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CFA Conference 2018 Notes by Andrew C Canter, CFA June 2018

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CFA Conference 2018

Notes by Andrew C Canter, CFA

The CFA Institute's Annual Conference is a highpoint for investment professionals. In addition to meeting industry colleagues from around the world, there is an array of topics and speakers – from leading edge investment ideas to reflections from Nobel laureates. The CFA Institute also uses the opportunity to promote industry standards of care, loyalty, fairness and trust. This year's conference, held in Hong Kong, was attended by over 1500 delegates of which over 100 were from South Africa.

These notes are my personal comments from some of the conference sessions.

I hope you find them useful.

Andrew Canter acanter@futuregrowth.co.za 14 June 2018

Quotable quotes and reflections on Hong Kong

"A pivot to Asia is not an option, but is a strategic imperative" Haiyan Wang

"I think the top [tech] talent is still in Silicon Valley" Haiyan Wang

"China has a national AI strategy, and US does not" Eric Schmidt

"There are only 2 temperatures in Hong Kong: Inside [cold & dry] and Outside [hot & damp]"

[On skills development in Asia] "Top down forces are good for moving mountains, but it is hard to cultivate the soil to grow trees" Haiyan Wang

"Chinese real estate loans could be a systemic risk, but a solution might be to securitise these loans to sell to asset managers" Haiyan Wang

[ACC comment: Seriously!?, is that a plan? Talk about insulting your audience]

"It is not clear if China will be governed by rule of law, or if the Party will be above the law" Haiyan Wang

"The key internal issue for China is domestic stability" Haiyan Wang

"China will have 30 million more men than women, and by 2025 India will have 40 million men without a bride. Can these men become a destructive force?" Haiyan Wang

"We [the finance industry] must enrich the communities in which we live and work" Paul Smith

"Winner takes all capitalism is not inclusive and not sustainable" Lei Zhang

"If you add value and create sustainable businesses, then the returns and exit strategy will take care of themselves" Lei Zhang

"Having missed the 1st, 2nd, and 3rd industrial revolutions Nigeria is poised to catch the 4th industrial revolution" Oscar Onyema

[ACC Comment: Ha Ha Ha!]

"Hong Kong seems to have no rules for city-walking: Sometimes on the left... sometimes on the right... there is no 'passing' lane or 'slow' lane. On top of that, there are few straight lines -- pavements go up down, around, over, under and across"

"There's an entire generation of Wall Street executives who mistook leverage for genius" Steven Eisman

"Incentives trump ethics every time" Steven Eisman

"At [gearing of] 35:1 for the bank to fail you need a spitball, at 10:1 you need a meteor" Steven Eisman

"I think Alan Greenspan will go down in history as the worst chairman of the Fed in history. There is no one who is even a close 2nd" Steven Eisman

"Credit quality statistics are a good leading indicator: Stuff shows up in the financial system before it shows up on planet earth" Steven Eisman

[On the big-short in the housing market in 2007] "God himself couldn't have prevented my trade from working!" Steven Eisman

"Don't 'pursue your passion' -- rather pursue your attributes: Try to figure out what your strengths are, then play to your strengths" Steven Eisman

"I've never seen worse street musicians than those in Kowloon"

"ESG factors [in equity investing] do produce excess returns in Japan – probably because the country is in governance reform mode" Kathy Matsui

"There is no chance that the governance reforms [in Japan] will be rolled back" Kathy Matsui

"Chinese banks are very slow and bureaucratic in, well, everything" [??]

"China is coming to the end of the demographic dividend, but on the cusp of its consumer boom" [??]

[on the potential for rising bond yields] "Risk-Free Rates are beginning to look like Rate-Free Risk" David Lebowitz

"The world is incredibly underweight China: The MSCI World Index currently has a 51% weight to the U.S.A., and only 4% in China – but in ten years China is likely to be the largest economy in the world!" Carl Huttenlocher

"There's a lot to like about China [equities]" Amy Flikerski

"The incidences of fraud in China are not greater than other places I've invested in during my career" Carl Huttenlocher

"There is a tectonic shift of global economies toward Asia: We will wake up one day more interested in what the Bank of China did than what the Fed did" Mario Therrien

"If you are a criminal and using Bitcoin believing it is non-traceable you are pretty stupid" Sandra Ro

"From a cultural, generational perspective something is going on here: Crypto is antiestablishment" Sandra Ro

"There are about 2 000 cryptocurrencies, many of them will be 'out of business' within a year" Sandra Ro

"In attracting and retaining staff, culture trumps everything" Christopher Ailman

"If we want to replace humans with Artificial Intelligence then we need quality assurance: But if we use AI as a tool, then we don't need additional quality assurance. AI is a tool, not a decision maker." Christopher Ailman

"Chinese research & development are still predominantly in the 'imitation and following' phase" [??]

