

CFA Conference 2017 Philadelphia, USA

Notes by Andrew Canter 05/2017

Quotable Quotes:

"An Investment in knowledge bears the best interest." Benjamin Franklin

"If a man empties his purse into his head, no man can take it away from him." Benjamin Franklin

"It is easier to make money by catering to consumers biases than it is to try to correct them." Richard Thaler

"There is nothing better for an academic than an untestable theory: You sleep much better at night knowing no one can refute you." Richard Thaler

"We might define an efficient market as one in which prices are within a factor of 2." Fisher Black

"The market is guessing what other people are guessing what other people are guessing." J.M. Keynes

"In a world where 80% of investors indexed, an active investor would benefit from huge liquidity provided by dumb investors." Richard Thaler

"There is a constant argument that Europe is terminally ill: But are you impressed by how long we can remain terminally ill?" Michala Marcusson

"Hedge funds that don't share any information are the ones that can afford to: Investors will line up at their door in any case." Frances Barney

"Look for opportunities where people are making the most complaints." Jack Ma

"Anyone who is not worried and confused is obviously not paying attention." Tom Peters

"Chance finds the prepared mind." Louis Pasteur

"Fail fast and cheap" Silicone Valley mantra

"Unconstrained profit-seeking capitalist enterprises will make and sell evil and destructive goods simply because they can." A C Canter

"The customer is a rear view mirror: He won't tell you your future." Tom Peters

Churchill's definition of tact: "Telling someone to go to hell, and they actually look forward to the trip."

"If we have another systemic crisis within living memory of 2008 (20-30 years) then the fabric of capitalism could be torn. The costs could be incalculable." Paul Tucker

"What really turns me off in a [job] candidate is when then say 'I want to make a lot of money'." Tina Williams



" 'Diversity' is being asked to the party, and 'inclusion' is being asked to dance." Joseph Brennan

"The phrase 'Behavioural Economics' seems to be a neoplasm." Herbert Simon

"Investment managers that get fired usually get fired at the wrong time." Richard Thaler

"The investment community needs to be defined not merely by the listed markets, but by the entire breadth of investment opportunities." Elizabeth Corley

"What gold was in the 1930s the Euro is today: An albatross around the neck preventing corrections." Neil Howe

"The kids are coming, and the kids might be socialist!" Gillian Tett

"Populism always leads to authoritarian leadership. That is the nature of the beast." Neil Howe

"Impatience is not with a [Political] system that works, but with a system that is widely perceived not be to working." Neil Howe

"Often populism is a code word for spending money to make people happy, versus spending money on long-term capex to adjust for the future economy." Willis Sparks

"Populism is not understood as a leader, but as a mood" Neil Howe

"Robots are the new narrative: Everyone is talking about it. The Luddites were wrong, but that does not mean they will always be wrong." Robert Schiller.

"The lessons we learned from the 1930s is 'don't let the money supply crash' as we did in the 1930s." Robert Schiller

"Chronic [equity] bears [on your investment team] are dangerous to clients, and your business". Bob Browne

"More money has been lost by fearing the next bear market than by the bear market itself." Peter Lynch.

"Be cautious about being short the power of compounding." Bob Browne

"You can't manage a good [investment] process with high staff turnover. Bob Browne

"If you are short, you have be right twice: On the sale and on the repurchase." Bob Browne

"There is an absolute intrinsic value when something is cheap: If you did your homework right you can be patient for returns". Bob Browne

"If you lay down with dogs, you wake up with fleas"

"There is a [passive] revolution under way." John Bogle

"The producer's sole duty is to serve the consumer." Adam Smith

"It is dangerous to apply to the future inductive arguments based on past experience, unless one can determine the reasons why the past experience was what it was." J.M. Keynes

"It's a huge mistake [in investments] to ignore reversion-to-the-mean" John Bogle

"Successful short term marketing strategies are rarely, if ever, good long term investment strategies." John Bogle

"No man can serve two masters, for he will love the one and hate the other." Bible

"The scale of US\$ bond issuance by global and Asian corporates is something to watch closely." Paul Tucker

"Exclusively rules-based regulation is doomed to failure." Paul Tucker

"[In market regulation] principles are harder to exploit or ignore than rules" Guy Debelle

"That the tiny U.S sub-prime housing market was able to bring down the entire financial system is clear evidence of the severe lack of a [suitable] equity cushion." Paul Tucker

"You can lead from any seat." Carla Harris

"The easiest way to grow your power is to give it away." Carla Harris

"The price of inaction is greater than the cost of making the mistake." Meg Whitman

"Failure is how we learn. You can't approach opportunities from a position of fear." Carla Harris

"Keeping your head down will not keep you from getting shot. Keep your head up so you can see the bullet coming." Carla Harris

"If you are always directive [e.g. telling people what to do] then you are overpaying your team." Fran Skinner

"We are moving from the 'information age' to the 'age of entanglement'." Scott Klososky

"Technology changes exponentially, but organisations only change logarithmically." Scott Klososky

"The 'singularity' is when the technology can process information faster than the human brain." Scott Klososky

"We want people for whom investments are not just their job, but also their hobby." Joseph Brennan

"Diversity is a management challenge that is worth it." Tina Williams

"Diversity is not a moral imperative, it's an economic no-brainer. " Tina Williams

"My number one source of concern is bond market overvaluation, and the mark-to-market losses [when rates rise]." Abby Joseph Cohen

"A discontinuity [in markets] will throw data and models out of the window." Abby Joseph Cohen

"Never in the history of calming down has anyone ever actually calmed anyone down by being told to 'calm down' ".

High Level Observations from the CFA Conference:

- The economic mood in the U.S. seems to be stable and positive. Trump-drama aside, employment is high, property prices are strong, and the shadow of the financial crisis appears to have nearly fully receded. America, it seems, is back!
- Globally, there is expected to be continued steady GDP growth, and likely very slow normalisation of monetary policy: This in the face of substantial policy and geopolitical uncertainty.
- U.S. (and Developed Market [DM]) labour productivity growth has been very low, and this was a repeatedly raised concern since labour productivity plus demographic growth drives long-term non-inflationary growth prospects. Neither the causes nor outcomes are well understood.
 - Given the repeated focus on productivity growth, I can't help but wonder in a world with open trade whether it makes sense to look at one country's productivity in isolation.
- There is plenty of worry about overvalued equity markets (although Martin Seigel makes a compelling case that equities are not overvalued relative to interest rates, see below).
- There is less evident concern about bond market overvaluation (although Abby Cohen raised the alarm, see below): It seems there is an acceptance of permanently low yields and a "lower-for-longer" outlook.
 - This is a change from the "hostile" industry mood toward bonds at the last 6 CFA Institute annual conferences and I can't help but feel it's a contrary indicator.
- Notably, I heard very little mention of inflation risk: Given the amount global liquidity (which is currently chasing any asset class offering more than a cash return), expected steady growth, high corporate profits but low capex, and a falling unemployment rate, surely there must be the potential for all that money to eventually find its way into actual goods and services. Possibly the lack of focus on inflation risk could also be a contrary indicator.
 - That said, 2017 data indicates global inflation is currently docile.
- A widely repeated concern is the disparity between low market volatility (as measured by the VIX) -- which, coupled with high equity prices, implies high investor confidence -- and the high levels of global uncertainty in policy, politics, terrorism, refugees, etc.
- Enormous focus on passive/indexed funds, both as a solution for retail and institutional investors and also as a threat to incumbent active managers. Passive is seen as a boon for retail investors to access low-cost alpha.
- Along with the "passive wave" is a hunt for alpha in alternatives: This signals a return to 'Core & Satellite' thinking holding a passive, low-cost 'core' of betas, and add on actively managed alpha-seeking funds around that core.
 - Several speakers warned about the systemic risks of 'false-liquidity' (or 'liquiditytransformation') in some ETFs which hold underlying il-liquid assets (e.g. high yield bonds).
- Equity returns are likely to be in the 4-5% nominal range in the coming years, while returns of balanced funds are expected to be in the 3%-*real* range in the coming 5 years.
 - Archaically, the seemingly 'accepted' definition of a vanilla-balanced-fund is 60% equity/40% bonds without alternatives or international diversification (but noting that about 50% of the S&P500's revenues are outside the U.S.).
- There is high consciousness of liquidity risk in various assets and investment products (e.g. alternative ETFs): Presumably this is a holdover from 2008-2009, and is probably a good thing.

