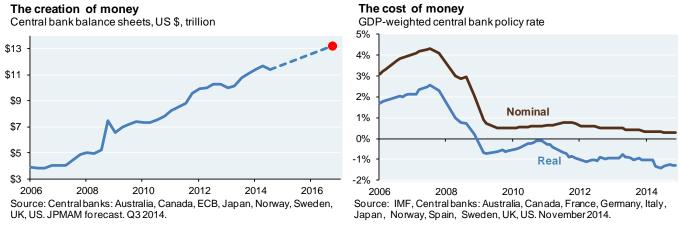
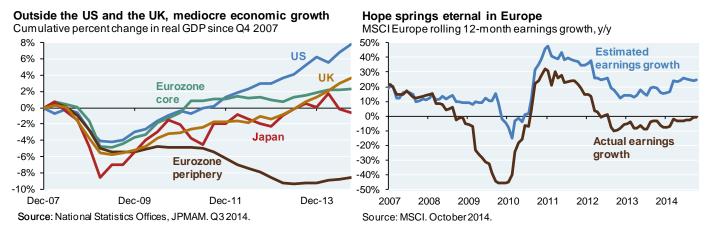


End of year wrap-up, and Stocking Stuffers for the Holiday Season

The year is ending more or less where we thought it would back in January: with modest, positive returns on diversified investment portfolios that were lower than in 2012/2013; positive returns from an over-weight to US/Emerging Market equities vs. Japan/Europe; positive returns on Japanese equities when Yen exposure is hedged; diminishing returns on high yield credit; declining commodity prices, driven by a decline in Chinese industrial production in private sector fixed investment; and with the largest global monetary policy experiment in history still ongoing. What we got wrong: we thought Treasury yields would rise modestly instead of rallying, and within EM equities, EM debtor countries (India, Indonesia, Turkey) we thought would struggle substantially outperformed EM surplus countries we thought would do better (Korea, Mexico, Poland, Malaysia, etc). The 2015 Eye on the Market Outlook will be published as usual on January 1st.



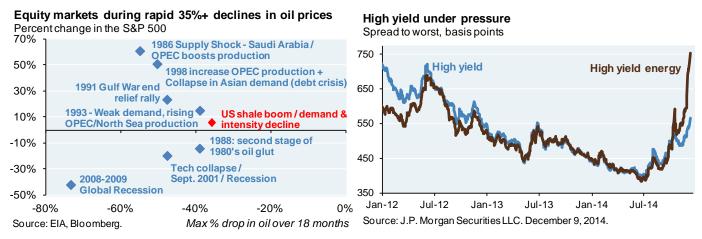
As 2014 comes to an end, the US/UK show signs of self-reinforcing growth with positive readings on consumption, investment, employment and housing. Europe and Japan do not (Italy has had negative growth in 12 of the last 13 quarters), and plan to throw more Central Bank liquidity at what appear to be structural rather than cyclical problems. If Germany is upset with the idea of ECB purchases of government bonds and **expropriation of German savers**, they'd be getting off lightly compared to where parts of Europe *really* want to go: a fiscal union, and/or ECB purchases of government debt that are effectively written off and forgiven over time. Some are more bullish on Europe than the US (again) based on ECB plans. However, hope springs eternal: according to MSCI, European earnings have been 15%-20% below consensus forecasts since 2011 (4th chart). Since 2011, the Euro has been a **growth and employment albatross** for the Eurozone compared to the rest of Europe and I don't see that changing in 2015. On Japan, foreign investors are buying Japanese equities while Japanese retail is selling; an uncertain verdict on Abenomics, which has been dependent on a falling Yen. I expect a US-Emerging Markets equity pairing to outperform Europe-Japan in 2015, as it has in most years since 1990.