"No one should be arrogant enough to think that you can create change by just throwing money at something: Progress requires skills" A Canter

"The benefits that retirement funds pay are better in a world worth living in" Roger Urwin

"Millennials may be confusing immediacy with trust: If you don't give an immediate answer to an issue, then you are seen as breaking trust" Alison Tarditi

"Being in Hong Kong feels like you are sitting at the high energy, pointy-end of a fast growing 1.3 billion person economy"

"Optimism is the engine of capitalism" Daniel Kahneman

"When you have a problem, ask advice: And the best person to give you advice is a person who likes you, and doesn't care about your feelings" Daniel Kahneman

"My greatest fear from Artificial Intelligence is social and political risk" Daniel Kahneman

High level observations from the CFA Conference

The dominant theme was *China! China! China!*

China - Ascendant

- China is on track to become the world's largest economy: Growth will persist, but at a slower pace than in the past.
- The Chinese tech sector, with its skills, access to capital, and an enormous market will overtake the U.S. – particularly driven by Fintech and consumer segments.
- The One Belt One Road (OBOR) initiative will tie more and more countries into China's trade circle and orbit of influence.
- The Renminbi is on track to become a leading reserve currency.
- Centrally planned state capitalism is an effective tool for mobilising the nation, and will overpower the choice-based, free-market model.

China - Unstable and Catching Up

- China is going to grow old before it grows rich: Adverse demographics the rapid ageing of China's population – means that the growth spurt will slow markedly.
- There will be rising demands for democratic reform -- driven by rising earnings, expectations and connectivity: This represents a threat to the overarching dominance of the Communist Party.
- Service levels for basic goods such as banking, health care and government services are very poor.
- Environmental degradation is undermining people's health, quality of life, and possibly China's political stability.
- The sheer quantum of debt in China, much of it invested in unproductive real estate, could cause serious disruption.
 - Worryingly, the Chinese debt-bubble was mentioned several times, but repeatedly dismissed: "They have the reserves"... "they'll grow out of it"... "the banks are state owned"... "they'll securitise the NPLs off the banks' balance sheets to investors or asset managers"... etc.
- China's huge infrastructure roll-out programme is past, and China must now make the transition to being a consumer led economy.
- Chinese industry is not as innovative as western countries.

Some additional takeaways:

- It is taken for granted that U.S. interest rates are rising.
- In Japan, Abenomics has made strides, and the country is on the road to recovery -- albeit with still structurally low growth.
- India may be the "next big thing".
- Fintech is an unstoppable leapfrog technology, with examples in Asia and Africa of new-style financial services filling the void left by poor banking services (much as cell phone technology solved the issue of poor wire-line services).
- Bitcoin seems universally avoided, and often derided, while Blockchain technology is accepted (if not fully understood).
- Artificial intelligence (AI) is spoken of both as an opportunity for, and a threat to, incumbent asset managers: There is fear of being "disrupted" out of business.
- Conversation about the rise and risk of passive investing the mega-theme of the CFA Conference 2017 – was totally absent from Hong Kong.
- Sustainable investing, ESG factors, and alignment between funds and fund managers were repeating themes.

Opening Comments

Paul Smith, CFA Institute

Big Idea: Asset Management industry must continue to rebuild trust with investors.

Paul reinforced that investment management is a *noble cause*. He highlighted that loyalty to clients, competence and diligence are paramount – this is the definition of "professionalism". Trust is critical, and that only arises from putting clients' interests first.

He further highlighted that there is a need for investors to have wider metrics than mere financial returns – and referred to societal returns, alluding to the call by Anne Richards of M&G (the first paragraph below):

Anne Richards, Chief Executive, M&G, April 5, 2018

The role of investment management in society is evolving. It is abundantly clear that delivering good financial returns for customers over the long run is necessary and important, but is not in itself enough. There are three main expectations that society has of investment managers: good performance at a fair price; effective aggregation and allocation of capital across our investments; and effective stewardship of those investments. We are thus called upon to invest with a wider purpose than just a narrow, financial lens. Our industry faces a challenge though. Do we have the right incentives in place to achieve the broader societal benefits that we have the potential — and the responsibility — to deliver? [...continues] https://www.ft.com/content/fe1fea86-371d-11e8-8b98-2f31af407cc8

There seems to be a disconnect between the role of finance and economic and social development: The purpose of finance was more visible 100 years ago – when investors could see the railroads, highways, dams, etc., that they were financing. Finance should narrow the gap between haves and have nots – it should enable fairness.

