ASHBURTON INVESTMENTS

INSIGHTS ON THE

London 72nd CFA Institute Annual Conference: The new reality in investment management

#DISRUPT19

...no better place to learn more about the current and future trends of an industry than at the conference which is put on by the non-profit institute that stands at the forefront of an industry, the CFA.

Murray Anderson, MD: Retail and Commercial

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INTRODUCTION

The title of this year's conference was enough to make me want to attend this conference again, since the asset management industry is in a state of disruption and no better place to learn more about the current and future trends of an industry than at the conference which is put on by the non-profit institute that stands at the forefront of an industry, the CFA. This year, in London was the 72nd year that the CFA Institute hosted the conference and yet again were able to put on a packed agenda with some of the best minds of the investment industry to talk about the very things that are changing the face of the industry at present and consider what the future state of the industry will be, considering the changes going on around us. An important meeting place of circa 2000 delegates from around the world.

The largest contingent of delegates came from the US and UK, but again the South Africa contingent was the largest outside of the hosting country with 296 delegates in attendance. The list of attendees was made up of asset owners and industry participants, all looking to learn about how the investment industry is being shaped by the disruptions around us and what actions are to be considered to ensure their businesses/funds are adapted to protect and thrive in an era of disruption and importantly how to ultimately best serve their clients and members.

This year Rudigor Kleyn and I were joined again by Gordon Wessels and Zandile Ngwepe and Kgothatso Nyabela, who agreed to come along to the conference and help cover the vast agenda, since each of us is not able to attend all of the sessions over the 3½ days. At a glance the agenda offered well over 70 different sessions thought the conference, ranging from the plenary sessions, breakaways as well as the concurrent practitioner sessions, all offering content that was designed to help the attendees engage across topics of: asset management, Brexit, capital markets, career development, fintech, global opportunities, private wealth management, ethics, ESG, valuations and broadly topics covering both private and public markets.

Besides the learning opportunities over the 3½ days comes the networking opportunities that present themselves, with the ultimate aim of us being able to engage the South African delegates, of which a large majority, as has been for the past 20 years, are the asset owners and small contingent of IFAs that attend. Prior to journeying, we spent time as a team discussing who and how we were going to actively engage the list of delegates we sourced from the CFA, to ensure we delivered value to the business not only from learnings, but importantly having strengthened and built new relationships, which ultimately will aim to turn into long-term profitable relationships for Ashburton. Having seen the fruits of previous CFA conference engagements we undertook to deliver on this with serious intent and I can assure you that between the 5 of us we certainly took this part of the mission very seriously. As a side note, it is very instructive to see how our competitors who attend with the same intent operate, where in fact on the Monday evening a number of them 'ambushed' the social (self-funded, so as not to fall foul of Section 8) event hosted by Ashburton Investments, Tri-Alpha and Futuregrowth. All hungry to have a shot at the same profit pools we are hunting in – it is a very competitive and lean market we operate in! Clients that were in attendance included: Unilever, MIFA, GEPF, Riscura, 27Four, Sentinel, Alexander Forbes, Momentum, Edge, Naviga and Southern Charter to name but a few.

> In the book he does an incredible job of taking the reader through the events that led up to the financial crisis of 2008, which ultimately was a wall of leverage...

The conference kicked off on the Sunday afternoon with registration and a number of very interesting sessions covering behavioural psychology, the future of Investment Management and sadly one that I missed being a talk by by Adam Tooze an economic historian who has written one of the seminal works on the GFC entitled Crashed: How a Decade of Financial Crisis Changed the World. A must read for any person involved in markets who is interested to understand how the world got to where we are today. In the book he does an incredible job of taking the reader through the events that led up to the financial crisis of 2008, which ultimately was a wall of leverage, hidden in different corners of the financial system by firms selling exotic products to the unsuspecting. A fitting talk to have at this juncture, where again countries and companies are leveraged to heights last seen back in 2008, namely Italy and China, which were mentioned often in the various lectures over the ensuing 3 days. More on this later.

Murray Anderson

Insights from Gordon Wessels

RETHINKING INVESTMENT MANAGEMENT FEES, AND THE "VALUE FOR MONEY" EQUATION

Dan Brocklebank (UK director of Orbis Investments)

Thesis

Clients are looking for value for money. Passive funds are seeing huge inflows as asset owners try to address asset management costs. Current active asset manager fee structures incentivize the manager to simply add more assets while not sharing in any risk. In an Allianz GI survey 68% of institutions said that they wanted their asset managers fees to change in line with performance. In the same survey, 58% of respondents said that they would change to managers that offered more innovative and better aligned fee structures.

Current regime

Asset manager's revenues are determined by: AUM X Fee %. Asset managers maximise the AUM portion by:

- Keeping all existing clients
- Launching ever more funds/solutions
- Increasing its sales force

Three things to consider

❶ Are traditional fee models adequate?

- ○ Benefits of the current model (AUM x Fee %)
  - — Simple to explain
  - — Easy to calculate and report
  - — Easy to compare across managers
  - — Easy for clients to predict costs
  - — Easy for managers to predict revenues
- ○ A study done by the Cass Business School, City University, London determined that a fixed fee as a proportion of AUM was the most prevalent fee structure offered to clients and yet it was also the fee that is best for the manager and worst for the investor.
- ○ An FCA Asset Management Market study report in 2016 determined that the prevailing fee model (as per b above) incentivises asset managers to grow AUM which may not necessarily be in the best interests of investors.
- ○ Clearly the massive move to passive funds indicates that current fee models are not adequate.

❷ How can new approaches better align interests between investors and managers?

- ○ Clients want a larger stake in the alpha produced (local consultants have indicated the same requirement). A more equal split using the formula below would be preferred. *Clients share of alpha = (gross alpha – fees and expenses)/gross alpha*
- ○ Rather than simply lowering fees, managers should link fees to results.
- ○ The above comment (b) does not mean the introduction of the 2 and 20 model which seems to have been widely derided - the manager shares in some of the upside if they do well but none of the downside risk if they do poorly. The 2 and 20 model also suffers from sequencing risk where different clients pay different fees for the same level of gross performance simply due to the differences in paths taken to produce the performance. The 2 and 20 model does tend to lead to an emphasis on growing AUM and it also incentivizes a manager to outperform, but this outperformance could come at ever increasing levels of risk.
- ○ An ideal fee solution was proposed but it does require long-term arrangements between the asset owner and the asset manager. GPIF's model was put forward as an example:
  - — A base fee is paid that is equivalent to passive fees;
  - — Some outperformance is compensated for each year but not full outperformance. The balance is carried over for future years.
  - — To accomplish this, GPIF enters into multi-year contracts with its managers

and at the end of the contract the final fee reckoning is done. GPIF pre-agrees what the split of alpha will be with the managers and anything not received by the manager for alpha generated to date is then settled at the end of the contract.

❸ Are refundable fee models a feasible innovation for active managers?

- In short – "yes"
- Proposed mechanism
  - If the manager outperforms, the outperformance fee is paid into a reserve;
  - If the manager subsequently underperforms, the client is refunded fees out of the reserve;
  - If the reserve keeps on growing, arrangements can be made for the manager to tap into the reserve once it reaches a certain level.
- Other factors
  - Fee Reserve is held independently of the manager
  - Fee Reserve is invested in the fund
  - Can be implemented alongside a base fee
  - Should be implemented with a high watermark mechanism

PRINCIPLES OF MANAGER DUE DILIGENCE AND SELECTION

Tom Brakke (Consultant to investment organizations, including asset owners, asset managers, and advisory firms, plus author of *The Research Puzzle*, a blog focused on investment decision making)

Tom has his own consulting company with one of their specialties being the assessment of asset management companies on behalf of asset owners. My assessment of his presentation is that he is too idealistic and that if an asset manager had to try and address everything in the amount of detail that he requires then we would all spend our lives preparing for due diligences and do little else.