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What about oil? Since 1974, there have been 7 episodes of oil declines > 35%. When oil declines were primarily driven by supply shocks (increased production) and improved oil efficiency, US equities generally performed well. When oil declines coincided with recessions and a collapse in global demand, US equities usually did poorly. There are elements of both this time, but the current episode is more the former than the latter. We will discuss oil price decline implications on a **client conference call next Tuesday** (impact on US growth and profits, oil company valuations, credit, etc). One area of concern: problems in the high yield energy sector could awaken investors to the excessively issuer-friendly HY underwriting standards in the last few years. This could cause a broader retrenchment away from riskier debt, which broker-dealers are in less of a position to disintermediate due to regulatory and market structure changes since 2008.



At this time every December, I write an *Eye on the Market* that departs from standard market and investment themes¹. This year's holiday issue (pages 3 – 8) contains stocking stuffers on money and work for some neighbors. For more standard commentary, wait for the 2015 Outlook in a couple of weeks. Have a happy and healthy holiday season.

Michael Cembalest J.P. Morgan Asset Management

¹ Last year, the holiday Eye on the Market <u>(Life Away From Home)</u> contained charts for a son leaving for college that dealt with the importance of thinking for oneself in an environment of extreme ideological and political uniformity; the impact of drinking and sleeping on grades; preparing for a world in which some careers will be displaced by computers/robots; the most effective exercise to stay in shape, and its importance for GPA; and why most of today's music is quantifiably inferior to prior eras.



To Steve, Kara, Ronin and Martha: finding happiness as a lawyer

I used to think that the most concerning words a parent could hear about a child's career would be these: "*I want to be an actor*"². That's still true, but would law be a close second? Over the last ten years, academic literature on the law profession includes the following:

"Stemming the Tide of Law Student Depression" (Yale Journal of Healthy Policy and Law)

"Lawyers, Anger and Anxiety: Dealing with the Stresses of the Legal Profession" (ABA Publishing)

"Drink Like a Lawyer: The Neuroscience of Substance Use and Its Impact on Cognitive Wellness" (University of Denver Sturm College of Law; on stress and substance abuse in the legal profession)

"Buffering Burnout: Preparing the Online Generation for the Occupational Hazards of the Legal Profession" (Pepperdine University)

"Women Lawyers Have Higher Divorce Rates" (ABA Journal reference of Washington & Lee paper showing higher divorce and lower marriage rates for female attorneys vs. other professions) "Why Lawyers are Unhappy" (Cardozo Law Review)

Add to that a 2013 CareerBliss survey of job satisfaction in which associate attorneys ranked last, behind customer service assistants (!). There was also a 2013 State Bar of Wisconsin web article entitled "*New Lawyers are in a Financial and Emotional Depression*". Other surveys paint a brighter picture (a study of 1987 UVA law school graduates is notably more positive), but the overall research evidence suggests that the legal profession is very stressful.

What to do about it? A February 2014 George Washington Law Review article summarized the results of a survey of 6,200 lawyers that was designed to find out. The table shows the correlations of each factor with each respondent's selfassessed "well-being". The conclusions drawn from the survey: prestige, income and other external benefits may not adequately compensate a lawyer who does not have enough autonomy at work, meaningful work relationships with others, a supportive manager and a passion for the job itself.

Note as well how more billable hours and more litigation hours only have modest negative correlations with well-being, suggesting that they can be offset if you can achieve positive readings in the factors at the top of the table.

This is important food for thought for not just practicing lawyers, but for those considering law school as well: according to a November 2014 article in The American Lawyer, the ratio of bar admits each year to the number of new lawyer jobs is 3 to 1. In other words, a very competitive market for new lawyers.

Correlations with Attorney "Well-Being"		
Have high degree of autonomy	0.66	
Strong connections and relationships	0.65	
Feeling of competence	0.63	
Internal motivation (passion for your job)	0.55	
Supportive manager (vs controlling)	0.44	
Driven by intrinsic (not extrinsic) values	0.30	
Vacation days taken	0.23	
Having children	0.20	
Higher level of income	0.19	
Being married	0.17	
Regular exercise	0.17	
Law school class rank	0.12	
Ranking of respondent's law school	0.05	
Being published in a Law Journal		
Negative correlations with well-being		
Larger firm	-0.06	
More litigation	-0.06	
More billable hours	-0.10	
Amount of law school debt	-0.19	
Souce: Krieger and Sheldon, George Washington Law		
Review, February 2014		
	on Law	