- There is now widespread acknowledgment (as individuals and as an industry) that behavioural factors are endemic in investment decision-making: It is no longer a debate.
- The idea of 'stranded assets' (e.g. un-useable carbon energy sources) seems to be sinking-in and almost taken for granted.
- Substantial focus on millennials: Their rising market power? What drives them? How to motivate them? How they operate? What they buy?
- 'Disruption' is talked about in all economic spheres as an investment theme. It is also evident in real life: Small travel agents are gone. Uber is taking over taxis. One sees many retail stores closed and large chains going out of business (this is referred to as the "retail apocalypse").
- There is much consciousness (and discussion) of widespread and growing -- income-disparity: Silicon Valley versus the U.S.A.; Wall Street versus Main Street; DM versus Emerging Markets (EM). The rich are getting richer and the poor are getting poorer. Democracy is letting people down. Populism is here to stay. Not a lot of solutions were offered. This is driving the disruption that is coming home to roost in politics as well as economics.
- Automation/robots/algorithms are, and will, cause widespread job losses across both EM and DM (with more forecasted impact in EM). There is a palpable fear of such automation for economies generally, and also in the finance industry. Technology is seen as both a threat and an opportunity.
- Academicians and practitioners remain over-focussed on listed-markets and index cognisant investing – despite understanding the failures of that paradigm (e.g. the flaws of cap-weighted indices, the underperformance of managers relative to benchmarks; the rise of passive). It seems to me that benchmark cognizant investing is a sucker's game, and the solution is to get outside of the listed-market paradigm into wider mandates and various alternatives.

Asset Management Industry Observations:

The industry itself expects change:

- 84% of those surveyed expect industry consolidation;
- 70% expect investors to increase their allocations to passive investment vehicles;
- 52% of CFA Charterholders surveyed expect substantial or moderate contraction of profit margins for asset management firms;
- 57% expect institutional investors (e.g. asset owners) to seek to reduce costs by in-sourcing more investment management activities;
- 73% of investment leaders expect ESG factors will become more influential.

There is much thinking about how to use technology in finance and investments – for example Blackrock's announcement they are moving to smart-models for company analysis.* However, there is caution that one should "apply the right technology", the technology and algorithms cannot always do the job: The example of the failure of peer-to-peer lending was cited.

*It is now possible for much financial, and even some non-financial (e.g. cars in parking lots), analysis to be automated. <u>https://www.nytimes.com/2017/03/28/business/dealbook/blackrock-actively-managed-funds-computer-models</u>

Asset managers are selling 1) trust, 2) competence, and 3) solutions. "Clients will invest where they trust, but they also need results and those results must actually solve a problem" [Bogle]: It is not considered a good client solution to say "I beat the benchmark" when the benchmark is down 20%.

In the great divide between the rich/haves and the poor/have-nots, asset managers are lumped in with Wall Street and bankers in the former group. Trust in the fund management industry is still not repaired.

Investment firms need to add quantitative & technical skills, but also soft-skills of client engagement (e.g. listening, tailoring solutions), alternative asset class skills, and an analytical ability to filter ESG factors (which can defy model analysis).

While historically general retailers did not succeed in selling financial services, the likes of Amazon, TenCent and others could become financial services providers: "They are plugged in, have client trust, and work well for the millennial mindset" (e.g. no human interaction needed; belief in technology). These disruptors can tap into the current mistrust of the finance industry, broken promises, new technologies, and new distribution channels. They can also take advantage of the traditionally highmargins in asset management.

The lure of low-cost passive/indexed/smart-beta funds is likely to cause margins to come under pressure in traditional asset management: Possibly less so in alternatives which is more of a 'hunt for talent and a hunt for deployment'.

The discussion of high fees/margins is puzzling, since arguably asset management is a hyper-freemarket with fierce competition, mobility of labour, and no collusion: Theoretically fees and margins should have fallen. One answer to sticky fees is that historically investors have not want to buy 'discount' active managers (e.g. "I'm not a great surgeon, but I'm cheaper than the other guys"). It does seem that the lure of passive funds is now undercutting fees for active managers.

"The purpose of investment management is to connect investors with opportunities." The purpose of capital markets are to be capital allocation mechanisms, providing capital to businesses and endeavours. Money is one of the 3 vital factors of production – resources, labour, and capital. Efficient capital allocation (and lower cost of capital) is a national competitive advantage.

The lexicon of "diversity" and "empowerment" are targeted primarily at gender diversity: Despite that focus there has been very little shift in the gender or racial make-up of the finance industry (with an estimated 15% non white-males in management).

Behavioural Economics: Past, Present and Future

Richard Thaler (University of Chicago)

On Behavioural Economics:

All economics is behavioural: The core assumptions of classical economics appear wrong:

- Assumption of Optimisation: Do we know how to choose? Do we know all the choices? Are we all smart?
- Assumption of self-interest: Plenty of evidence points to our weak ability to look after our own self interests.
- Assumption of consumer sovereignty & self-control: Do we really resist things that are bad for us?
- Assumption of unbiased beliefs: Clearly humans have biases that come into decision-making.

All these core assumptions are flawed: "Homo Economicus" (or "econs") is an idealised, theoretical animal – but they are clearly not the same as homo sapiens.

People are not experts at everything ... most decisions are made by amateurs... humans are not maximisers. Economists thus satisfice with "explainawations" (Matthew Rabin) which are really excuses for retaining the status quo.

Humans make errors, <u>but human errors are predictable</u> (according to Kahneman & Tversky), and that is what behavioural economics seeks to do.

Canter Observation: The assault on classic economics is justified, although it should be noted that assumptions about consumer "efficiency" is based on large numbers, not individual actors.

On the Efficient Market Hypothesis ("EMH"):

EMH Assumption 1): There is no free-lunch. You can't beat the market. Investors are rational. Markets are efficient.

Thaler: This is "approximately true": It is possible to beat the market, but it's been proven that on average active management underperforms.

EMH Assumption 2): The "price is right" – asset prices are equal to intrinsic value. Thaler: This essentially untestable: "Who can say what a company is really worth?"

He summarises that markets are not really efficient, and certainly not in the "strong" form of EMH. It is dangerous to assume markets are correct and 'prices can't be wrong'. He cites repeated recent surveys of investors that indicate the contradictory beliefs that a) "markets are over-valued", but the "markets will continue to rise".

In particular "markets can be very wrong when there are no arbitrage opportunities" and mispricing can persist.

He suggest that investors shouldn't evaluate shares, just try to evaluate which shares are likely to be subject to over-valuation. If you are buying 'cheap' shares, you need to know why they are cheap, and when it will change, and what will make it change.

Canter Observation: Markets are rarely right. You should start with the assumption that prices are wrong, and set your analysis against the current price.

General Comments:

On Thaler's "nudge" theory, he notes that automatic enrolment in pension schemes proves that for any age-group and any income-group, auto-enrolment materially increases participation in schemes. He notes that the auto-enrolment rates start at a 3% contribution, which is too low, and people don't choose to increase it by themselves. However, automatic increases in the contribution rate can nudge it upward.

Canter Observation: Thaler espoused the Nudge theory – "Incenting people to change behaviour in a way that feels natural." He observes that that small changes (e.g. opt-out clauses for retirement plans or organ donation schemes) could have substantial effects. While there is little debate about the impact of "nudge" theory, it misses the big point: All marketing/sales is an exercise in "shove" not "nudge"! In particular, the USA style sales-machine has the unmitigated, over-powering ability to lie, change perceptions, and force-feed consumers things that may or may not be good for them. E.g. Pharmaceutical ads on television for made up maladies! The consumer market is "nudge" gone crazy.

Thaler also mentioned the "Fallacy of intervention" – the tendency for investors to over-intervene and not allow mean-reversion to function (e.g. firing a manager after bad performance, or buying a market at the top).

Professional investors' most common behavioural bias is the **over-confidence-bias**. He recommends investors should look very closely at their own past record – an honest reflection of views and decisions: "It should convince you to be a bit less confident."

Speaking of the current complacency evident in markets (e.g. low volatility, high prices), Thaler notes (worryingly) that "Animals have a tendency to freeze when afraid".

The boom in index investing, and the plummeting of fees, is great for retail investors (especially in largecap stocks). "But if everyone indexed there would be no one setting prices."

Thaler's summary points:

- Behavioural Economics is a theory of 'humans' not 'econs'.
- Humans need help with complex choices that require self-control.
- Don't hire and fire from performance, use process
- It's hard to beat the market, but prices can be wrong.

Strategic Investment Choices and Considerations in the Current Market Environment

Elizabeth Corley (Allianz Global Investors)

Macro Factors:

Corley proposes that the world has an improving cyclical environment (e.g. rising PMIs), but persistent structural challenges and uncertainty. Global GDP is recovering, and is resilient (driven by China and India), but is not getting support from Europe.

- A structural issue is strong employment in USA and Germany, less so elsewhere: "The rich are getting richer, and it's not spreading."
- The reflation trend is continuing: "The risks of inflation are increasing, and risks of deflation are dissipating."
- Monetary policy divergence: US is on a steady path toward normal monetary policy, but the ECB and Japan are still engaged in quantitative easing, and generally monetary policy is expansive globally (with the unwinding of global QE set to start toward 2020).
- Fiscal policy is also diverging: The high debt overhang and tenuous global growth is impairing structural reform of fiscal policy.
- Substantial risk factors: Conflicts, elections, refugees, political challenges.

Market and economic volatility is low, and markets have been seemingly immune to global geopolitical uncertainty: Brexit; Super-election cycle in Europe (e.g. several elections forthcoming); antiestablishment forces; refugees; terrorism; trade protectionism; etc.