Some insights from his presentation:

Potential roles of a Chief Investment Officer

- Investment "master of the universe"
- Marketer/commentator
- Forecaster
- Portfolio manager
- Administrator
- Leader

However, the most common role for a CIO at the better asset managers was "builder of an organisation that makes good investment decisions."

Structure of the asset management business – find out the following:

- Why this organisational design?
- What are its weaknesses?
- What are its differentiating factors?
- Is it optimised for a certain environment?
- How will it evolve under other conditions?
- What is its useful life?
- How different is the hidden organization different from the advertised organisation – the assumption is made that what is presented by the marketing department is not the actual organisation.
- Where does the cash flow go? When? To whom?
- Which are the most important silos or groupings – these exist in every organization.
- He believes in the saying "everything is seating charts." (I will view walkabouts in a different light from now on).

How to determine the culture of an asset management business:

- Overt culture – the way we say things are done:
- Stated goals
- Technology that has been implemented
- Structure
- Policies and procedures
- Services and products
- Financial resources

The points raised above sound very typical of the due diligence documents that we complete. Tom would want to interview a cross section of people in the organisation to get a sense of the covert culture. Getting an understanding of people's beliefs, values, assumptions, feelings, perceptions, attitudes, group norms and informal interactions provides a better sense of how things actually get done.

What is a sound investment philosophy?

He quotes from John Minahan:

- "Knows where it stands with respect to capital markets theory and evidence."
- "Is living, that is, it wrestles with confirmation and disconfirmation as it is used in practice, and adapts as necessary."
- "Has deep enough core principles that adaptation does not result in total change."

Important attributes in terms of team composition and decision making

- Cognitive diversity
- Psychological safety, leading to sharing
- Listening and active disagreement
- Collective intelligence (broadly defined)
- Clear purpose and decision rights
- Trust
- Thoughtful leadership

Thoughts on investment process

The standard spiel revolves around a consecutive process involving a universe of securities, proprietary screens, preliminary research, in-depth research, candidates and finally a portfolio. Tom typically advises his clients that "this is not the real process." If you want to get to the real process then start by asking Who, What, When, Where, Why and How questions (Who does forecasting, what skill /inputs are needed, what errors occur, what is consistent and repeatable, where is value added, how are people incentivized, what is unacceptable behavior and how is it dealt with).

He preaches that in a complex adaptive system, "Continuous improvement wins" and (in what would probably be a bit of a blow to the likes of Prudential) "Consistent and repeatable loses!"

Capacity definitions

- *Threshold capacity:* The point at which the stated objective can no longer be met
- *Wealth maximising capacity:* The point at which the product of AUM and alpha is maximised
- *Terminal capacity:* The point at which alpha goes below zero

Beware of funds that are growing too quickly – they follow a pattern

- Growth as a result of past success
- Current investors, consultants spread the word and make the fund the popular choice
- Popular choice goes further to become the default choice
- Increased assets leads to decreased quality
- Decreased quality leads to the opportunity for disruption
- Cascading outflows

Ultimately, an asset owner's decisions will be driven by:

- Their beliefs and preferences (e.g. small independent managers are better than large managers)
- Why they hold these beliefs and preferences (e.g. large managers are aligned to insurers and therefore have a captive book and this makes them less innovative)
- The extent of the influence that these beliefs and preferences have on their decision making (e.g. will small boutiques within a large asset manager make a difference if they are incentivised at the boutique level?)

The brackets above are not from the conference but simply an example that sprang to mind while he was talking. We probably do not "interview" our clients enough on what their beliefs and preferences are and hence we could be wasting valuable time with prospects that will never become clients.

And finally, Tom's advice to asset owners that are reviewing managers:

- Don't believe the theatre
- Confirmation of the marketing message is not the goal

Insights from
Kgothatso Nyabela

DIVERSITY AND INCLUSION: DRIVING CHANGE IN INVESTMENT MANAGEMENT

Lauren Foster (Former managing editor of Enterprising Investor and co-lead of CFA Institute's Women in Investment Management initiative)

The aim of the campaign is that team diversity leads to better investment outcomes. Diversity is emerging as an interesting theme and the paradigm of diversity inclusion is disruptive in the global context. Diversity is multi-dimensional as It could mean a lot when seen through the lens of gender, race, ages, culture, etc.

This year, gender diversity is making waves. Women are said to be the universal diversifiers and leaders. Women are CEOs, politicians, presidents, the new activists that are disrupting the status quo.

According to the CFA institute, about 38% of candidates are women in pursuit of the CFA Charter. Spilt geographically, China has circa 50% of candidates that are female. Interestingly, 7 of the 10 large markets in pursuit the CFA Charter, the gender gap is narrowing. In other words, there are more females who are pursuing the qualification in an otherwise known to be male dominated industry. Overall about 18% of global charter holders are female but this is changing quite rapidly.

Millennials are behind the force creating the drive of diversity. In the United States (US), millennials account for 35% of the work force. Institutional investors are also now pushing for inclusivity and diversity from their service providers.

In context, investment decisions are made in a team-based approach, and diversity from culture awareness to experience around the table brings about better and improved investment outcomes.

In the report, the institute recognises that diversity is broad based and cross culturally different across the globe. Institutional diversity is unique. Diversity is a roadmap and can be encompassed across many definitions. Intersectionality is a dominant theme - "I am more than one quality". A diverse team is built on the inclusion of race, gender, age, experience and skill set, and the separation of these attributes doesn't allow the true ability of the team to be expressed.

The other theme that was touched on was cultural taxation. This follows the idea that the underrepresentation of a person in an institution leaves them 'doing all the work' but has an inverse correlation with getting the promotion deserved. The take away, is that leaders in the organisation need to recognise, reward and respect the hard work being done. The cost of not being able to recognise this might in turn affect staff turnover i.e. Brain-Drain, etc. Many employees may seek work fulfillment in other organisations.

Lastly, awareness of unconscious bias needs to be an everyday activity. Investment professionals and many institutions must understand how behavioral biases affect decision making, and how an institution can widely benefit from diversity and divergence in overcoming the norm of "groupthink".

RETHINKING CAPITALISM: CHALLENGING THE ECONOMY AND ECONOMIC THEORY

Mariana Mazzucato (Professor in the economics of innovation and public value and is founder and director of the Institute of Innovation and Public Purpose at University College London)

- Weak policy execution and application of the theory in real life, and how we should start rethinking about this problem? How could the 2008 crisis not have been detected by investment professionals? Where were they and where were you?
- Is policy disruption the new tools needed or is it just that the existing ones need to be better understood and implemented?

- The world is rethinking purpose, both of corporate and government. Better and richer thoughts on purpose driven investments and not just short-term gains, but purposeful ecosystem.

Five major problems with capitalism

1. Increasing inequality
2. Financialisation of finance
3. Short-term corporate governance
4. Climate change
5. Lame policies

1. Increasing inequality

Economies have allowed wages to be disassociated from the actual job as entailed i.e. job productivity and wages have over time has diverged. According to OXFAM, the number of billionaires has doubled since the Global Financial crises (GFC).

How has this happened, how has the ecosystem allowed for such a divergence in wealth to be created?

2. Financialization of finance

Finance seems to be financing the financial sector i.e. FIRE (Finance Insurance and Real estate sector). In the United Kingdom (UK), financial intermediation has by far outpaced the growth of the rest of the economy. Interestingly only 10% of the funds in the financial sector circulate back into the real economy. Finance financing finance could be a real economic problem.