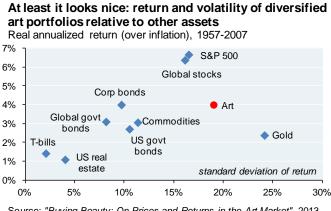
² As for acting...based on Screen Actors Guild data, at any given time, **85%-90% of its union member actors are unemployed**. An executive director of graduate theater programs said this in NY Magazine: "We're producing too many people... many of them poorly trained or without the connections or relationships necessary to make their transition to a career possible. It's as if medical schools were graduating people without giving them internships at a hospital." The same article quoted the executive director of Actors Equity as follows: "These schools are just turning out so many grads for whom there is no work". In the UK, **75% of all stage, screen and film actors make less than \$7,500 per year acting**. Are universities being transparent about the risks? Probably not, based on the title of a Stage News article last week: "*Drama school graduates not being made aware of industry reality*".



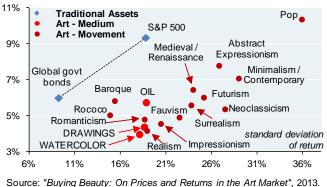
To Tim: art returns versus traditional investments

I had one minor (and lurid) experience with acquiring art. Twenty years ago, I mentioned to my wife that the walls of our apartment looked bare, and that if she didn't buy something to hang on them, that I would do so instead. The next week, she and her mother went shopping. They returned with 3 prints of women that reminded me of Gauguin. I looked at the artist's name in the corner, which I recognized, but they did not. They were told at the gallery that they were painted by a "struggling artist" in NYC in the early 1960's who went on to have a "major career in publishing". Well, yes, I suppose he did: they were painted by Bob Guccione. One still hangs in our bathroom.

Tim, on the other hand, is more involved and may be interested in data on art as an investment. Using one million transactions from 1957 to 2007, researchers at Tilburg University (Netherlands) and HEC (Paris) analyzed art compared to other asset classes. In their analysis, "art" includes oil paintings, watercolors and drawings. As shown in the first chart, art returns (even when excluding expenses associated with art ownership)³ were well off the "efficient frontier": similar to corporate bonds, but with twice the volatility. As for individual art movements, there was a wide range of outcomes; pop and abstract expressionism showed higher and more volatile returns.



Returns by medium and movement Real annualized return (over inflation), 1982-2007



Source: "Buying Beauty: On Prices and Returns in the Art Market", 2013.

While **abstract expressionist works** have generated higher returns, they may be harder to identify. There are examples of paintings by toddlers and animals bought by unwitting collectors, and praised by art critics for their "determination" and "fastidiousness". To examine this phenomenon, researchers at Boston University surveyed a control group of Art Institute of Boston students and Boston University psychology majors. They were shown untitled works by abstract expressionists [Rothko, de Kooning, Seliger, Frankenthaler, Francis, Hofmann, Twombly, etc] paired up with paintings by toddlers, monkeys, elephants, chimps and gorillas. When asked on a "blind" basis which ones they preferred and which ones were technically "better", survey participants preferred abstract expressionists only 55%-60% of the time, and thought they were technically better **only 2/3** of the time. For some strange reason, the researchers interpreted these results as a resounding reaffirmation of the art form.



"What time is lunch", Max Cembalest, c. 2000, aged 5. Oil and crayon on canvas. Reprinted with permission from the Rachel Hines private collection.

³ A caveat about investing in collectibles, reiterated by the authors: **analyses like these exclude many real-life** costs of owning and buying/selling art and other collectibles which reduce returns. For example, auction houses often charge premiums to buyers and commissions to sellers that can be 10%-20% of the sales price, large costs which are excluded from their analysis. Insurance and storage costs are also excluded. There's no easy way to adjust for this, other than to know that they would shift realized art returns lower vs. traditional assets. The authors also computed returns on violins, stamps, art and wine from 1900-2012. Annualized real returns ranged from 2.4%-2.8% for the first three; wine was the better investment, growing at 4% in real terms over the same time frame.