She notes there seems to be policy 'risk aversion': A slowness in monetary tightening and/or fiscal restraint due to tenuous nature of economic growth, global uncertainty and high levels of global gearing.

Corley highlights the substantial global re-leveraging (i.e. increasing debt), and the notable "deequitisation" of USA corporates (who are converting equity into low-cost debt). Globally, there are record levels of debt:gdp – both in the private and public sector. Thus, when interest rates rise it may have a geared (negative) effect on economic growth: This argues for a slow-and-steady approach to monetary normalisation.

Related to this is a refocus on dividend yield as a reliable driver of investment performance – and corporates are paying dividends at the expense of capex.

Weak demographics (e.g. fewer working age people) in many DM (notably Europe and Japan) will not support rising productivity nor growing economies. Labour productivity growth has been slowing down across all DM since the 1990's.

The key issue for the next decade is income disparity: As an example, huge value is being created in tech sector, but very few middle-income jobs.

She argues that the finance industry is "essential to the next stage of growth", and needs to engage with policy and policy-makers productively.

Asset Management:

While the current trend is toward passive investing, according to Corley active investment management is a better choice for investors when:

- Markets are not fully correlated (e.g. active can add value);
- When fees bear a relation to returns (e.g. value for money);
- Skilful managers can achieve superior returns over market cycles.

Alternative asset classes are part of the answer for long-term investors: 80% of investors have an allocation toward alternative investments such as property, private equity, hedge funds, real estate, infrastructure, private debt, and natural resources These classes add diversity, low correlations, and additional returns.

She notes a strong client interest in Responsible Investing: This is dominated by Europe, but in the U.S. is rising. However, for many investment managers "ESG might just be a label on the tin", and may not be a true process. Real ESG can be narrowed down to "intentionality": The intention for profit seeking businesses to behave well, and for developmental companies to a clear positive impact.

In those veins, she argues that asset managers need to expand their repertoire of asset classes (e.g. alternatives) and skills (e.g. ESG).

She notes that U.S. has a clear advantage in pre-ipo/VC/angel financing.

Corley's (Allianz') measures of success for the firm:

- Investment performance (risk-adjusted basis, not just absolute)
- Client satisfaction
- Profits
- Growing
- Employees

Investors:

She talked about the rise of "Guided investment architecture" -- short-hand for tools such as robo-advice and default investment options. Even within that framework, portfolios should be structured around clients' needs, there should not be a cookie-cutter approach: Thus, the interface of technology <u>and</u> customisation is the right path. Even that framework has be tailored: For example the baby-boomer generation is more comfortable to have a person involved, while millennials want to operate purely online.

Final Comments:

- Pay attention to the risk of "stranded assets".
- The continued search for yield: In equities dividend income remains attractive.
- Active investing remains an important feature for clients (provide you deliver value for fees, on a sustainable basis).
- Alternative assets continue to play a key role.
- There is no risk free portfolio.

Panel: Progress Interrupted – The Revolt Against the Status Quo (and the Rise of Populism)

Gillian Tett (Financial Times); Michala Marcussen (Societe Generale); Willis Sparks (Eurasia Group); Neil Howe (Hedgeye Risk Management)

Europe, Migrants & the French Election

Sparks: People are seeing change happen faster than they feel they can retain control -- politics is a lever to try to regain control over their destiny. Despite recent French and German elections, the populism risk is not passed: Voters are not voting for traditional parties. And it is going to be very hard for leaders to meet the demands and expectations of the voting populace.

While the Turkey/EU migrant deal stopped the flow of refugees to Europe, Turkish Prime Minister Erdogan needs to win the next election, and is using criticism of European leaders to win votes. Turkey could play hard ball with EU on migrants (e.g. the migrant doors could be re-opened).

Marcussen: There is no room for complacency in the political realm. Globalisation has squeezed out low wage jobs in the West, and governments will focus on structural reforms to make people feel safer. That might include education/life-long-learning programs and possibly barriers (e.g. trade barriers) to shelter people. If economies do not recover by the next round of election then the movement for populism will accelerate.

While polls show that the French are pro-EU and pro-Euro, despite recent votes, she notes that all the French candidates indicated a desire to renegotiate the EU arrangements.

Howe: There will be continued political volatility. He considers the EU is at risk, and may not be around in a few years (50% of the French voters in the 1st round voted for candidates who espoused exit from EU, and another 20% voted for a major EU reform). Macron is inexperienced, and technical, but trying to fix a country with one of the weakest economies.

The most popular leaders in the world are populist, autocratic and less interested in liberalism.

Trump, Populism & Authoritarianism:

Howe: Trump was elected on a populist agenda, but has not actually brought much populism as yet. Trump can't easily affect change with high valuations in the market and complacency: Congress is not motivated to do anything when things are evidently so stable.

Populism is realigning both (U.S.) political parties. The Democratic party is looking for a younger gen-x candidate – as the party itself is quite aged. A younger generation will stand for authority and community. Trump has uncovered a feeling that people are less confident in the (slow moving) democratic process, and more interested in building something that works.

In times of disorder (loss of sovereignty, uncertainty), people shift toward authority. People have lost confidence in Democracy.

Sparks: "I'm less interested in Donald Trump than I am in the Donald Trump voter": The real issue is the competition for who can be the populist candidate in 2018 and 2020.

Unified Republican control (of Presidency, House and Senate) indicates policies could move forward quickly, but that seems less sure now (given Trump's low ratings and troubles).

However, in general disruption favours the US and Europe because there is greater resilience in large, diverse, and wealthy economies.

Marcusson: If political risk does not translate into earnings, then markets tend to ignore politics. The current consensus is for some form of U.S. tax cut, which is good for growth and profits: If that tax cut gain starts drifting away, then there could be more market impact.

In the U.S. there is very low labour productivity growth, and nearly zero demographic growth. When you have high valuations and low volatility, markets tend to look for a catalyst to revalue the entire market.

Society seems tilted in favour of the old and wealthy, against the young and poor. Political disruption is necessary to rebuild that structure.

Living in a zero-sum society: What can be done to reduce inequality?

Marcussen: Elements of socialism are needed, such as income redistribution. Governments should be more proactive on reforms to reduce inequality. Sometimes reforms make people feel less safe in the short term, even though it may be good for them in the long term.

Sparks: Technology is also creating instability. The revolution in alternative power (e.g. wind, solar) is creating long term problems for energy based economies such as Saudi Arabia, Russia and Venezuela.

It is estimated that in India 69% of all jobs are at risk of automation: In China its 77%, and globally it's 60%. DM countries have the education and social-safety-net can partially absorb that shock, but much less so in EM.

Is Populism bad?

Sparks: Countries run by populists generally don't produce long term growth (e.g. Putin, Erdogan, Duterte).

Marcusson: Brexit will cost UK up to a full 1% of GDP growth for the next decade: Bad news for both the UK and Europe. Macron is not a populist but represents a revolution in the way politics works in France . He is trying to build consensus for labour reforms, pension reform.

Panel: Investment Wisdom from the Elders – Risks in Globally Diversified Portfolios

Gillian Tett (Financial Times); Jeremy Seigel (University of Pennsylvania); Robert Schiller (Yale University)

Equity valuations, Long-Term Real Returns, Economic Growth & Interest Rates:

Schiller: The Cyclically-Adjusted-P.E.-Ratio ("CAPE") divides the real-price of a share by its 10 year average real-earnings: So it's a slow moving measure of valuations. (Note: Schiller invented the CAPE) He notes that "earnings are too volatile on an annual basis if you are using earnings as a measure of intrinsic value". CAPE is intended to be a measure of the fundamental value of companies.

A CAPE and interest rate model currently indicates a 1% excess long term return from equities (over bonds): So if you were limited to the US and to stocks and bonds, then you would favour shares (but he notes that you have to have a very long term perspective and the ability to withstand volatility).

In calculating CAPE, rather than use S&P earnings you could use National Income and Product Account ("NIPA") earnings. NIPA may have higher integrity due to less smoothing and/or manipulation. But NIPA earnings are designed as a partial breakdown of national income accounts and don't include foreign earnings (which are material), and don't deduct bad-debt losses.

Seigel: He argues that equity markets are not as overvalued as they may seem.

S&P500 median P.E. over1954-2017 is 17x, and market is above that now. When discussing earnings yields, P.E.s, and real returns, it is assumed that earnings grow in line with inflation.

With the market at 20x P.E. there is a 5% expected real return: That is about 4.5% above bonds now, while the long term equity risk premium (expected return over bonds) is 3% to 3.5%. Thus, relative to interest rates, equities are not over-valued.

The 5% earnings yield is currently comprised of a 2% dividend, a 2.5% buyback rate, and only 0.5% on capex. (note: share buybacks should promote capital gains, which benefit from deferred taxes, versus dividends which are taxed on receipt).

He notes there are three types of earnings:

- Firm reported earnings: The most liberal exclude impairments, litigation costs, plant closure, etc.
- Operating Earnings: Excludes options granted
- GAAP earnings: Includes write-downs (on a mark-to-market basis), but not upward revaluations.