Financialisation dictates how corporate profits and income are not being reinvested into the economy inter alia research and development, skill and training development, but rather how profits are being used to repurchase stocks to boost share prices, stock options and executive pay. Some companies state that this is due to lack of investment opportunities in the economy. Results of such practices have seen a dramatic rise in ratios such as percentage of cash flows returned to shareholders and CEO-to worker compensation ratios, while increasingly a decline in investments in the real economy is evident.

Business investment as percentage of US GDP

Source: Mazzucato (2018) The Value of Everything

3. Lame policies

The world needs to start rethinking the direction of growth and not just the growth rate, and how it can be achieved. Are professionals equipped with the right set of tools to redirect growth?

Growth seems to be consumption led, and not investment led, herewith lies the problem. Ratio of private debt is back at pre-crises levels.

Old standard policy toolkits being utilised to reshape or co-create new economies may not be as effective.

We need a symbiotic relationship where private, government and third sector types of institutions (including Trade Unions) work together to co-shape a new economy that allows for inter innovation and redistribution of ideas and wealth to filter through the ecosystem. Case study provided showed pioneering innovations such as an 8-hour workday and even the idea of a weekend off were done by unions. What innovations are expected from unions?

Governments must rethink policies more entrepreneurially. Governments need to be more agile, adaptive and atypical in directing growth in this new ecosystem. Governments should partner with the private sector through the innovation chain; example of the rise of Silicon Valley.

The value propositions behind how we look at the economy might provide insight into redirecting growth. Government-led investment through public institution allows for greater scope of investment chains to be opened and the use of Government purchasing power to stimulate growth. This refers to the adage of Government leads, business follows.

Overall, lessons learnt from the past offer ideas for the future. Once governments have a goal-orientated investment idea that are led through the multi-public value chain, innovation will not be seen a disruption but a tool that might be utilized to redirect or generate growth.

Insights from
Murray Anderson

THE FUTURE OF INVESTMENT MANAGEMENT

Ronald N. Khan (Global Head of Systematic Equity Research, BlackRock)

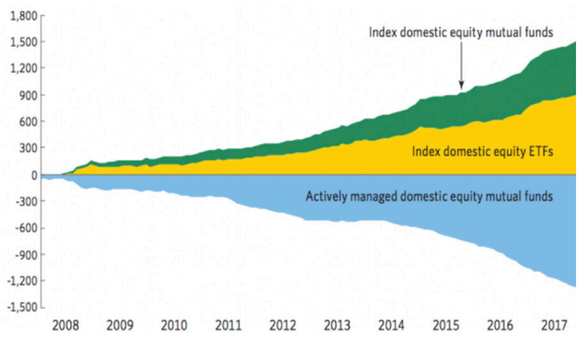
Turning back to the theme of the conference, it is important to consider what the major themes the industry is facing at the moment, which broadly are agreed to be the following and which were addressed at the conference by one of the early sessions presented by Ronald N. Khan. The key themes he touched on:

- **Active to passive –** the move to ensure underperformance is mitigated
- **Increased competition –** between active managers (as they fight to retain market share which is moving to passive at a rapid rate). See graph below supporting this view (which has been taking place over the past 10 yrs)
- **Changing market environments –** the rise of high frequency trading which means trying to get liquidity in a stock is difficult and prices will move quickly meaning trading at the best/ optimal price is difficult.
- **Big data –** and how AI is changing the investment industry
- **Smart beta –** factor investing on the rise (smart beta, active return component and pure alpha)
- **Investing beyond returns –** the ESG angle which is increasing across the globe, which is investors have a risk and return focus, with the inclusion of other aspects which go beyond this (depending on what the investor cares about E, S or G).
- **Fee compression –** the race to hold onto margin (in a world where indices can be replicated for 7 pts!). Gordon has written a note on this.

What I found most interesting form this presentation were the following points specific to these trends:

- **Active management is evolving into two branches: smart beta and pure alpha.**
  - These differ in the strength of the investment case and the requirements for investment and business success. Each branch will furthermore offer two styles of products:
    - Return- focused on risk
    - Return- and sustainability-focused
- **Smart beta:** This is more than a new product. **This is a disruptive "innovation" for active management**, this isn't an investment innovation, it is a product innovation. Suddenly, important components of successful active management have been carved out and offered to investors for below active fees (which are somewhere between active and indexing fees). These being factor investing: Value, Momentum, Quality, Low Volatility
- **Active fund management: trend is to identify those managers that are better than average** (i.e. top quartile managers), since the market is representative of the average manager.
  - A key focus on Active Managers is the attribution analyse to determine the split between the excess return above a cap-weighted index benchmark return and the active return component; then to work out what part of the return above benchmark is driven by **Smart Beta factors** and what part of the return is **Active Alpha**.
    - *The point here is that active managers charging fees for smart beta type returns are going to be under pressure and those that can deliver **Active Alpha** will be able retain margin.*
    - *Hence the trend here is that two business models will prevail: Smart Beta and Alpha generators (these occurring within boutiques or teams within a bigger business)*

The movement from active to passive (a ten year trend):



Source: CFA Conference London Speaker Presentations 2019

- This trend is bad news for active fund management businesses. Unless you can demonstrate alpha.
- **One of his key points has to do with Big Data and the opportunity this presents for active managers –** should they be able to harness big data to support the discovery of information inefficiencies that provides them the edge or discovery alpha opportunities. Hence this is a research driven approach.
- **Big data:** enables the research process to search many more data x to establish deeper insight into for example: consumer trends, covering broader text sources, search activity to identify and social media sources to support the search topic at hand (Google+, Facebook, LinkedIn, Twitter etc)
    - Khan summaries: *This explosion of available data, along with the analytical developments of machine-learning, constitute the greatest new opportunity for active management in many years.*
    - *But this will not last for ever, since Quant Equity businesses in the investment markets will manipulate the data to an extent that it is no longer an edge (this will take time though!).*

GOOD LIFE: WHAT THE SCIENCE OF PSYCHOLOGY SAYS ABOUT HOW TO LEAD A MORE FLOURISHING LIFE

Laurie Santos (Head of Silliman College and a professor of psychology at Yale University)

Included in the agenda this year which wasn't included last year was a strong focus on employee wellness and leadership development, so naturally I wanted to listen to some of these types of presentations. On day one I attended a presentation entitled Psychology and the Good life: What the science of psychology says about how to lead a more flourishing life. Well what a surprise the room was packed and delegates were sitting on the floor since there wasn't enough space in the breakaway room. I was not aware of Professor Laurie Santos the presenter, in short, she holds a course at Yale that has been the most popular course in the 300-year history of the university.

I encourage you to watch Prof Santos talk on YourTube: **https://youtu.be/ZizdB0TgAVM**

THE NEW WORLD (DIS)ORDER

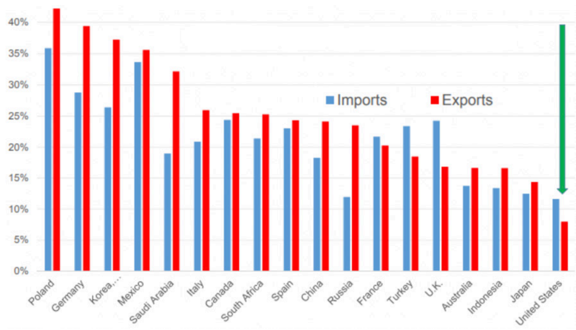
Peter Zeihan (Geopolitical Analyst, president and founder of Zeihan)

One of the plenary sessions on Monday, his presentation explored the intersection between demography and finance. This was a fascinating presentation which really made one think that his (in my opinion) biased view of the US being the centre of the universe! Some of the notes I made while listening to his speech were:

- Trump's point of departure is that the global order the American's created in the 1940's no longer serves American's interest, since the alliance which it funds was set-up to defend the alliance partners against the Soviets. The US doesn't use the alliance for its own trading purposes, hence Trump wants to change the set-up, since the US is not a trading state i.e. doesn't need to trade with foreign alliance nations, due to its internal consumption rates, hence it can go its own way and it is!