As for today's sky-rocketing modern art prices and the difficulty in finding good value, here's art adviser Thea Westreich: "If you're looking for something rational in the art market, go fishing, or go do something else instead." I agree 100% about the fishing.

To Louisa, the daughter of a neighbor looking to crowdfund a university Quidditch team

Quidditch is a sport from Harry Potter that is actually played at college universities. Players carry broomsticks between their legs, and the game involves the use of a slightly deflated dodgeball and a yellow sock that someone wears as a tail. I am tempted to make a derisive remark about all of this, but I do not want anyone casting a spell on me. I understand that you want to raise \$3,000 to fund equipment and travel, and reward funders with T-shirts showing the team logo. Here's information on crowdfunding that may help make your campaign a successful one.



4th annual Quidditch Cup; Alamy Images.

The crowdfunding⁴ you are looking to accomplish is *rewards-based* fundraising. Such projects received ~\$2 bn in contributions since 2009. Funding targets range from a few hundred dollars to several hundred thousand. Of successful campaigns over >\$100,000, 90%+ have been for technology, hardware, software, or product design; over 60% took place in North America. Ethan Mollick at the University of Pennsylvania recently examined the keys to success in crowdfunding campaigns:

- You have to spend it to get it. Success is linked with presentation quality, often involving a highdefinition video introduction, which raises your chance of success by 26%. Optimal funding windows are 4-5 weeks, with chances for success declining by 3% per week after that.
- You need friends to get the momentum started. Large numbers of friends on online social networks are associated with success. The average film project has a 9% chance of successful fundraising if the founder has 10 Facebook friends, 20% chance with 100 friends, and jumps to 40% with 1,000 friends.
- Communicate a lot. Founders who blog in the early stages of fundraising and provide updates throughout the project increase their probability of becoming fully funded by over 13%, as compared to those who simply hope for social media "likes" and comments.
- *Check your spelling*. The chance of success for projects with spelling errors is 13% less than those with proper spelling and grammar. You wouldn't think spelling would be a concern, but freshman writing seminars about comic books and how to speak Klingon may not stress that kind of thing.
- *Geography matters.* Success is partly dependent on proximity to funders and the creativeness of your geographic area. Since college campuses tend to have higher than average creative populations, you'll find a higher probability of success with them than with non-campus sources.

By the way, you aren't alone. In 2013, Quidditch teams raised over \$75,000 through crowdfunding sites to create teams for the sixth Quidditch World Cup, held in Kissimmee Florida, and where the University of Texas (UT) beat UCLA 190 to 80. UT defended its title and beat Texas State University in the 2014 finals. I would never have guessed that Texas is the Quidditch capital of the United States.

⁴ In the US, crowdfunding approaches generally fall into four categories.

[•] *Patronage*: individuals donate funds with no expectation of any return.

[•] *Reward-based*: individuals donate funds with an expectation that they will receive a tangible item generated by the project (i.e. music album, photograph, or video).

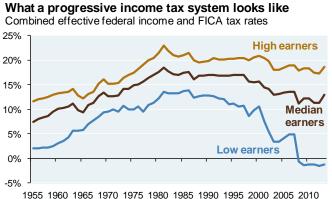
[•] Lending: individuals loan funds with the expectation of a rate of return on capital.

[•] *Equity*: individuals receive an ownership stake in the venture or are entitled to royalties. While this kind of crowdfunding was approved by the 2012 JOBS Act for companies with less than \$1 billion in revenue, it is limited to accredited investors as per SEC rules, and only makes up a small part of US crowdfunding activity.