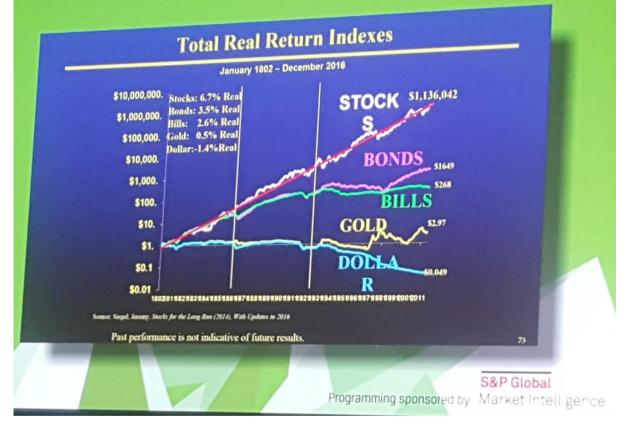
Why is the CAPE ratio persistently above the long-term average for the past 15 years? CAPE has been overly bearish for past 10 years due to the big accounting write-offs in 2008-9.

CAPE uses GAAP earnings – which is a more conservative number (write-downs are taken, but not write-ups). If you use S&P operating earnings or NIPA earnings it is smoother.

A driver to high P.E. ratios (low earnings yields) is the very low Interest rate environment – and arises from the low productivity and population growth rates. Low rates change the "normal" P.E. ratio to be higher.

He notes that relative to history it is much cheaper and easier now to own the entire market – there are low transaction and management costs: A 15x PE now is different to 100 years ago (at that time you could have had costs of 2% slippage). Thus, there should be an upward trend in P.E. ratios over time to allow for more efficiency/lower costs.

Seigel showed his long-term expected real returns (in a series from 1802 to 2016):



Thus, Seigel argues stocks are not overvalued relative to the alternatives – and are projected to earn excess returns over other asset classes. For example, 10 year TIPS are offering a 0.4% real return, bonds about 1% real return, versus equities at a 5% real yield.

This also applies to non-US stocks: There is a predicted excess return of 1% (over bonds) and this implies a 3% excess return on the stock market (over bonds) over the next 10 years (1% excess + 2% inflation).

However, the underlying assumption is that inflation and interest rates will stay low for a long time ('the new normal'). He notes that growth is comprised of two parts: a) productivity and b) demographics. The "Low productivity, secular stagnation, weak demographics" narrative points to low rates.

Schiller: Rates have been trending down for a long time, and possibly that has less to do with central banks and more because of demand for liquidity and quality: Regulatory and market factors driving down interest rates.

General Comments from Schiller & Seigel:

The rise of automation ("robots") in a range of sectors is accelerating now in a new and scary way. Many jobs are at risk, and quickly. What should we do about robots? Should there be a robot tax? Or an "inequality tax" in case of robotic acceleration? Schiller, in particular, is warm to the idea of protecting human jobs from robots (!).

With regards to the perceived public and private debt overhang: a) Entitlement systems (e.g. U.S. Social Security, Medicare) are not sustainable in the long run; b) Private debt is not overly leveraged today, given the low interest rates (and thus decent serviceability).

House prices – according to the Case-Schiller index – is not wildly too high, but optimism is rising.

Global Asset Allocation – Themes for 2017 and Beyond

Bob Browne (Northern Trust)

Risk Management & Equity Positions

Browne's team took a big position on Russian bonds in the late-1990s, just before the collapse of Long Term Capital Management: "We thought we were making a credit bet, but we were actually making a bet on market liquidity. We failed to understand the other holders' positions and risk tolerance". They lost about 70% of capital in 3 months, and spent the next 9 years recovering. The lesson? Watch out for the unintended bets in your position. You need to understand what is driving the risks in your portfolio. Examples of unintended bets in single stock selection: Sector, size, currency, factor, macro-economics, valuation, markets.

Browne argues that as a CIO you need to be an actual investor: You need to be a player coach, and not just talk about strategy. *(ACC note: Agreed!)*

He suggests you "work in two time horizons": Long-term discipline with short-term flexibility aimed to provide "downside protection and upside participation".

Equity markets are volatile: 5% and 10% corrections are normal parts of being an equity investor, but you can go a very long time before you see a large correction. U.S. equities are now 2000 days into a rally without a 20% correction, against a long-term average of 685 days. Still, he argues the case for staying fully invested: While cash is safe and liquid, Browne asserts you can get those attributes from other assets. Cash is the lowest performing asset class over time – and his neutral cash position is about 0%.

He admits that a structural bear market will hurt the fully invested individual investor. Normally a core holding of bonds is a partial hedge -- but if bonds themselves are the catalyst for the selloff, then equities and bonds will fall together. However, "for a recession, there are very few places to hide -- and high quality bonds is one of them."

Market View:

Browne thinks interest rates will be "lower-for-longer", while equities will slowly advance in a choppy way. With inflation also remaining mute, he expects lower nominal returns as well.

While professionals focus on real-returns, clients "eat" nominal returns – it affects their perspective of wealth, growth and well-being.

Political volatility is here to stay, and "if you haven't figured out how it affects your investment view and funds, then you have to get on the job". He describes the current environment as "populist roulette": Volatility of the electorate must be taken into account in investment strategy. As a political risk note (driving populism, income disparity and mistrust), he highlights that the real median income of U.S. households has fallen by 4.7% since 2008, while overall growth and equity markets have risen.

Presently his funds are overweight "risk": US equities and high yield, natural resources, and EM equity – all funded by short U.S. investment grade bonds (e.g. underweight safe bonds, overweight risk assets). Given high equity valuations he favours more alternatives (e.g. private equity, hedge funds) for non-correlated returns.

Reducing behavioural factors in decision making:

His Tactical-Asset-Allocation Committee is 8 people, plus "subject matter experts" by invitation. But management-by-committee is not ideal: While they aim for consensus in decisions, in practice " 3 of us drive 80% of the decisions", while others drive the analysis: "Some people are just not comfortable making the investment decision nor bet size."

He notes that consensus only works if there is a high level of mutual respect and recognition of the different strengths.

To deal with conflict between Strategic-Asset-Allocation and Tactical-Asset-Allocation they align the teams -- same committee members. They get people actually vote on their view, rather than the CIO making the decision. Browne notes that continuity of the team is important.

Browne highlights a possible current blind-spot in markets: Trump is a divisive figure and there are many people allowing their personal politics to affect their market view (e.g. dislike Trump, so sell shares). This, he says, is emotional decision making.

He comments that most investors tend to be better buyers than sellers: It is much harder to know when to sell/exit.

Considering the Alternatives: A Practical Look at Enterprise Risk Analysis and Alternative Investments

Frances Barney (BNY Mellon)

Barney addressed the challenges and methods for institutional investors to perform integrated risk reporting & management given the lack of consistency in various fund/manager systems and reports.

Her key question: Assuming you want to do integrated risk management, and assuming you must take risk to meet return requirements, how do you measure risk in a comprehensive manner and consolidate the information (from all your underlying managers, funds and investments) to be meaningful?

Enterprise Risk Analysis: Review all of the assets of an investor for embedded risks. But, she limits that to only investment risk (e.g. not regulatory risk, not longevity risk).

There are some different approaches to enterprise risk analysis:

- Historical stress testing (e.g. draw-downs)
- Value at Risk (e.g. correlation matrix based, with stress test. "What is the minimum amount by which a portfolio will fall over a given period of time at a given probability": How much will I lose over 1 year at the 5% probability level)
- Exposure Reporting (e.g. what are your risk buckets)
- Sensitivity Analysis (e.g. testing for specific risks/stressors to see what happens to fund).

All these define risk as the 'volatility of returns'.

Another risk to measure could be: How much you might lose if you want to exit (liquidity risk)?

She notes that any one measure will be incomplete, and it's more useful to look at several measures.

Good questions to apply to ERM:

- "Which manager exceeded their risk budget?"
- "Which manager is most exposed to EM equity?"
- "How would the fund perform if interest rates rise by 1% over the next year?"
- "What is my energy sector exposure across the fund? And which manager contributes the most risk?"

In terms of consolidating data, each type of investment or fund offers different information:

- Listed asset data (daily, live pricing, transparent, comparable)
- Pooled funds (underlying holdings, daily/monthly values, monthly reporting)
- Hedge funds (more opaque, but some info on holdings, monthly valuations and reporting)
- Private Equity/Property/Agri (monthly/quarterly reporting & valuation; can see underlying deals, but challenge is how to integrate into the risk framework)

Each type also has its own liquidity profile, rules, and price consequences.

If you look at funds by "holdings" versus "exposures" you get materially different answers about VAR and about how the funds behaved during various crises.

For example, you might have a U.S. listed equity whose business has large non-U.S. or EM activities: She argues that it is best to look-through to underlying business risks, and do so for all assets in all funds on a range of risk measures.