- Demographics - US is consumption led, hence it doesn't need to trade with world (70% of gross domestic product (GDP) is internal consumption), it can integrate with Mexico but not Canada since their demographics is mature. Mexico has a consumption demography i.e. it will consume and doesn't compete with the US, it delivers the US with services (where the US is the design engine). Canada on the other had is saturated demographic (again population with no millennials – it competes with the US).
- US has the Baby Boomers, making it a capital rich demography, they are becoming retirees in three years, the Baby Boomers have kept the cost of capital low, but it will rise, they will become net 'takers' from the savings pool in the years' time, no longer adding to the savings pool.
- Millennials are important for the US since the consumption they represent, keeping US out of recession, however they become tax payers later in the life cycle.
- Capital shortages have been excessive and since the Global Financial Crisis have taken years to recover, Italy and Japan haven't recovered yet. Brazil and Greece have had a lost decade with their levels of debt and still have not recovered/reduced debt fully. China most over credited nation in the world, how can it be fixed...deflation won't work. Demographics have changed where consumption slows impacting growth in few years' time.
- Global order – US with the extensive military forces they have are the only country that can enforce World Order. Hence no other country is a threat to the US.
- Robert Lightheizer is the current US trade representative and is a very astute negotiator having spent years negotiating trade deals for the US (for President Reagan). He is Trump's man in the negotiation for US trade dominance.

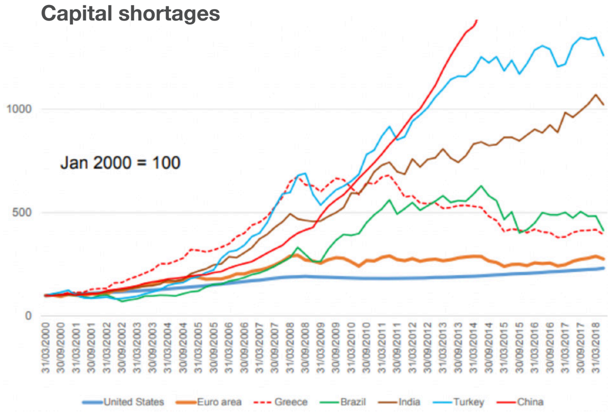
Imports/exports as a percentage of GDP, 2017



Source: CFA Conference London Speaker Presentations 2019

- Post Brexit: a deal between the US and Britain – for any concessions with Britain, Trump will take financial district of London. So where does the centre of the financial system move to? Brexit disrupts London as the first stop for capital trading, the money moves to easier places to execute its activities.
- In summary Zhein's pointed to understanding why country demographics are so important for a country (consumption/income/growth), understanding the debt levels as well as why the US is a superpower that the world needs for trade. He doesn't see China as a threat since they can't become consumption lead, due to aging population (for many other reasons too – trade/shipping/military power etc). The US dominance makes the trade negotiations very one sided, with the US holding the balance of power and is less indebted than most other (developed and developing) nations in the world and has massive consumption ability. In addition, the US debt level and non-performing loans (banks) is low versus other very over indebted nations.

Capital shortages



Source: CFA Conference London Speaker Presentations 2019

His new book should shed light on these views for anyone interested: **Disunited Nations**

DISCUSSION AND ANALYSIS OF ETF PRODUCTS AND TRENDS

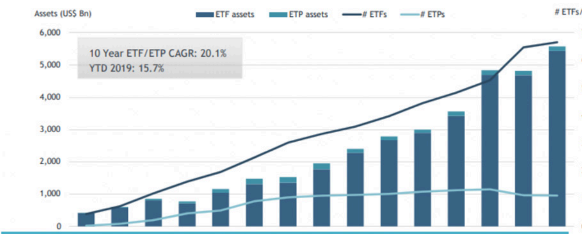
Deborah Fuhr (Managing Partner and Co-founder, ETFGI)

At the conference, the rise of the ETF asset class was noted to be one of the key trends that continues to disrupt the industry globally. Deborah Fuhr, managing partner and co-founder of ETFGI offered a historical perspective on the industry and made projections for the future:

- Fuhr expects the ETF/ETP industry to increase to US$8.9 trillion in 2020 and US$22.3 trillion in 2025. Institutional investors are increasingly moving into exchange-traded funds (ETFs) and other exchange-traded products (ETPs), and market volatility is one of the main drivers of demand.
- Institutional investors held 25% of their assets, on average, in ETFs last year. It's an increase from the 19% reported in 2017.

Global ETF and ETP asset growth as at end of April 2019

At the end of April 2019, the Global ETF/ETP industry had 7 774 ETFs/ETPs, with 15 451 listings of US$5.574 trillion, from 412 providers on 71 exchanges in 58 countries. **63 months of consecutive positive inflows.**

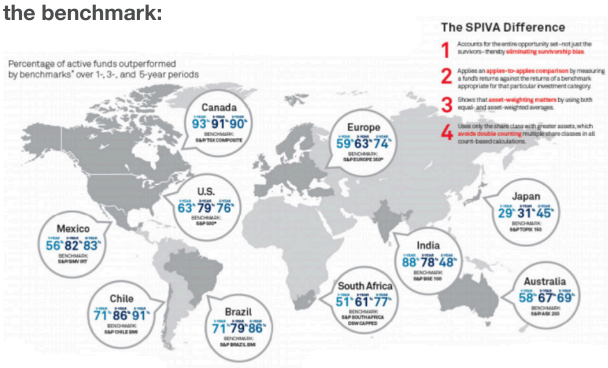


Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Apr-19
# ETFs	454	730	1,194	1,621	1,971	2,490	3,033	3,347	3,612	3,989	4,458	4,835	5,286	6,472	6,658
# ETFs/ETPs	484	828	1,422	2,094	2,547	3,399	4,086	4,457	4,751	5,163	5,712	6,142	6,628	7,598	7,774
ETF assets	417	580	807	716	1,041	1,313	1,355	1,772	2,284	2,675	2,899	3,424	4,692	4,685	5,436
ETF/ETP assets	426	603	857	774	1,158	1,478	1,526	1,952	2,403	2,788	2,998	3,553	4,841	4,817	5,574

Source: ETFGI data sourced from ETF/ETP sponsors, exchanges, regulatory fillings, Thomson Reuters/Lipper, Bloonberg, publicly available sources and data generated in-house.

- Fuhr then spent most of her talk indicating where the ETF growth is coming from, in what format and why:
    - Stock picking and alpha generation is difficult hence buy style ETF
    - ETF index as building blocks to generate Alpha (more asset classes and
    - Price and liquidity is key
    - Use ETF's to build solutions (easier than futures and swaps)
    - Hedge fund replication

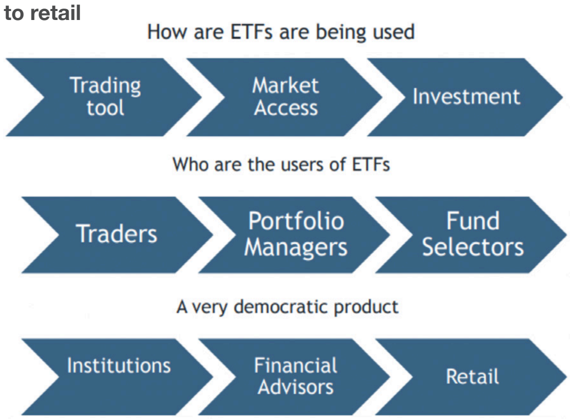
SPIVA Around the world. How many active managers beat the benchmark:



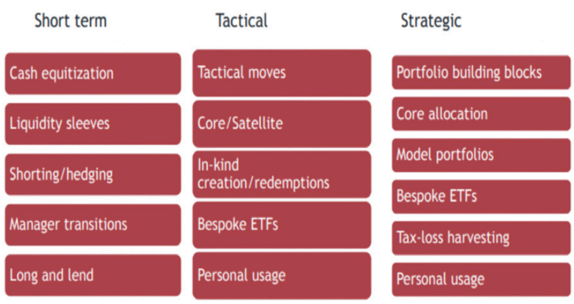
Source: CFA Conference London Speaker Presentations 2019

- Equity is the dominant ETF produce globally with fixed income next (in US and Europe) and the commodity focussed being the next largest
- Looking at flows – she showed a number of slides on where the flows are going to, what type of ETF's and where (I have this presentation which will be distributed). This was very insightful with respect to wat these funds are being used for e.g. Market cap, Smart Beta, Thematic (disruptive technology) and ESG
- She also provide insight into the evolution of the industry:

ETFs evolve: trading to investments, institutional to retail



How investors are using ETFs Source:

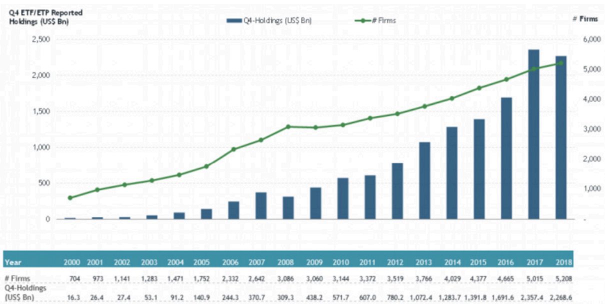


CFA Conference London Speaker Presentations 2019

Distribution of ETF:

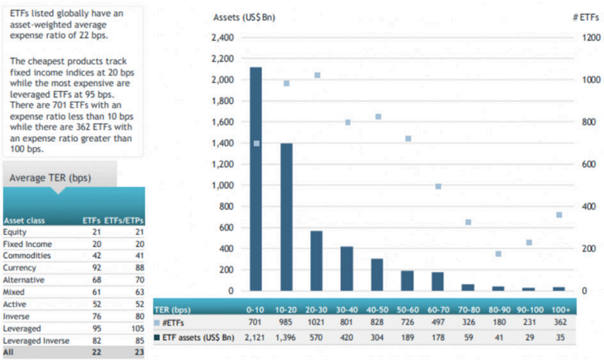
- 690 ETFs/ETPs have greater than US$1 Bn in assets
- 2 587 have greater than US$100 Mn in assets
- 3 413 have greater than US$50 Mn in assets
- The 690 ETFs/ETPs with greater than US$1 Bn in assets hold a combined total of US$4 777 Bn, or 85.7%, of Global ETF/ETP assets

Institutional growth in use of ETF's has increased:



Source: ETFGI, Thomson Reuters. Note: #Firms reflects the number of firms reported holding one or more ETF or ETP in any of the 4 (quarterly) periods in each year. Q4-Holdings reflects the US$ value of reported ETF and ETP holdings for just the Q4 reporting period only (Q4 is isolated as we do not combine $ values from different reporting periods).

Total expense ratios: global



Source: ETFGI data sourced from ETF/ETP sponsors, exchnages, regulatory fillings, Thomson Reuters/Lipper, Bloomberg, publicly available sources and data generated in-house. Note: #ETFs and assets refers only to 'primary listings' and may not sum to the full totals where fees are unavailable. Management fees may be used where the TER is unavailable.

The future for ETFs is positive

Challenges: distribution, salesforce compensation, fractional shares, mutual fund platform, success of RFQ, no consolidated tape, need for education, misunderstandings, fear of change, other products being sold.

We forecast the ETF/ETP industry will reach assets of:

- Globally $8.9 trillion in 2020 and $22.3 trillion in 2025
- Canadian listed $164 billion in 2020 and $409 billion in 2025
- US listed $6.4 trillion in 2020 and $8.9 trillion in 2025
- European listed $1.5 trillion in 2020 and $3.7 trillion in 2025

THE GREAT SEPARATION: WHY THE FUTURE IS BRIGHT FOR EMERGING MARKETS

Mark W. Yusko (CEO and CIO, Morgan Creek Capital Management LLC)

This presentation was held on the Tuesday and from the summary you can tell why this was so interesting, since Yusko presented the diametrically opposite view Zhein offered: *Why the killer Ds of demographics, debt, and deflation will present a huge tailwind for emerging markets and a huge headwind for developed markets; Discover why now is the time to build a foundation of your portfolios.*

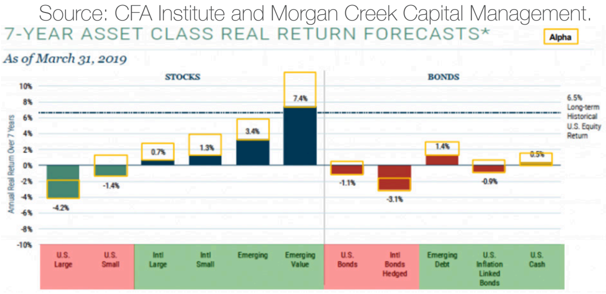
His 144-slide presentation was insightful tour as to why investors should diversify from developed market equities. Some of the highlights:

- US valuations are high at this point
- Historically EM unlisted have done better
- The US is loaded up on debt and still we have the worst economic recovery in the US
- The US + Europe productivity is declining due to age population, therefore they speculate, leverage is therefore high and are buying expensive stocks
- Yellen/Powel PUT is expiring worthless
- Slow active = passive (momentum strategy) – dumb and rules based
- Fair value will reoccur in the US – mean reversion = stocks are overvalued now and will retrace
- Buffett indicator (market cap/GDP) = needs to fall 60% to get back to reasonable value
- Global liquidity and trade has fallen off a cliff, when this happens share prices fall! Companies don't do as well when global trade slows.
- Next recession is going to be greater than the Depression

- Facts win - PMI etc have turned down, rates are low
- EM liquidity was terrible in 2018, till Oct and finally the FED stopped Quantitative tightening,
- Europe is Turning Japanese
- $11 trillion of debt with negative yields
- High rates are a sign of economic strength, we have low rates
- FANGS have negative earnings
- GMO says US has negative returns for 7 years and EM positive for 7 years.

GMO Forecasts negative returns for US assets again over coming decade

Source: CFA Institute and Morgan Creek Capital Management.

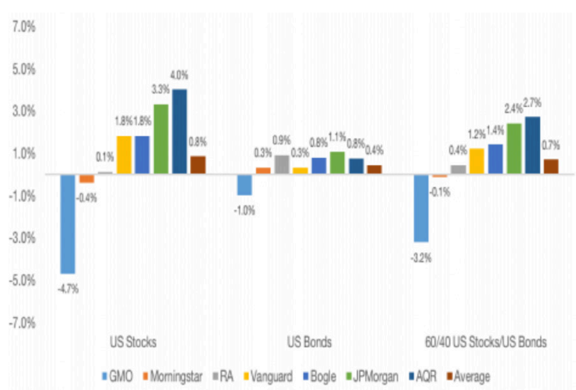


Note: This chart represents local, real returns forecasts for several asset classes and not for any GMO fund or strategy. These forecasts are forward-looking statements based upon the reasonable beliefs of GMO and are not guarantee of future performance. Forward-looking statements speak only as of date they are made, and GMO assumes no duty to and does not undertake to update forward-looking satements. Forward-looking statements are subect to numerous assumptions, risks, and uncertainties, which change over time. Actual results may differ materially from those anticipated in forward-looking statements. US inflation is assumed to mean long-term inflation of 2.2% over 15 years.