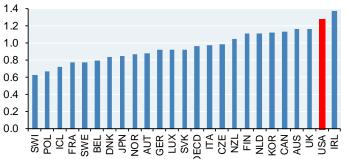
To John G: the US tax code is very progressive, even after accounting for state and local taxes

A neighbor asked me if progressive US Federal taxes are mostly offset by regressive state and local taxes, since that's what his friends are telling him. John, here are some charts to show why that's not the case. Start with effective Federal tax rates (including social security and payroll taxes) by income bracket, which have been getting steadily more progressive over the last 35 years (1st chart). The US system is one of the most progressive in the OECD (2nd chart). This chart divides concentration of taxes paid by concentration of income, and includes Federal and state/local taxes; higher ratios indicate more progressivity.



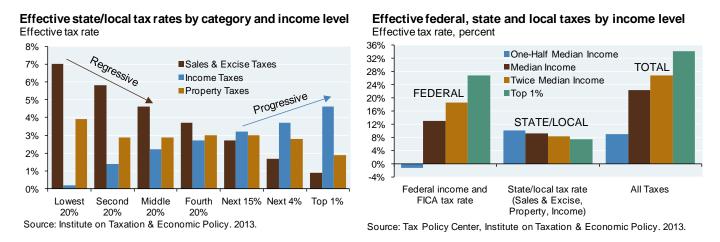
Source: Tax Policy Center. 2013.

Tax progressivity by country, from low to high Concentration coefficient of household taxes divided by Gini coefficient (concentration of earned income)



Source: "Income Distribution and Poverty", OECD, Chapter 4, 2008.

Now let's focus on state/local taxes, which are dominated by sales/excise taxes, state/local income taxes and property taxes. Sales taxes are *regressive* (brown bars, next chart). However, most state and local income tax systems are *progressive*: 34 states levy a personal income tax whose graduated rates rise with income. Of the rest, 7 have a flat general income tax; 2 have a flat tax on unearned income; and 7 have no income tax. Even when incorporating the latter three categories, the overall state income tax system is still progressive (blue bars). As for property taxes, after factoring in homestead exemptions, circuit-breaker property tax relief and more expensive homes typically owned by wealthier families, they end up being "*proportional*" (gold bars; neither regressive nor progressive). The last chart pulls it all together, taking into account the amount of Federal, state and local taxes paid relative to income. **The Federal Tax code is highly progressive, and state/local taxes are** *slightly* **regressive, with the emphasis on slightly**⁵. When combining the two, the overall system maintains its progressivity. Be aware that people inclined not to believe this may not change their minds.



⁵ The national average effective state/local tax rate for ½ Median Income earners is 2.7% higher than for the Top 1% (i.e., a 2.7% regressivity gap). There is dispersion around this national average by state: Washington is the most regressive with a 9% gap, and California is the most progressive at -2.4%. Only 8 states have a regressivity gap of more than 5%: AL, AZ, FL, IL, SD, TN, TX and WA.

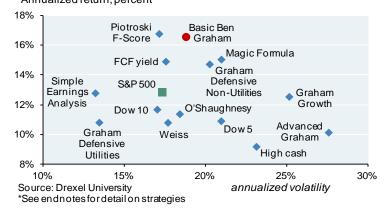


To David, who invests his own money: data on self-directed investing

Want to generate higher returns investing your own money?

- According to professors at Goethe University (Frankfurt), two factors with large negative impacts: a lack of diversification, and a preference for so-called "lottery stocks" (very low price and high idiosyncratic volatility). Based on individual portfolio holdings of 5,000 investors from 1999 to 2013, the most diversified investors achieved annualized returns that were 1.5% higher than the average investor. Those with the lowest preference for lottery stocks achieved returns that were 3% higher.
- **Don't be alphabetically lazy**. Seton Hall researchers found that from 1999 to 2012, stocks beginning with "A" through "E" had valuations (price to book value) that were consistently higher than those beginning with "F" through "Z", and were traded more frequently as well.
- Find a girlfriend. A Quarterly Journal of Economics article found that men traded 45% more than women, which reduced men's net returns by 2.7% a year vs. 1.7% for women. Vanguard also found that during the 2008-2009 market downturn, women were less likely to abandon equities than men.
- Complex stock selection screens rarely improve over the **basic Ben Graham** approach to value investing. A simple screen of earnings before interest, taxes, depreciation and amortization relative to enterprise value generated higher returns than almost all other more complex approaches, using data from 1963 to 2013. The only exception: a 9-factor "F-Score" approach from a Stanford Business School professor, whose results were similar. The basic Ben Graham strategy also worked well in each sub-period (1963-1980, 1981-1996 and 1997-2013), and had the second best Sharpe ratio. If it's not broken, why fix it?