The challenge, in the end, is data: Different managers will report the same things different ways (e.g. region definition), and different asset classes and funds have different reporting styles, timing and valuations.

She noted that alternative assets (e.g. Private Equity, Hedge Funds) are inherently il-liquid and have weak available data. Thus, private investments must be "proxied", since asset values are opaque, sticky

and don't covary with other measures (and assets). She thinks Beta can be used as a risk proxy for unlisted equities.

She indicated there is an increasing product trend toward "liquid alternatives" – funds that use listed assets to proxy venture capital or private equity funds.

Best practices in ERM:

- Take a uniform approach. (e.g. you can't use each managers' VAR and combine them you have do that calculation at the centre)
- Position level information wherever possible (e.g. the actual holdings)
- Consider custom hedge fund structures (?)
- Use a single vendor to combine enterprise risk
- VAR is just one of many risks.

A New Era for Finance and Financial Markets

John Bogle (Vanguard)

Bogle founded Vanguard, and they now claim 50% market share in passive funds.

He estimates that indexing is now about 36% of all U.S. equity funds, and about 22% of total U.S. markets: He reckons it will get to 50% over 10-15 years. He acknowledges that at the 75% indexing level it would be easier for active managers to beat markets -- but he doesn't expect indexation to ever reach that level of take-up. He noted that while indexation might have been expected to reduce the amount of liquidity in markets it has not worked out that way.

He says there is currently a "mini price war" between Vanguard, Fidelity and Schwab, as the S&P500 index fund is a commodity. Fees are approaching zero (although zero fee ETFs do securities lending for profit). Bogle reported that Vanguard's cost basis is 12b.p. on \$4 trillion of AUM.

He is concerned that the concentration of index managers is so substantial (Blackrock 9% of the market cap, Vanguard 7%, and State Street 4%) that it could bring regulation, collusion risk, and could block new entrants. "Government intervention is a risk" he highlights.

While the "index revolution" has not claimed many victims (amongst active managers) yet this is due to the rising size of AUM in general: Generally rising markets have hidden mediocre asset managers. However, at the margin there should be consolidation in active managers due to the large swing in preferences toward passive.

Making the case for passive funds, he reports that only 57% of equity mutual funds in existence since 2006 are still around today.

- Average life of equity fund managers is about 9 years, so clients will see meaningful manager turnover over an investment lifetime.
- Active Managers face big challenges: Comparable information is now more freely available; Investors can easily access indexed funds; Performance (both absolute and relative) is highly visible.

That said, active management isn't going away: So long is there are competent value-adding professionals and processes. "Markets are highly efficient. Clever managers do a good job of price discovery." Nevertheless, he expects fees to be more dynamic, and more based on client outcomes.

Bogle argues that Vanguard aligned strategy and structure: Passive funds couple with and an investorowned "mutual' company structure. He says the flaw in the mutual fund business is that you have fiduciary duty to fund investors, but if you are a director of the management company then you have a fiduciary duty to the manco – and this creates conflict.

Canter Observation: Acknowledging this challenge, it is possible to align incentives with investors and create a framework where one's overarching fiduciary duty is to client/investors.

Bogle suggests a good mantra for the financial industry is to always ask "How will this investment serve my client over an investment lifetime?"

Bogle indicates investors can expect a 4.1% return on equities in the coming years: He derives that by [Dividend Yield + Earnings Growth+Capital gain based on expected P.E. expansion or contraction]. To get to 4.1% he applies a minor PE contraction over time.

He highlights that in the long run, the driver to equity returns is GDP growth, which has a high correlation to corporate profits.

Note: As a guideline, Bogle's (wise & correct) premise is that the best indicator of future returns is the current yield. If someone asks you what the likely return on a 5 year bond will be simply quote them the current 5 year yield.

"Bonds are guaranteed to offer low returns in coming years": The 60:40 classic allocation is an example of confusing "certainty" with "security" (e.g. bonds have a 'certain' low return, and thus don't really offer 'security' or risk avoidance).

Given the expected equity return, coupled with the likely low bond returns, and blended with some higher-return alternatives, Bogle expects retirement funds to have returns of about 5% in the coming years.

Given that low-return outlook, active management expenses are a much higher as a percentage of returns (e.g. the fee:return ratio) than in the past: Returns on equities were 12.1% from 1982-2017.

"Smart beta" or "strategic beta" funds have boomed, but Bogle argues they are flawed because: a) they ignore mean-reversion (and relative underperformance of value-stocks will hurt RAFI), and b) they are closet-indexers (he says RAFI has a 97% R² with the S&P500).

Bogle feels the growth of ETFs in bonds represents a systemic risk: High yield bonds and gold share funds are examples of ETFs getting beyond underlying instrument liquidity. They are pretending to offer liquidity that may not be there in a crisis. He also observes that "4-time leverage in ETFs is asinine".

As to the allegation that passive funds are not good shareholder-citizens: Bogle says index funds have to take an active role in governance: "You can't vote with your feet as you have to own the index: So if you don't like management then fix management." He considers that it is a "duty to society, community and investors to be engaged investors in governance matters." Accordingly, despite being a passive house, Vanguard has a governance team. While he says they are not trying to run investee companies they want companies to be run in the interest of its shareholders and not its management.

Systematic Risk: Are the World Financial Markets Still Vulnerable?

Paul Tucker (Chairman, Systemic Risk Council)

Nine years after the global financial crisis, the recovery is only partly done.

- The major central banks' balance sheets are still large and even growing.
- It is going to be years before we find out what the new normal is for global interest rates.
- The regulatory reforms agreed by the G20 have not been completed, and now there is a debate about rolling back some of those reforms.
- Household debt has not gone away, nor has the USA enacted reform of its housing finance market.

The 2008-2009 crisis was catastrophic because the banking system did not have enough equity. While bank capital is much more robust than 2007, the environment is less benign now than one would have thought or expected: The level of debt is higher than where it was in 2007, although more of that debt is in the public, not private (or household) sector and governments can extend duration of liabilities more easily than the private sector. More worrisome, there are fewer tools in the arsenal to deal with another recession. Rates are low, and quantitative-easing is more limited.

As specific concerns Tucker highlights:

- The lack of good information about the levels of Chinese debt. "We don't know enough about our own situation [let alone China]" and he cautions to remain alert to the Chinese shadow-banking system "which is wrapped up in the calculation of tax bases in the provinces and the inability to reform the entire tax system in China."
- The U.S. leveraged loan market: This "the dog that didn't bark in 2008-9" as it got bailed out by low interest rates. However he notes deals are now being done at 10x EBITDA: Investors are good at analysing companies, but not good at assessing the macro-economic variables which affect levered loans.

Tucker thinks the key data point for 2017 is U.S. productivity growth: "There is not a lot of slack left in the U.S. labour market, so if growth is to come it needs to come from productivity growth."

The Systemic Risk Council is trying to create global rules for the financial system: "People like rules, so they can understand the framework" but the finance industry is a hotbed of "endemic regulatory arbitrage" and a purely rule-based system would fail. The challenge as to defining principals and giving some discretion the various regulators.

The core pillars of the reform program to make the financial system more resilient:

- Ensure the core of the system banking carries more common equity;
- Banks should be much less exposed to liquidity risk;
- It is necessary to take a system-wide view, and less focussed on legal form but rather substance of what company does (e.g. oversight of both banks and shadow-banks, and the need for macro-prudential regulations)
- Simplify the network of exposures (e.g. centralised derivatives clearing)
- Introduce enhanced resolution policies for troubled entities of all types (e.g. banks, insurers, shadow-banks, clearing houses).

This last is the most important of the lot: Enhanced resolution policies are about making banks and financial intermediaries part of the capitalist system – otherwise "gains are privatised, losses are socialised", and that is "politically toxic."

Banks and dealers can fail, and failure is part of the market process as it allows the reallocation of resources. The losses have to go somewhere—and since it's not going to be the taxpayers, it will have to be the shareholders and creditors (bondholders).

In Tucker's view this puts asset managers central to the strategy of improving financial system resilience. Since we cannot rely on regulators to get everything right, nor spot when a firm might be failing: Analysts and market players will monitor issuers and demand information needed to make assessments and price for risk. Likewise bondholders need to learn to price a bond that is convertible into equity, and get better at pricing for risk. Investors and asset managers have a massive stake in the outcome of the resolution-framework process. Tucker believes that the success of the reforms depend on the voices of investors, and the discipline (and demands) of markets.

ACC Comment: I fear he is hopelessly naïve if he believes that bond investors (as a group) are going to take true responsibility for proper analysis, risk assessment and controlling issuers' behaviours. They never really have done so – happily outsourcing oversight to ratings-agencies and central banks and hiding behind "diversity" as a catch-all for bad investment choices.

Central Clearing/Counterparties: The G20 in 2009-10 decided that to get the benefits of centralised risk management and margining then centralised clearing was the way of the future. Clearing houses and central clearinghouses are Too-Big-To-Fail by design (as opposed to banks which became too big to fail by accident). Central clearinghouses are actually systemic risk managers, but they don't really know it yet (that is, they have a significant role now, but they aren't yet the systemic risk managers they will be). That said, clearinghouses might also be allowed to fail without government support. Tucker's view is you should not build a system based on the idea that things cannot fail: Build systemic resilience and have a plan for failure. Bad things will happen.