- On Beta, don't own US, you must own EM Beta (and if you can find EM Alpha even better)

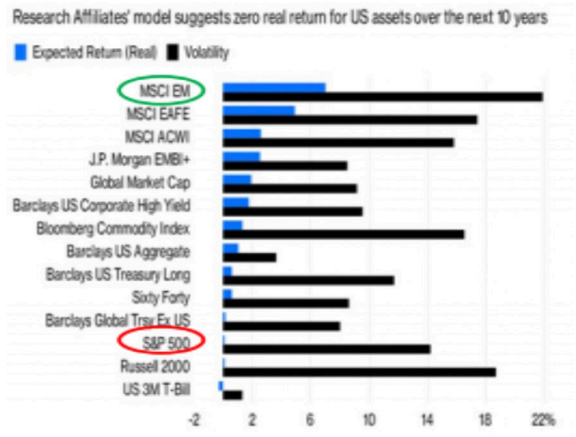
If have to buy equity beta, at least focus on cheapest global markets

Medium term real (after inflation) expect return forecasts



Source: CFA Institute and Morgan Creek Capital Management

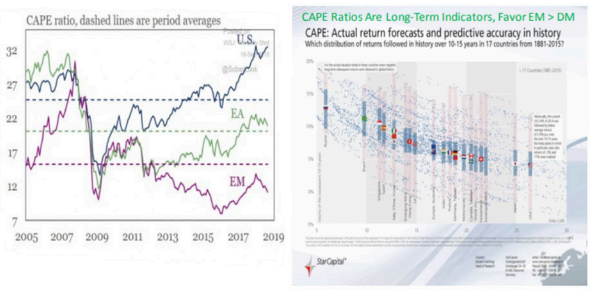
Judging by valuation, EM is the only place to be



Source: Research Affiliates

- When people a negative on markets, like they are on EM, then it is time to buy (valuations are low vs. US and some parts of other DM's)
- Chines credit creation has reduced dramatically. It's not important what is imported from China, it's important what is consumed by China i.e. what they import is important. Chinese are trading A shares, MSCI inclusion
- Chindia is going to dominate – more buying power, by 2050 E7 will be x2 as big as G7 = growth. Incremental growth is coming from EM
- FED tightening…leads to a recession
- Skate to where the puck is going - EM have population and earnings growth in the future and right now you pay less for this growth meaning when you buy cheap assets you have strong period of return in the future.

Cyclically adjusted P/E ratio, US above average, EU average, EM below



Source: CFA Institute, Morgan Creek Capital Management and Bloomberg

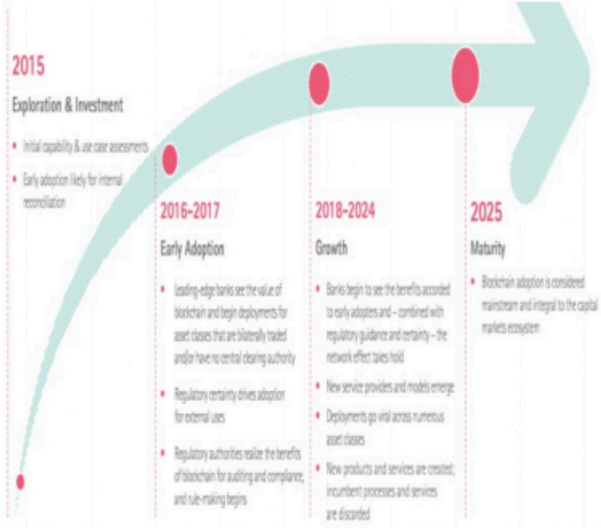
- But not all EM's are equal, so you have to be selective in where you place within EM: Brazil, Russia, Korea.
- How to make returns, must take Risk:

Four ways to make returns, must take "risk" in all four, be compensated

Components of Long-Term Portfolio Returns		
Component	**Average Return**	**Outlook DM EM**
"Risk Free" Rate	4%	2% to 3%
Credit Risk	2%	1% to 2%
Equity Risk	5%	(3%) to 2%
Illiquidity Risk	**5%**	**7%**
Structuring Risk	Variable	Low

Source: CFA Institute and Morgan Creek Capital Management

Major tech cycle 1954, 1968, 1982, 1996, 2010, 2024

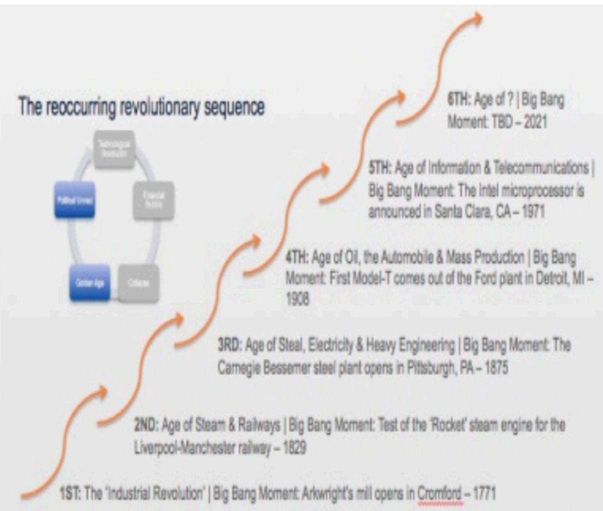


Source: CFA Institute and Morgan Creek Capital Management

- Lastly: about the future Yuskos predicts disruption will come in the form of innovation and particularly addressed the future of blockchain technology and how this will be a one in a lifetime wealth creation opportunity. The point here is that this is an alternative asset class that needs to be added to a portfolio to create diversification and as it scales its application and value through industry will become more prevalent and valuable to industry and investors.

Blockchain era right around the corner, internet of value in growth phase

The 6th age is nearing



Source: CFA Institute and Morgan Creek Capital Management

ARTIFICIAL INTELLIGENCE

7 presentations overview

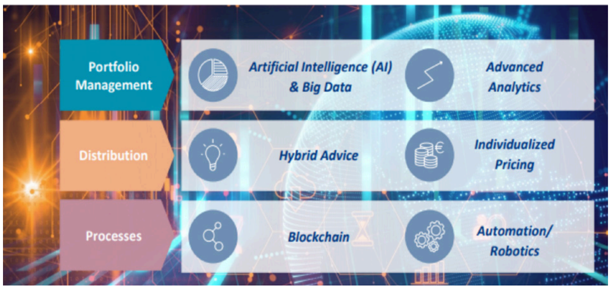
There were seven presentations including a plenary session on AI and Machine Learning and the future of the inclusion of these in the investment industry, where it supports the research process, investment decision processes, client engagement strategies, robo advice models as well as risk management. It was clear that AI/ML is seen as a disruption by the industry and many of the large managers are deploying some level of AI/ML to improve their business decisions. The list of presentations included:

- Nick Bostrom, Rumman Chowdhury, Ophir Gottlieb and Rory Cellan-Jones discussed AI in the future (plenary session)
- Sri Krishnamurthy: A Master Class on AI and Machine Learning for Financial Professionals
- Thorsten Heymann: Embracing the Potential of AI
- Marc Carey: Applying AI and Machine Learning to Risk Management and Risk Modelling
- Malcolm White: Progression beyond Regression, using AI to transform traditional analysis
- Tim Gaumer: Data is just the beginning. The rise of quant models
- Victor Mayer-Schonberger – Reinventing Capitalism in the Age of Big Data

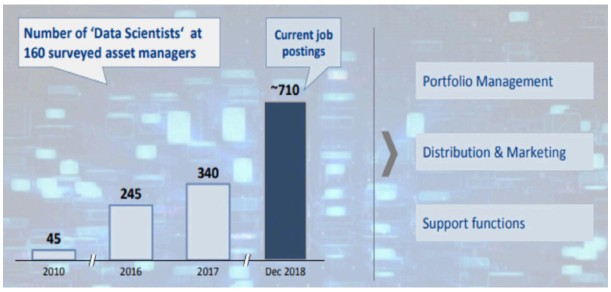
It was quite eye-opening to hear the extent of the spend and ability of AI/MI to support the investment industry, it is in the infancy, as spend increases, computing power improves, and skills come available this disruption will only accelerate and become omnipresent giving asset management businesses and edge over those that do not embrace this tech.