Simple vs. complex value investing strategies applied to large and mid cap stocks, 1963-2013 Annualized return, percent

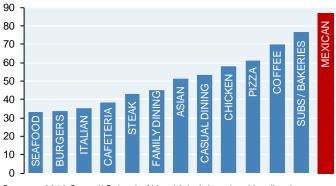


To Jim and Lisa: advice from Cornell on how to run a small restaurant

Your decision to open a Mexican restaurant could be considered an act of considerable hubris. As per the Cornell Handbook of Applied Hospitality Strategy, the failure/turnover rate for Mexican restaurants was the highest of all categories measured. Fortunately, Cornell also provides guidance for small restaurants (30-100 seats), which they believe have a higher chance for success than larger ones. In the sources (page 9), you'll find a Cornell piece with recommendations for space rental, food and liquor costs as a % of sales; optimal table sizes and configuration based on most parties being 2 rather than 4; optimal bar logistics; and vendor delivery management. There's also some research on Yelp⁶ reviews (a half-star

Restaurant turnover percentage by segment

Cumulative three year-turnover percentage



Source: 2010 Cornell School of Hotel Administration Handbook.

⁶ **There is no shortage of controversy about Yelp's business model**. Restaurant owners have alleged that Yelp representatives offer restaurants the opportunity to eliminate or move bad reviews in exchange for advertising. However, the U.S. Court of Appeals for the Ninth Circuit recently dismissed several class action lawsuits against Yelp that claimed the company altered business rankings in exchange for payment. On a related topic, a November 2013 Harvard Business School paper finds that 15%-20% of Yelp reviews are fraudulent.

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improvement on Yelp's 5-star rating makes it 30%-50% more likely that a restaurant will sell out its evening seats). In addition to the obvious (food, décor and service), the following reportedly influence Yelp reviewers as well: frequent refilling of water glasses, special touches for birthdays and other occasions and the quality of pre-meal snacks. Your food is great; my only suggestion: improve the website, which looks like a COBOL program printed on a 1970s-vintage Smith Corona typewriter.

To Cecilia: charitable giving as a fantastic voyage to better health

Do you remember the 1966 film *Fantastic Voyage*? A spaceship is hyper-miniaturized, allowing Stephen Boyd and Raquel Welch to attack blood clots and germs inside of a Soviet double-agent's head. It's still the stuff of science fiction, but there may be easier ways to attack viruses and bacteria: **by increasing charitable giving.** A growing body of literature suggests that giving to others can reduce stress and strengthen the immune system. This topic has been well understood for some time:

• In the 1980's, researchers found that generosity inclinations increase the protective antibody "salivary immunoglobulin A", a protein used by the immune system to identify and neutralize foreign objects such as bacteria and viruses



Fantastic Voyage, 1966. United Archives GmbH; Alamy Images. Raquel Welch is inside this man's head, literally.

- Giving ignites neural activity in a pleasure center of the brain: the same region stimulated by recreational drugs, appealing art (i.e., *not* abstract expressionism), attractive faces and photos of loved ones
- In 2010, researchers found that keeping money instead of giving to others increases your level of cortisol, which is a hormone related to stress
- Volunteering is similarly shown to correspond to lower levels of anxiety and depression, more happiness, longer life spans, and is even used as a treatment for chronic pain

Here's the latest news on this topic. A 2014 article in the Journal of Economic Psychology took another look at the possible health benefits of giving. The findings: increased giving was associated with lower levels of the following ailments: arthritis, high blood pressure, lung disease and emotional/psychological problems. The author controlled for income, gender, marital status and age to support his view that "giving is beneficial", although some of the causality probably runs in the other direction (healthier people are in a better position to donate).