Smith called for more transparency of risks and fees: Fees should be more closely tied to investor outcomes.

China & India: Changing Dynamics

Haiyan Wang, (China India Institute)

Big Idea: By 2030 China will be the world's largest economy, and India the 4th largest. China's growth rate will slow, but prosperity will deepen. India is embarking on a high growth phase.

China:

China's per capita GDP has grown from \$85 in 1960 to \$309 in 1980, to \$959 in 2000, and \$9 377 in 2018. (\pm 8.6% compound growth for 57 years, compared to the USA's of \pm 5.3%). However, "China's GDP per capita is still only 1/7th of the USA's" (US\$57,500 in 2016): China is still a long way from being 'rich'.

China would not have grown as it has for the past 30 years without opening up: So this remains the consistent policy message – to "open up to the world, and to continue with reforms".

China's long term growth is shifting down -- into the 6% range for the next five years, and thereafter into the 4% range to 2035. This is driven by --

- China's ageing population;
- The slowing of the urbanisation trend; and
- The prior overbuilding of real estate which will lead to a slowdown of capital expenditure.

Peoples rising expectations are not being met by service delivery of government. Coupled with slower economic growth and impaired health due to environmental degradation this could create political instability in China.

China aims to be a technology leader:

- China spends 2.5% of GDP on Research & Development, #2 in the world;
- There is a large pool of venture capital, and China has a strong Science/Technology/Engineering/ Math (STEM) education system;
- The country has some large and growing technology powerhouses;
- The government has a blueprint for development of China's micro-chip industry;
- Government policy is for AI parity with the U.S. by 2020, and to be global leader by 2030;
- In technology, China has money, talent and data advantages -- but is relatively weak in computing hardware (e.g. chips);
- China's technology 'trump card' is a large, underserviced (and hungry) market for technology solutions and services: It is a large market opportunity which offers scalability to entrepreneurs; and
- There is hostility toward western tech companies and there are increasing barriers to acquiring western tech companies (and their intellectual property). China is not a leader in international acquisitions.

In finance:

- Chinese markets are opening up to foreign investors in an incremental way;
- Inclusion of China's "A" share market in the MSCI is happening now, and this will lead to foreign capital flows from benchmark cognizant investors;
- The risk of a U.S./China trade war may take the shine off the market in the near term;
- The composition of the Chinese stock market does not align with the broader economy;
- The Chinese financial sector needs foreign competition to become more efficient;
- The Chinese financial sector is opening up, with less restrictions and less capital caps; and
- However, China has capital controls and it is not clear how that ends: "Plenty of money can get it, but it is not clear if it can get out."

The One Belt One Road (OBOR) Initiative:

OBOR currently includes countries with 30% of the world's GDP and 60% of the world's population;

- "100 countries and international organisations have signed up to OBOR";
- OBOR is seen by the West as Chinese expansionism and a potential debt trap for participants (e.g. offering large scale finance, with strings attached, to poor countries for unaffordable infrastructure projects);
 - For example, Sri Lanka couldn't pay for its Chinese funded airport, so commuted the airport debt into a 99 year lease on a deep water port.
- OBOR is seen by the Communist Party as a vehicle for China to become a world leader.

Military/hard power:

- China spends 2.1% of GDP on military, which is not particularly high (e.g. U.S. 3.5%, Germany 1.2%, Russia 4.5%) -- particularly since China borders on 14 countries!
- China features prominently in the U.S. strategic defence review of president Trump.