In addition, there were sessions on behavioural finance, ESG, sustainability, Brexit, ethics and education in the industry as well leadership, diversity and inclusion and importantly views and research papers on the future of the investment management industry.

Digital disruption impacts the entire asset management value chain



Asset managers are investing increasingly in AI



Source: CFA Institute and Morgan Creek Capital Management

GLOBAL PRIVATE WEALTH MANAGEMENT

Philip Marcovici (Principal at the Offices of Philip Marcovici and serves as a consultant for governments, financial institutions, and global families on tax, wealth management, and other issues)

Marcovici's talk was interesting from the perspective that it covered his personal experience as an advisor to wealth families across the world which require of the wealth management process to incorporate strategies to protect wealth for generations. This is achieved by incorporating into the process advice on structuring affairs with the aid of Trusts and other protection strategies, with a very strong tax angle. The primary aim of this talk was around protecting beneficiaries interests as well as the patriarch/matriarch considering how to protect wealth not only from the need to continue the growth of the assets but also protecting the assets from being appropriated by the country in which they are tax juristic. His talk content included:

- Global regulatory trends in tax transparency and compliance, and the massive impact on private wealth management.
- The evolving needs of today's international wealth owners, and the changing role of advisors in the decade ahead.
- How advisors can best utilise trusts, insurance, and other tools of wealth management in meeting client goals.
- Family retreats, family and family business governance, and best practices for today's business and wealth owners.
- Strategies for building a successful 21st century private wealth practice. • How tax systems have to change, and will change, and reflections on political challenges including BREXIT and more.
- The realities of income and wealth inequality and the responsibility of wealth and business owners and their advisors.

THE CLOSING PLENARY SESSION

How unpredictable the world has become, how the US can advance and outpace other advanced economies (it has de-correlated from the rest of the world), how politics contaminates economics, Mohamed El-Erian (Chief Economic Advisor at Allianz)

His talk was how: unpredictable the world has become, how the US can advance and outpace other advanced economies (it has de-correlated from the rest of the world), how politics contaminates economics.

The world is fluid, so how you think about the world now is key: Institutions have to be open to diverse thoughts and ideas and challenge the status quo in order to figure out where to from here (the system is not as it was).

He is one of the top 100 thinkers and therefore his thoughts as a writer and economist are important to consider; especially he says on issues like negative yields we see in the world today! He emphasised that the world is unstable, we see revisions in GDP (quickly revised down from 1.5% to 0.5% in Germany), this is has not been seen before. The New Normal (low growth and lower rates for longer) and the benefits of what the new normal was to bring benefits to so few. Disruption from above (tech) plus disruption from below (the people) such as: Anger has built up; anti-establishment movements, anti-expert opinion view = politics of anger – people know what they don't want, but they don't know what they want, which makes for a very unpredictable system to work with.

Leadership at government and corporate need to come to the fore and work together to work to serve people.

China is in a middle income transition (few have manged this transition) and this is very difficult to navigate – it is tricky and when you have global headwinds it is tricky to progress since at the moment it is harder to move forward, old policies that used to work doesn't anymore, such as stimulus which is aimed at assisting the change, but few benefits/stabilisation arises.

Higher tariffs is this part of the destination or they journey – China and US - this was posturing, but now it is part of the destination, where the US used tariffs use to contain China. China doesn't want to get into a trade war (not only with the US but Europe) – Europe has the same issues with China that the US has. China doesn't want to have no trade with the world!

Five summary points and implications

1. Absent (avoidable) self-fulfilling expectations and a policy mistake, the major global macro theme to get your arms around for this year is NOT synchronized slowdown but, instead, the micro and macro implications of divergent economic performance in advanced countries.
2. Interaction of economics, markets, politics and policy will increasingly be viewed also through a national security lens. Trade and tech are at the forefront of this.
3. Mismatch between policy tools and objectives will continue to be an issue for central banks, rendering them more vulnerable to political intervention.
4. Whether you are a company, government, or household, openness of mind and confidence to question and even reconsider certain conventional wisdoms, (for example, the old mantra that cash and tactical overlays do not belong in a strategic asset allocation for long-term investors.)
5. Good companies, governments and household investors these days are characterised by:
    - Intellectual curiosity and open mindedness;
    - Understanding that some basic structural relationships have changed in their operating environment;
    - Exploring behavioural biases at a time when behavioural traps have increased: be it the challenges of blind spots, unconscious biases, asymmetrical framing, and active inertia;
    - And, most of all, a relentless operational focus on resilience, agility and optionality.

Insights from Zandile Ngwepe

INVESTMENT PROFESSIONAL OF THE FUTURE: NEW RESEARCH FROM CFA INSTITUTE

Rebecca Fender (Head, Future of Finance, CFA Institute)

Rebecca Fender is head of the Future of Finance initiative at CFA Institute, *a long-term global effort to shape a trustworthy, forward-thinking investment profession that better serves society*. Her team works with industry partners, academics, and a volunteer network to produce research and thought leadership papers.

The research inputs for this presentation were:

- 3 800+ CFA Institute members and candidates via survey responses
- 30+ investment industry leaders via survey responses
- 100+ industry professionals in discussion forums
- Guidance from Future of Finance advisory councils and CFA Institute leaders

The research found that:

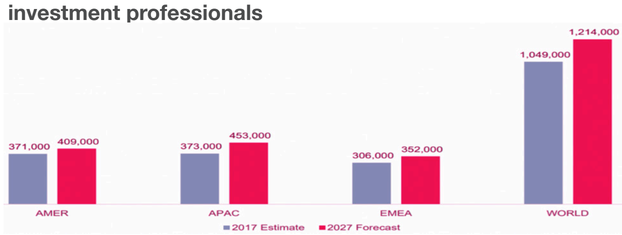
- Most business are being run by 55 year-old white males who are not prepared to change the model.
- Do they have the incentive to make the necessary changes?
- Style of leadership?
- Are these businesses trying to create a strategy in an organisation with people of same age and same skill?

Addressing the above can help both investment professionals and organisation navigate the future in investment management.

Definition of investment professionals

People who work in asset management firms as owners, professionals.

Estimate and forecast of the number of core investment professionals



Source: CFA Institute and Morgan Creek Capital Management

Changing roles, changing skills and changing organisational cultures

- Investment professionals will need new skills, multiple jobs.
- Society, organisation, climate, our kids are all part of this change.
- Individual roles will be transformed multiple times in their careers
- The question to ask is: will your job exist in the next 5 to 10 years?
    - 43% expect their roles to be substantially different in 5-10 years.
    - 77% expect greater changes in the world of work.
- T-shaped skills will be most important.
    - Having technical skills but being able to connect beyond that.
- AI + HI will be a norm.