This all came to mind after reading your impressive new mission statement for the Brooklyn Community Foundation. The evidence is still being debated, but either way, you can let people know that charitable giving stands a better chance of improving health than waiting for miniature astronauts to fly into your head. During a season of giving, I cannot think of a better message to end the year with.

Happy Holidays.



Notes and Sources:

Renneboog and Spaenjers note that other art research has shown higher returns, but rely on a repeat-sales approach that limits the population sample (e.g., a study with 5,000 transactions that spanned 125 years); or were confined to sales at Sotheby's or Christie's which are similarly limited. Their approach is based on Art Sales Index data starting in 1957, when the data universe becomes more robust (at least 1,000 observations). Renneboog and Spaenjers also apply a repeat sales index to their own data, and get similar results to their base case regressions which use the entire data set.

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"Does Complexity Imply Value? AAII Value Strategies from 1963 to 2013", Gray (Drexel University), Vogel and Xu, October 2014.

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"Fake It Till You Make It: Reputation, Competition, and Yelp Review Fraud", Luca/Zervas, Harvard Business School and Boston University, November 8, 2013

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"States ' Projected Lawyer Surpluses Deteriorate for 2022", Matt Leichter, The Am Law Daily. November 2014.

"The 350,000 Percent Rise of Christopher Wool's Masterpiece Painting", Vernon Silver and James Tarmy. Bloomberg Businessweek. October 9, 2014.

[Sources continued on following page]

Chart description	Description	Fundamental inputs
Basic Ben Graham	Cash flow to enterprise value	Earnings before interest, taxes, depreciation and amortization, divided by total enterprise value
Simple earnings analysis	Fundamental rule of thumb	Earnings yield, dividend yield and retained earnings yield, with limits on debt/assets
Advanced Graham	Graham enterprising screen	P/E ratio, current ratio, long term debt/working capital, EPS growth and dividends
Graham Defensive Utilities	Graham de fensive utility	Debt/equity, EPS growth, P/E ratio, price to book, dividend growth (utility stocks only)
Graham Defensive Non- Utilities	Graham de fensive non-utility	Debt/equity, debt/working capital, EPS growth, dividend yield, P/E, P/B
Graham Growth	Graham enterprising investor rev.	Current ratio, long term debt/working capital, EPS growth, dividend payments, price to book, P/E
Magic Formula	Magic Formula	Return on equity, earnings yield, enterprise value
Dow 10	Dogs of the Dow 10	10 highest yielding dividend stocks in the DJIA
Dow 5	Dogs of the Dow 5	5 highest yielding dividend stocks in the DJIA
High cash	Cash rich firms	EPS growth, debt/assets vs industry median, LT debt/capital, cash/price, cash/share, current ratio
Piotroski F-Score	Piotroski model	Profitability (return on assets, cash flow from operations, net income, accrued earnings); leverage/liquidity (LT debt, current ratio, common equity issuance) and efficiency (gross margin, asset turnover)
Free cash flow yield	Price to free cash flow	Free cash flow per share growth with comparisons to industry median
Weiss	Weiss blue chip dividend yield	Timing and growth of dividend payments, institutional ownership %, EPS growth, dividend yield, current ratio, dividend payout ratio, long term debt/equity
O'Shaughnessy	O'Shaughnessy value screen	Market cap, shares outstanding, cash flow per share, sales vs group median



"The dynamics of crowdfunding: An exploratory study", Ethan Mollick (Wharton), February 22, 2013.

"Unemployment Is A Lifestyle For Actors", Brendan McMahon, June 4, 2012 Huffington Post

"What makes lawyers happy? Transcending the anecdotes with data from 6,200 lawyers", Krieger (Florida State University College of Law) and Sheldon (University of Missouri), February 2014

"Which Investment Behaviors Really Matter for Individual Investors?" Loos et al, Goethe University, Frankfurt am Main, November 2014

"Who Pays? A Distributional Analysis of the Tax Systems in All 50 States", Fourth Edition, Institute on Taxation & Economic Policy, January 2013.

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