ACC Comment: It seems a dichotomy to concentrate trades through central clearinghouses, but admit they may be allowed to fail. I must have misunderstood him.

Shadow Banking: It is hard to distinguish between benign/beneficial financial intermediaries, and those that are dangerous. For example, ETFs are a fine idea, but geared ETFs or "ETFs of ETFs" could become systemically risky. In that vein, "liquidity transformation" products (e.g. ETFs which promise real-time liquidity while holding illiquid assets) create risks, unless these can be gated and are structured for bad times.

Systemic View: The idea that finance can be put in buckets of 'banking', 'capital markets', 'insurance' is delusional – you have to look at the entire system and all its players. Likewise, the systemic view must unavoidably be international: Interlinks mean the weaknesses in one jurisdiction will create imbalances globally. The alternative is financial autarky (e.g. every country isolated and acting for itself): He argues that no country can make sure its financial system is safe for its own citizens without international cooperation (unless it has comprehensive capital controls – and no one wants to go down that road).

Dodd Frank: He acknowledges that Dodd-Frank cast its net too wide, applying similar rules to large, international banks and small local banks. Thus, community banks' regulation could be largely put in the

hands of each national government. A challenge to Dodd-Frank is that the difference between marketmaking and proprietary-trading is very hard to write down and regulate.

He cautions that the repeal of Dodd-Frank (as has been mooted) could affect the ability of US banks to operate in a global environment.

Tools for Maximising your Career Success

Carla Harris (Morgan Stanley)

Personal Currencies for Career Advancement:

All human engagements have an element of subjectivity: For your career you have to consider how you manage those subjective inputs.

Your **"Performance Currency"** is based on you delivering what is asked (plus more) equates to more Performance Currency. Early in your career delivery will get you noticed, paid more, and could attract a sponsor. (Advice: Make your work relevant to the people who will read it.)

A sponsor is the most important relationship in your career: You will not ascend in your organisation without a sponsor. A sponsor will be asked to spend their valuable political and social capital on you, and they need a reason to do so: Performance currency is your value-proposition to your sponsor. While a sponsor is vital, a mentor is a "nice-to-have". A mentor can be a good advisor and offer tailored advice to you for your aspirations. Your mentor does not have to be in your organisation.

However, over time your Performance Currency has lower marginal returns: It becomes expected of you. Thus, as you get older you need to develop...

Relationship Currency:

The Relationship Currency is generated by the investments you make in the people in your environment. "I let my work speak for me" is a losing proposition: Your work does not speak! You need to put your work in context for people around you. Frequency of 'touch' builds relationships (e.g. with colleagues, clients): The easiest way to build those touch-points is to demonstrate that you are listening to them (everyone wants to be listened to).

Your ability to ascend in your career will be a function of somebody's judgment about you (e.g. "will he succeed?", "will others follow her?"): Those judgments are directly affected by the relationships you have built. People will only recommend those who they know, and they need to feel they know you well enough to put your name forward (e.g. back you or recommend you). If you feel stuck in your career that is a red flag that you have not invested in your Relationship Currency.

Most people overinvest in their Performance Currency and underinvest in their Relationship Currency. Introverts in particular need to practice building relationships. "Be intentional about your performance. Be intentional about your communications. Be intentional about your relationships."

Elements of powerful leadership: The L-E-A-D-E-R model

Leverage: You alone won't always have the right ideas, and you should create an environment so that those working with you want to contribute their best idea. They do it for affirmation, but also must be secure knowing that mistakes will be tolerated.

Efficiency: You need to know and communicate what "success" looks like for the team -- if you don't know then you create frustration and inefficiency. Define and redefine success all the time over the short-, medium-, and long-term.

Authenticity: Being real is at the heart of your power, and it is your own, personal, distinct competitive advantage (i.e. your authenticity is unique to you). Do not waste valuable mental capacity to make up a persona, rather be yourself. Trust is at the core of any relationship, and if you are authentic, others can bring their authenticity as well.

Decisive: You need to make decisions, even in the face of making a mistake. Don't do nothing! Change is a reality in our work lives, and you need to adapt to change.

Engaged: You must be engaged with your team: Dialogue, Brain-Storming and Feedback. If you manage by fear you will only get the job description from people, not the outsize contribution. Millennials have lived in a high engagement environment, and 21st century leadership means high-feedback and high engagement.

Risks: Information is a commodity, and you have to be comfortable taking risks without complete information, and also comfortable coping with change. Particularly in adverse environments you need to stick your head up, throw out ideas, and take some risks. When you have a new idea, you must educate others, sell it to them, and price for it (e.g. negotiate pay). Advice: Take the risk to seize a new opportunity if it gives you experience & learning and will it help build relationships.

General comments:

How to manage an insecure boss? Give them huge amounts of interaction, feedback, and information. Go for information overload: Make them comfortable.

How to deal with a bully? Engage directly by asking "what went wrong?" and "how can I fix it?" Also, build lots of relationships around a bully or insecure boss so they cannot easily undermine you: Make them the 'outlier'.

Harris says the skills to acquire early in your career are:

- Management
- Analytical
- Presentation
- Strategic

Harris is a high energy speaker, best experienced on video: https://www.youtube.com/watch?v=0rWmtyZXkFg https://www.youtube.com/watch?v=y3YYCTf8YTU

Design Thinking Toolkit: Strategies for Successfully Leading Growth and Innovation at Your Firm

Jeanne Liedtka (University of Virginia)

Design Thinking is a framework for making innovation a replicable process. The paradox of innovation is that the set of experiences and competencies that got us where we are, may not be the ones we need to progress in a dynamic environment.

People with a Fixed Mindset see "life is a test", while those with a Growth Mindset consider that "life is a journey". The Growth Mindset accepts uncertainty, seeks new experiences.

Design thinking aims to give Fixed Mindset people a method to work like Growth Mindset people: "Don't change the horse's stripes, just give it better tools".

Some premises:

- We rarely have enough data to make big decisions. Thus, low cost, limited, experimentation is a great tool. Aim to "fail small and efficiently and gather more information".
- The ability to innovate is dependent on your own repertoire of skills and experiences, and needs a diversity of views and ideas.
- You can create "speed learning" by having engaged people, aligned around a goal, curating their learnings (note that inertia, disagreement, or confusion slows down learning).

In Design Thinking problem solving is driven by three core beliefs:

- Empathy: Understand human needs
- Invention: Discover new possibilities
- Iteration: Use these as stepping stones to better solutions in an iterative way.

Design Thinking steps:

- 1. Decide on what the challenge/problem is. Define it widely (not narrowly). Try to phrase it as a question.
- 2. Remove intellectual constraints: "If anything were possible, what I would I do....?"
- 3. Get a grip on reality. "What is the state of play?".
- 4. Move into considering alternative solutions. Some tools here might include Journey Mapping (?), Value Chain Analysis (?), Mind Mapping, or Brain Storming. "What if we did...?"
- 5. Move into assumption testing and Rapid Prototyping: 'What wows the market?"
- 6. Customer feedback/co-creation, and a Learning Launch: "What works in the market?" In this phase ask the customers questions about the idea. In prototyping show respondents rough drafts and sketch-outlines ("the more finished a prototype is, the more false-positives you will get" as people don't like to shoot down others' work).

Canter Observation: Design Thinking is based on attentive listening, meaningful questions, testing ideas, and taking small incremental risks – similarly to many relationship and business tools (e.g. mentoring, coaching, therapy, and innovation). In sum, people's minds operate best in the presence of a question, and they thrive on being listened to.

Traits the Distinguish Investment Leaders

Fran Skinner (AUM Partners)

The aim is to have high performers at all levels in the organisation: To build a team full of leaders.

Who you bring into the firm:

Great investment leaders know what attributes really makes their firm unique -- the reality versus the ideal (e.g. 'website') version. Recruit for who you are, not what you think you are. Aim for Culture Fit, Eligibility Fit, and Suitability Fit.

Practice *continuous* recruitment: In general the recruitment process is time-bound and formulaic: a) a position opens, b) post the job with agents and on website, c) fill the position. But that is "a game of chance and luck... what are the odds of finding the right person at the right moment?" Skinner asks. She says recruitment should be happening all the time – the organisation should always be looking for good candidates on a rolling basis.

Hire for "fit" in the team: Everyone on the team should know what makes a great fit, and is responsible for helping choose candidates. Technical skills are a necessity, but it is a mistake to hire for technical skills and make culture a side-issue.

Assess the alignment of firm and work environment with individual, for example;

- Entrepreneurial versus predictable/stable
- Collaborative versus Independent
- Long term perspective versus short term. (be sure to define what is 'long term')
- Team based versus Autonomous
- Noise versus Subdued (train station versus library)
- Pressured versus relaxed
- Public contact (e.g. press, conferences, clients) or Internal
- Communication style: blunt or diplomatic

When you have a lack of alignment it becomes evident quickly.