Investment industry sentiment among professionals

- 75% are very proud of being associated with the investment industry
- 68% say the industry is intellectually challenging

But only

- 43% say they are committed to a career in the investment industry

Roadmap for investment professionals

❶ Keep learning: Apply the career flywheel

The flywheel

- The professional and the organisation
- How the professional and the organisation provide vital inputs that are turned into results by interacting with the organisation

The professional

- Inputs
  - values and identity
  - competencies
  - experience
- The "Give of the Employee"
  - self-motivation (intrinsic motivation)
  - personal growth
  - belonging
- Results
  - professionalism
  - teamwork
  - personal resilience

The organisation

- Inputs
  - vision and purpose
  - capabilities
  - culture
  - business plan
- The "Get from the Organisation"
  - extrinsic motivations
  - reward
  - feedback
  - culture
- Results
  - professionalism
  - training
  - diversity and inclusion
  - financial resilience

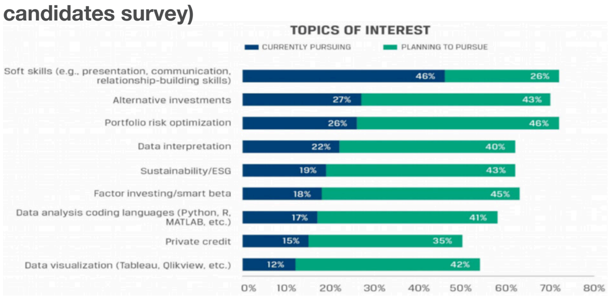
❷ Invest in new era skills: Apply the skills pathway

- T- shaped skills
  - expert knowledge and experience plus ability to collaborate with experts in other disciplines and a willingness to use the knowledge gained from this collaboration
- Leadership skills
  - passion and commitment
  - positivity
  - innovation
  - strong communication
- Soft skills
  - relationship building
  - communication
  - presentation etc
- Technical skills
  - job related

Expert view on skills required for investment professionals in the next 5-10 years

T-shaped skills (49%)
Leadership skills (21%)
Soft skills (16%)
Technical skills (14%)

Trending skills (data from CFA Institute members and candidates survey)



Source: CFA Conference London Speaker Presentations 2019

- Investment professionals must build a competency model.

❸ Be Tech-Savvy: Harness and Navigate Technology

- Be prepared to do new and different things
- Be prepared to use tech that will enhance your work

- Buy into new Tech ‘must -haves’ by learning how to do things differently

Roadmap for investment organisations

- **Enhance employee experience: cultivate stronger culture**
  - Personal Growth – training and development opportunities
  - Performance reviews (check in and reviews work)
  - Remote working (working from home)
  - Flexibility and part time working
  - Wellness (wellness center, gym)
  - Diversity focus (in hiring, compensation)
  - Work space (open, interactive)
- **Invest in empowering leadership: communicate**
  - Strong Expectation vs Deal Breaker
  - What type of organisation people will work for or not work for because of culture, wages career growth etc
  - Entrepreneur mind set is common amongst Gen X
- **Be change-savvy: transform your worldview**
  - Key Concept: AI + HI
  - Interaction of artificial intelligence (AI) and human intelligence (HI)

The way forward

- Roadmap for Investment Professionals
  - Keep learning: apply the career flywheel
  - Invest in new era skills: apply the skills pathway
  - Be tech-savvy: harness and navigate technology
- Roadmap for Investment Professionals
  - Enhance employee experience: cultivate stronger culture
  - Invest in empowering leadership: communicate
  - Be change-savvy: transform your worldview

HOW INVESTORS AND CONSULTANTS USE MANAGER DATA FOR MONITORING

Yoshimasa Satoh (Product Strategist, eVestment, a Nasdaq Company Board Director, CFA Society Japan)

Yoshimasa Satoh is a Product Strategist at eVestment. He has extensive experience in portfolio management and asset allocation having worked for managers such as Goldman Sachs.

His presentation focused on institutional trends of how investors and consultants are using manager data for monitoring.

According to eVestment:

- 850+ institutional investors worldwide rely on eVestment as the backbone of their monitoring process
- 76% of the top 50 global consultants are eVestment clients
- There are 25 000+ institutional strategies represented on the platform
- 4 100 managers are reporting their data
- Quantitative plus qualitative data reporting includes:
  - Detailed performance
  - Track records
  - Key professionals
  - Assets and flows
  - Geographic, sector and style allocations
  - Fees
  - Peer comparisons

eVestment facts:

- 10 000+ investors and consultants screen (check manager data) each quarter
  - Quantitative track record analysis
  - Quantitative characteristics analysis
  - Qualitative analysis
- Each quarter, about 500+ new products are added to the eVestment database
- This means finding the best managers in the world is an ongoing effort

Investors and consultants are looking at the following:

- Re-evaluating managers in their existing portfolio:
  - Are managers delivering the expected risk-adjusted performance?
  - Have managers changed anything in their investment process?
  - Has there been any team turnover or team changes?
  - Has there been any changes on a strategy or firm level?
- Re-evaluating the external environment:
  - Are the managers peer-relative ranks changing?
  - How do the existing managers compare to new managers joining the peer group?
  - Is a passive approach offering better value for money in a particular asset class?
  - Which asset classes and/or universes are going out of favor based on investor activities and asset flows?

Data that is being monitored:

- Performance track records
  - Comparing each manager to the benchmark
  - Performance across time under different market conditions
  - Risk and regression analysis
  - Efficiency
  - Value at risk
  - Resilience in head-winds
  - Consistency analysis
  - Drawdown analysis
- Assessing whether managers are following their stated philosophy and process.

Stated	Actual
Philosophy	Holdings
Process	Holdings vs average of peers
Buy/sell discipline	portfolio characteristics
	Contributers and detractors
	Style, region, sector allocations

- Monitoring for indications of challenges at the firm-level.
  - Significant outflows in other products
  - Litigation
  - Personnel changes
  - Changes to the ownership structure
- Monitoring for concerns that other investors and consultants have about the strategy.
  - Significant outflows
  - Watch-listing by other clients
  - Downgraded consultant ratings
  - Significant increases in screening by investors and consultants (indicating increased scrutiny)

ESG/SRI screening

- Consultants and Investors screen on 80+ ESG criteria in eVestment
- Top 10 criteria used in ESG/SRI screens

Rank	Full Year 2018	H2 2018	Q4 2018
1	Is product currently managed with ESG considerations?	Is product currently managed with ESG considerations?	Is product currently managed with ESG considerations?
2	Does firm have a firm-wide ESG policy?	Does product use an ESG Integration investment approach?	Does product use an ESG Integration investment approach?
3	Does product use an ESG Integration investment approach?	Describe your ESG Integration investment process	Negative Screening: Fossil Fuels
4	Describe your ESG Integration investment process	Negative Screening: Fossil Fuels	Does firm have a firm-wide ESG policy?
5	Negative Screening: Fossil Fuels	Does product use a Sustainability-themed Investing process ?	Does product use a Sustainability-themed Investing process ?
6	Are you a member of the UN PRI?	Does firm have a firm-wide ESG policy?	Are you a member of the UN PRI?
7	Do you report on your ESG efforts?	Are you a member of the UN PRI?	Describe your ESG Integration investment process
8	Describe firm's background and policy as it relates to ESG issues	Sustainability/Impact Investing: Gender Equality	Sustainability/Impact Investing: Water Scarcity
9	Does product use a Sustainability-themed Investing process ?	Willing to manage this product with ESG in a separate acct?	Willing to manage this product with ESG in a separate acct?
10	Describe organization's team structure as it relates to ESG/RI initiatives	Sustainability/Impact Investing: Water Scarcity	Sustainability/Impact Investing: Gender Equality

Source: CFA Conference London Speaker Presentations 2019

Best practices for consultants and investors with regards to manager monitoring

- Monitoring must be done on a quarterly basis
- Hundreds of new products emerge every quarter – it is important to stay abreast
- Need for automated reporting to create a disciplined rhythm
- Assessing managers against their peers, not just the benchmark
- Evaluating whether existing managers are doing what they have been hired to do, not just whether they are delivering returns
- Looking for signs of challenges at the firm and strategy level