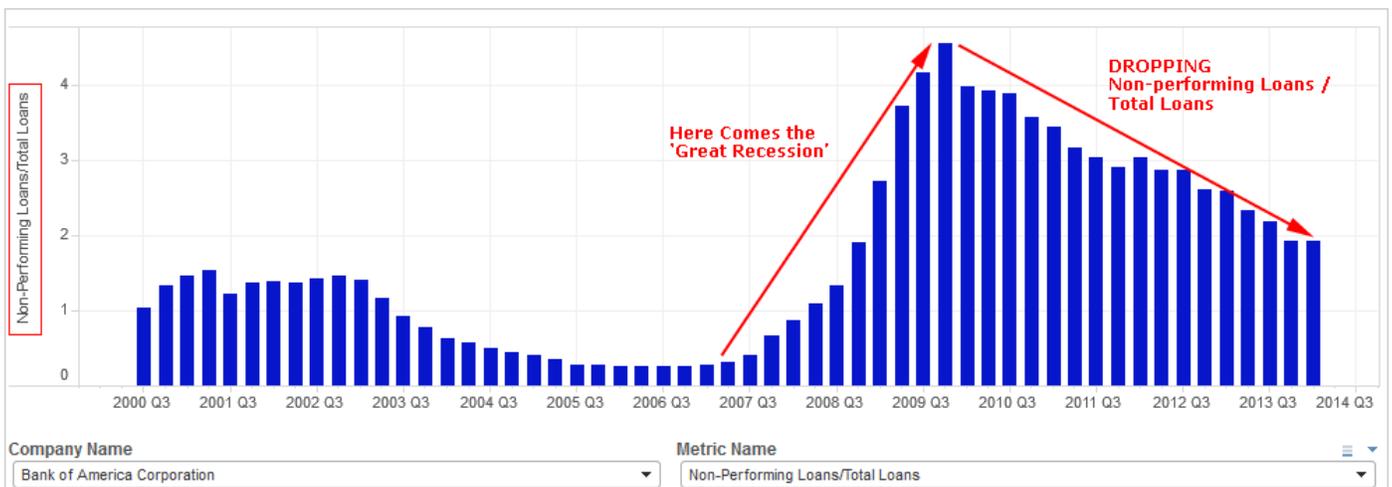
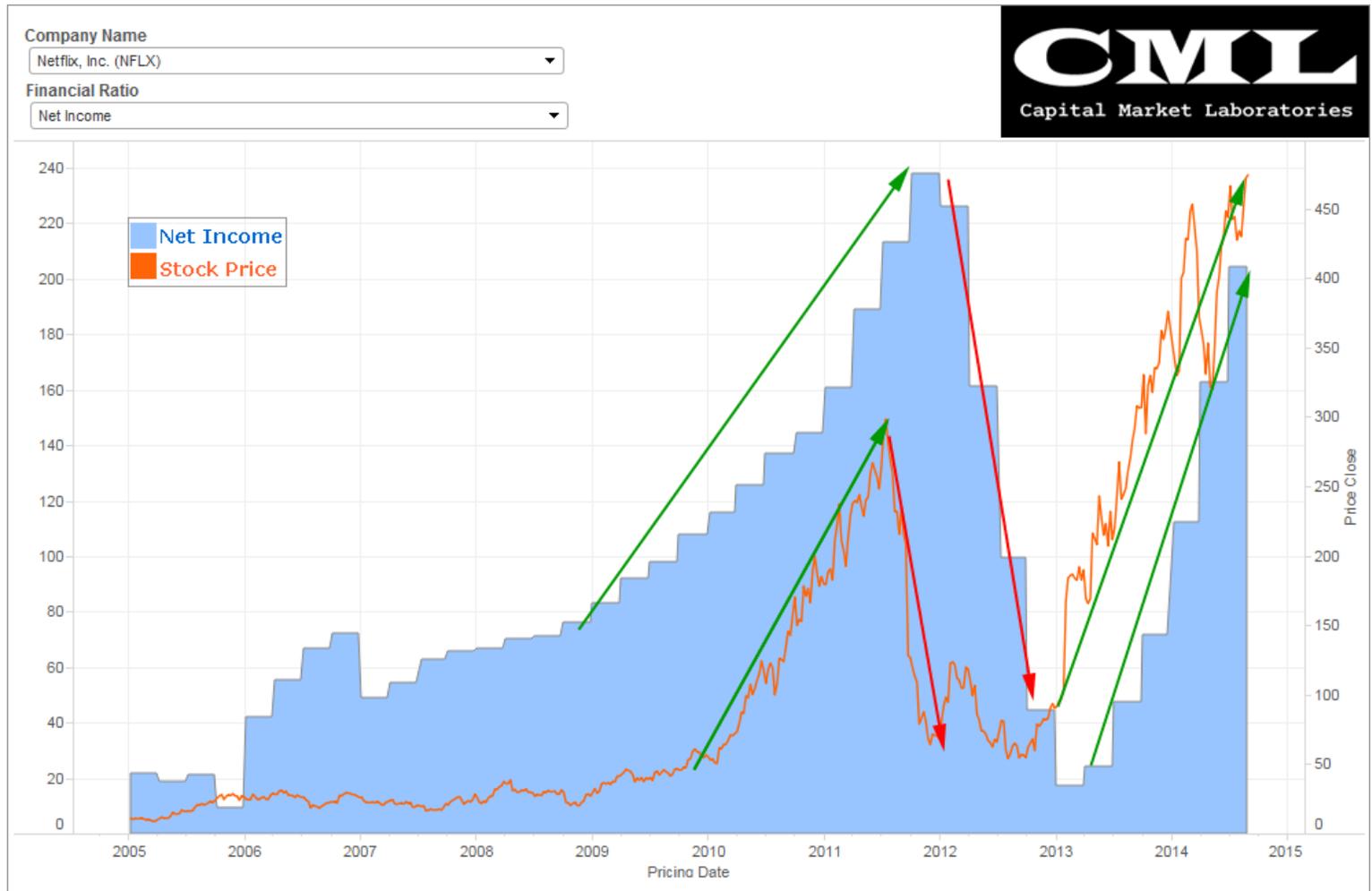


Illustration – Identifying Performance and Financial Metrics That Correlate Most Closely With the Stock Price



X-Y Factor Illustration – How Big Is Apple?