Note: Ask job candidates culture questions before they know the "right" answer.

Managing High Performers:

Great Investment Leaders know that Compensation is just one piece of the puzzle about what motivates people: Aim for fair-pay and job satisfaction, but generally the better the fit with the team/firm the less important money is.

Suitability fit can be assessed by off-the-shelf tools and cultural tools. For example, some attributes of suitability for a Fundamental Equity Analyst could be:

- Takes initiative: What needs to be done? Does she just do it, or wait for direction?;
- Comfortable making decisions: Demonstrates conviction in proposing/selling to others;
- Great awareness of their own tendencies: Risk taking, biases, optimistic/pessimistic;
- Passion to pursue new information, and willing to adapt to new information;
- Seeking leadership position (or not... may not want to manage people);
- Development and/or advancement: Ask "What does advancement look like to you?";
- Recognition needs: Ask: "What does recognition look like to you?.

There are off-the-shelf tools to determine fit for particular positions... or there is the "low tech" option.

Great investment leaders do not assume they know what you want to do (e.g. by engagement they should know who wants to be a leader and who wants to be an analyst; and what "growth" means for each person). Engagement, dialogue and continual feedback are the best tools.

- "What's a great day at work for you?"
- "What are you working on?"
- "Tell me about it?"
- 'What do you suggest?"
- "What are you worried about?"

- "What are your thoughts?"
- "What would you do if you were me?"

Great Leaders know that satisfaction is about discretionary effort (e.g. what you have to do, versus what you want to do). Wikipedia, Yelp and TripAdvisor are all driven by people who get paid nothing for their effort. There is a human need to share knowledge, to be heard, and to be productive.

Great leaders avoid the "knowing trap" (e.g. "I know it all"). As we get up-the-ladder we tend to ask fewer questions, and become more directive. To avoid the knowing trap, you have to hold back your views and ask questions.

http://www.barrons.com/articles/creating-a-team-full-of-leaders-1477305430

Panel: Getting to Great: Investment Firm Management

Joseph Brennan (Vanguard); Tina Williams (FIS Group); Leo Grohowski (BNY Mellon)

For an investment firm what are the factors of success (aside from performance)? Brennan: Firm culture and mission that aligns the staff, firm and clients. Build and maintain trust over the long term. Hire great talent and have them aligned with your culture.

Williams: Having a firm culture that allows you to perfect your craft - this brings focus on caring about clients, service, results, people and new investment ideas.

Grohowski: "People, Process & Performance!" Attract and retain the talent we need to perform and serve clients. Client needs are changing dynamically, so innovation is necessary to meet those various needs. Lower cost solutions are a structural change.

How do you hire, incent and motivate?

Williams: Industry trust levels are very low, and that drives peoples' career choices. We want people who are motivated to do the best, and not all about the money. The annual review process should reinforce the culture.

Brennan; When you hire young you have a chance to affect peoples' cultural choices. Candidates differentiate themselves by their curiosity, passion, intelligence, team work, and culture fit. "We can teach technical skills": Cultural stability of the firm is 'number one''.

How do you look at diversity? What are you doing about it?

Brennan: Diverse teams make better decisions. You should have a team that mirrors your clients' profile. But to find staff you are often "fishing in a small pond" and you need to make extra efforts to get diversity: Use specialist agents, train and support good candidates, and aim for a higher than industry average of diversity. (Note that the industry average, amongst professionals, is 15% diverse). You can add diversity, but it you don't foster inclusion then you won't succeed!

Williams: The benefits of diversity are not theoretical, but are supported by studies. You need people in the firm who ask the right questions about diversity: The real question is how diverse is the firm at

management level. "You won't find something unless you are looking for it", and firms need to look hard, in new areas and from new sources, to find racial and gender diversity. She notes that when diverse candidates are found, they are often channelled into business development and operations – while the path of leadership comes from the investment side.

Boutiques tend to have a "star" system, so diversity is also about having people to challenge the thinking of the star.

Grohowski: Our clients are diverse, and we need to keep up with that. Within investment decisions, a diverse group brings more ideas and curiosity. "I see and feel the dangers of 'group think". Firms must make space for alternative perspectives and ideas.

A good 360-degree question is 'does my manager foster inclusion in the team?' *Canter Observation: The diversity discussion echoes, but is about 10-15 years behind, South Africa. Also, in the DM context "diversity" is much more interested in gender issues*

What is the impact of technology in the millennial generation? On products, services?

Grohowski: We are still using the same pie-charts and PowerPoints as we did 30 years ago, despite the changes in client needs and thinking. If we are doing outcome-based investing we need to change our reporting. Often you can see different generations of client – in the same meeting – responding differently to different reporting methods.

Brennan: Baby boomers are now thinking about pre-retirement/retirement. Millennials are a huge growing force who are adept and comfortable with technology – you need to give them tools they can use themselves, but they sometimes want advice: You need to build a high-function platform, and have good backup support (e.g. call centres).

Williams: For millennials the products and information delivery system has to be pain-free, user friendly, and "cool". People want to be empowered with tools to do it themselves. Funds-of-funds are at risk, as people want to choose building blocks of customisation.

Active/Passive Debate:

Williams: Increasingly investment technology has to deal with big-data, satellite imagery, etc: These sources will reduce the research cost of 'manufacturing' investment returns. This will also blur the lines between active and passive (e.g. "automated active"). It is notable that there are parts of the investment opportunity set that passive doesn't do well (e.g. less liquid markets, EM, frontier). Smart beta products are about 1/3rd of ETFs. The ETF trend has been driven by low interest rates as clients buy dividend-income funds or yield enhanced products. Williams indicates this may be "false liquidity", and that ETFs can be an additional source of il-liquidity (or liquidity demand) in a crisis: "It's an untested experiment."

Grohowski: He worries about robo-platforms: They do a nice job of risk-profiling and asset-allocation, but a bear market could cause an over-reaction by investors. Since future returns will be lower than in the past, the over-simplification by robo-advisors may damage industry trust. Some asset classes don't lend themselves to active management due to relatively high efficiency of

those markets, so low cost options (e.g. passive) are a permanent trend. Nevertheless, active investing should not take the back seat: Better active management performance is usually associated with difficult markets (e.g. rising trend markets tend to hide good active management relative to passive). Another key differentiator for active managers is post-tax returns.

Like others, Grohowski is also concerned about liquidity risk in levered or alternative ETFs.

Brennan: It has been an incredible few years of flows into indexed funds. The real issue is not active versus passive, it is low-cost versus high-cost: Investors now understand that net-returns are what matters. Drivers to index funds are a) low cost, 2) ETFs' emergence as another channel for index funds (and passive products are used to express active [e.g. asset allocation] views, and 3) target date return funds have become the default option for many retirement funds (and those products tend to be indexed).

He notes that ETF pricing – which is live – may be a good price discovery mechanism for markets that are not open for trading (e.g. out of time zone). Also, addressing the il-liquidity risk in ETFs, he highlights that there have been "zero instances" of illiquidity in the passive and ETF markets.

Digital Transformation: It's Impact on Finance and Investing

Scott Klososky (Future Point of View)

Digital transformation will be viewed as a 50 year historically significant era (2000-2050) when "humans connected everything". We see this in free & instant ("frictionless") communications; the steps from mobility, to wearables, to implantables; to immersion in data & information: Everyone can get the same information, easily, cheaply and quickly. We will soon have an individual "AI" -- not a generic Siri, but your own personal lifelong 'friend'.

Technology advances in degrees:

- Evolution of Functionality. For example, an irrigation system starts out as Connected (to a central controller on a fixed schedule), then moves to Smart (where the system decides how much to irrigate based on weather) and onto Edge Intelligence (where each node can decide how much to irrigate).
- There is also evolution of Capabilities from 1) monitoring, to 2) controlling, 3) optimising, and 4) autonomy.
- Finally there is Convergence between systems, with widespread rules-based systems networked to a wider environment.

Software and robotics will replace a lot of jobs in the coming decades. A "Humalogy scale" measures that portion of any service/activity that is human versus machine: From -100 (all human) to +100 (all machine). Examples: Driving a car could be about 0 (but is quickly moving positive); Hand-crafts = -90; shopping on Amazon.com = +90.

Digital readiness is a state of human capacity, and acceptance of what technology can give you. The business strategy risk-gap is "what you are doing with technology versus what you could be doing." Leadership skills require a vision about how technology is going to change your industry and business. Leaders should aim for pre-emptive vision – to spot the inflection point of technology change where you are either "on the bus" or "off the bus".

Klososky highlights what we all now realise: There are substantial risks of connectivity. <u>https://www.youtube.com/watch?v=lc7scxvKQOo</u>

Technology in Investments: AI will soon be running with massive, real time data. Models will be able to perform predictive analysis: New news will trigger automated impact analysis ("who will win and lose") and fast decisions. So, while everyone uses data, investment firms need to learn how to 'harvest' data, and have data driven investment models.

Canter Observation: It has always been true that many high-level, algorithmic, statistical, or quantitative investment techniques rely on diversity, liquidity and data: These are attributes of large markets, not smaller economies. A similar problem applies to the quantity and accessibility of data.

While "Big Data" is about architecture and harvesting, "Business Intelligence" is above those foundations.

The Outlook for the Global Economy and Financial Markets

Abby Joseph Cohen (Goldman Sachs)

The U.S. expected GDP growth is 2% for 2017, as it has been for several years. (Note: The budget assumptions from the White House uses a 3% growth rate, and the proposals are therefore untenable).

Cohen set out to challenge some presumptions about the state and structure of the economy. First, she notes there are wide variations in performance by sectors:

- The single fastest growing sector in the U.S. for decades has been exports.
 - \circ The global economy is doing better it is U.S. led, but others are picking up.
 - \circ $\,$ U.S. has large trade deficits with China, Europe and Mexico.
 - Companies report that a reduction in trade would be damaging: It is not a zero sum game, it is a complex, interconnected trading and supply-chain system.
 - The U.S.'s largest trading partners are North America, Europe, and China. While North American and European currencies have been falling, the Chinese Yuan has been strong (10% stronger post-GFC).
- 2nd fastest growing sector for the U.S. has been business equipment and software
 - Business investment in structures (buildings) has been weak, but is recovering. Office space per worker has dropped by 25% since 1979: Less space means less buildings.
 - Residential & non-residential construction has recovered and is growing, with a building boom in commercial properties.
 - Public infrastructure spending has lagged sharply.
 - Capex in 'new age' sectors (technology) has been higher than 'old economy' sectors.
 - Statutory tax rates in the U.S. (the sum of federal, state and local taxes) is about 39%.
 But the effective tax rate is 31%, and fewer than 10% of companies in S&P500 are paying the statutory rate, and many paying well below 31%.
 - Companies are at record levels of cash generation, and increasingly that is being used for dividends and share repurchases. About 30% of earnings is being used for capex, and 15% for M&A: She cautions that a much lower proportion of cash is being used for reinvestment for the future.
- Consumer spending is 65-70% of GDP, and this sector has been accelerating from 2014.
 - It took 6 years for employment to recover from GFC, but employment growth is now robust (6.5m-7m net new jobs, unemployment rate at 4.4%)
 - Consumer balance sheets have de-levered (the debt:personal income ratio is back down to pre-1980 levels).

- While unemployment rate is 4.4% overall, there is wide disparity by education level. Likewise with family income based on education level is also disparate.
- There is a declining female labour force participation (this could be a child-care cost issue).
- $_{\odot}$ $\,$ There is higher employment growth in large cities, and slower growth elsewhere.
- Compensation has risen slowly, and wages & salaries have been outstripped by benefits (e.g. health care, pension). But wages are now relatively rising, and that will support consumer cash-flow and spending.
- While most sectors are showing rising hours-worked, the retail sector has very weak growth, employment and hours.
- Wages in Science/Technology/Engineering/Maths ("STEM") are about double the rest of the economy – but only 7.2% of U.S. workers are in STEM industries. She notes that higher wages apply to all STEM industry jobs (not just professionals).
- Government spending has been weak at Federal level, but stronger in state and local level.
 - In 2009-10 government stimulus added 1.5-2% to GDP, but from 2011-2015 it became a drag. Looking forward more spending is expected for state and local government.
 - Keep in mind state and local governments often must have balanced budgets year by year.
 - Public construction is also starting to rise. Roads and education are large, but power and water spending has been low and stable. Likewise, there is low spending on broadband access.
 - A major concern for growth is broadband access outside of major cities.
 - Fiscal deficits: While the deficits were tragic during the crisis, it has recovered quickly. (The U.S. Federal deficit is now -3% deficit/GDP, recovered from -10% in 2009).
 - However, with no change of policy the deficit:gdp will rise from 3% to 5% in the coming 10 years, almost all of it due to medicare and social security. This is a big problem.
 - Likewise, with no change in trajectory, aggregate U.S. federal debt:GDP is projected to rise from =/-75% now, to nearly 150% in the coming 25 years.
- R&D/Long-term investment: US is in the top-third of countries, but is falling behind. Previously R&D spending was at 4.5% of GDP, and it's now at 2.5%. Some countries are investing heavily in growth (e.g. R&D, education). Notably in science and technology, the U.S. is middle of the pack (down from #1), with far fewer science graduates.
- Equity Markets: The U.S. equity market has diverged strongly from other markets, followed by Germany. As equities have risen, volatility has fallen possibly due to the movement toward indexation (and closet-indexation).
 - Equity valuations have performed in line with underlying economies, and global equities are not wildly overpriced.
 - However, she cautions that markets are priced for things to continue to go well. At current prices you have to believe things will go well. By contrast in 2009-2012 markets were priced for bad outcomes.
- Fixed income markets are overvalued: Government bond yields remain negative in more than 1/2 the developed world, and "no market has yields high enough". There could be wide spread shocks due to revaluations (i.e. rising yields) in bonds. Cohen assumes yields are going to go up.

- Since GFC individuals have moved into fixed interest assets, but they don't understand duration risk. Falling bond fund values could have knock on effects for consumers and industry trust.
- Capital is flowing to US bonds (corporate and treasury) due to lower global yields. While valuation models say U.S. yields are low, they are still *relatively* attractive (versus global yields).

Policies:

- Trump leans toward deregulation generally.
- Corporate tax reform has bipartisan support (less so personal tax reform): There does seem to be willingness to talk about corporate tax reform.
- Some believe that even if there is not tax reform, there will be tax cuts.
- Not clear if a repatriation holiday* will happen, and how that money will be channelled into productive uses.

*This refers to a holiday on taxes due by U.S. corporates who bring offshore cash holdings back to the U.S. Many corporates seem to have channelled profits to lower tax jurisdictions, creating large cash piles offshore, but now can't bring that money back to the U.S. without incurring tax penalties. Trump is looking at how to enable that money to "come home".

Crisis Risk: Cohen questions whether there a "plunge protection team" in government to head off a crisis/meltdown. She notes there is reduced probability of a meltdown (due to stronger balance sheets), but there are fewer tools to use in case of a crisis. Also, there may not be "Yellen Put" since unregulated markets can be the source of risk. The US banking system is in very good shape, and several years ahead of European counterparts.

Over Confidence: Investment professionals are not immune from behavioural traps, but they think they are. Data sets change, and models may be mis-specified. Currently volatility is low and equity prices are robust, but they may not stay that way: Too much good data may fool people into thinking they have insights or control.

Allocating to Emerging Market Local Debt within a Global Fixed Income Portfolio

Wim Vandenhock (Oppenheimer Funds) [sponsored presentation]

Vandenhock says that by 2020 EM are expected to represent 60% of global GDP, and he made the usual simplistic arguments about deepening markets, upgrades, more stability and growth in EM.

Further, he says that EMs' history is driven by trade, commodities, inflation, the global economy, and currency moves -- but (by some miracle) the future is all about urbanisation, demographics, and growing share of world GDP. I disagree that fundamental single-country drivers will give way to macro/demographic factors. His sales pitch is that investors need to "get on the band wagon" of EM growth, and should do so with bonds. This is a weak argument: If you believe in growth, then buy equities.

GEM bond returns are about 5.6% (in USD) over 10 years, but with a remarkable standard-deviation of 13% p.a. (!) Returns have been driven principally by the credit pickup of EM debt, while volatility is

added by duration, and (mostly) by currency moves. EM bonds have correlations of 50-60% with credit and bond indices in USD.

EM local currency debt accounts for 47% of total EM debt (versus 53% in hard currency), but is a growing share. Overall, about 10% of the local currency debt is held by foreigners -- but some countries have more than 50% held internationally.

Vandenhock's investment philosophy points:

- Identify key risks in your markets (e.g. asset bubbles, private-debt risks, economic indicators, regulatory policies).
- Have good knowledge of market structure (e.g. how do the local markets function in terms of trade, settlement, liquidity, counterparties).
- Understand local policies (notably the intersection between politics and economics), and the effect on the public and private sectors (with a particular eye on large role of governments in EM).
- Have an investment policy to stay exposed through the cycle, so as to avoid being whipsawed.

Outlook:

- The reflation trade continues, with growth in EM above DM.
- There is uncertainty emerging from the U.S.
- Monetary policy remains favourable to EM bonds, and normal US rate hikes should not derail EM growth.
- In credit, valuations are looking stretched so managers should be selective.
- South Africa stands out as a "positive carry" country.

Canter Observation: Essentially this was a sales pitch for an EM bond fund. He touted the usual offthe-shelf arguments of a) "it's growing and you need exposure", 2) "you need a skilled manager to do it for you, because we have the magic process to identify and manage risks", and 3) "stay invested through the cycles". His strategies seem simplistic and trite and he downplays volatility – past and future – arising from forex, duration, global macro risks, and local factors.