Some drawbacks:

- Chinese are ageing: 18% will be over 60 by 2020, and 33% by 2050. Median age in 2050 will be 48.7 years (USA 40 years). The Chinese labour force will shrink by 0.3% p.a. from 2018 to 2023;
 - This ageing implies the service economy (e.g. travel, personal care, health care) will grow to be 56% of GDP by 2020, and higher thereafter.
- Net exports are down to 2.2% of GDP (from 9.2% in 2006);
 - On U.S./China Trade War: "China overproduces and US over-consumes this structural problem cannot be solved in two years, although China could increase its shopping list in technology, services, and big-ticket items".
- Gross fixed capital investment relative to consumption has slowed;
- Urbanisation is slowing, so capex (notably housing) will also slow;
- There has been enormous growth in debt, with more than 50% related to real estate: That could be a systemic risk;
- The level of bank Non-Performing-Loans (NPLs) is unclear: The Bank of China says NPLs are at about 1.7%, while the IMF says 5.6%;
 - Generally more transparency is needed both by China's banks, and by its companies.
- China's Gini coefficient is already considered high at 0.46: The gap between the haves and havenots is wide, and creates a political risk;
- Pollution is a problem of both lifestyle and healthcare costs;
 - China wants to transition to more 'green growth'. For example, China's auto sales are about 1/3rd of the global market – and China is now setting targets for phasing out fossil fuel cars.
- China has intellectual property rights (IPR) protections, but poor enforcement;
 - "I am very hopeful for the IPR protections act to become much stronger. Pressure is now coming from domestic companies, and not just international companies: This should bring about better enforcement".
- While productive, China tends to have a passion for quantity over quality;
- The education system favours rote learning, and society is generally hierarchical; and
- The pace of political reform seems slow, and it is not clear.

India:

"India 2018" is widely seen as "China 2000": However, India's growth in the next 15 years will not be the same growth as China in the last 15 years.

- Indian growth will be driven by both investment and consumption (vs China which was infrastructure driven);
- Indian growth will be more energy efficient;
- India's growth will be less steel-intensive due to the Uber/Google/Tesla effects; and
- The hope is that India will achieve 'green growth': Currently 14 out of 15 of the most polluted cities in the world (as measured by particulates in the air) are in India.

In any case, India is ready to ride the wave of demographics (46% of the population is under 24 years old), a capital expenditure and infrastructure investment boom, and policy reform. India is expected to grow by 7.2% to 8% in the next five years to 2023.

Modi's reforms have borne some fruit:

- Improvements (off a low base) in the ease-of-doing-business survey: India ranks at #100 in 2018, up from #130 in 2017.
- India's GST (goods and services tax) integrates India as a single economy. The GST also forces informal traders into the formal sector: The indirect tax base in the past year has risen by 50%.
- "Digital India" drive: The introduction of biometric identity cards has led to high growth of mobile payments, financial inclusion, and access to health care and education. This stimulates consumption and improves efficiency.
- India is now spending 6.5% p.a. of GDP (up from 4.7% p.a.) on infrastructure.

However, some concerns are:

- Bank non-performing loans (NPLs) reached 9.2% in 2017 (up from 2.4% in 2010);
- Youth unemployment is a risk;
- The need for land acquisition reform (presently the law impairs land acquisition for development); and
- The need for labour law reform (e.g. there are rigid labour laws).

Emerging Asia:

- Emerging Asian economies have had, and will continue to have, 3-times higher GDP growth than developed markets. This is driven by a range of factors: Rise of the market, entrepreneurship, literacy, global integration, etc.
- Emerging markets will be more than 50% of global GDP in 10 years. China alone will add US\$6.5 trillion to Global GDP in the next five years (US\$11.94 trillion to US\$18.4 trillion).

Asked to choose an investment destination for the next 20 years, Wang chose India as a stock market bet.

Thoughts on Research, Investing and China's role in Driving Innovation Lei Zhang (Hillhouse Capital Management)

Big Idea: Private equity deals in general – and technology in particular -- should have a clear connection to human needs; Investors should be partners, not merely funders; Investment mandates should be wide.

Investment business:

Zhang built his private equity firm from \$20 million in 2005 to \$35 billion in 2017.

- "Start with a very wide mandate: Do whatever makes sense", instead of having a narrow sectoral or style mandate;
- "We are entrepreneurs who happen to be investors";
- "Think long-term, with passion, to solve problems";
- "The natural growth of Asian countries, and emerging markets in general, gives us a tailwind to returns";
- There is competition for deals, but if you have the ability to help businesses grow then businesses want you as a co-investor: "It's all about being long-term and adding value to investee companies";
- "Investing is all about people: Are they competent? Trustworthy? Customer focussed? Not getting stars-in-their-eyes [e.g. about listing]? Able to work collaboratively? Able to think long term?" "We must have the ability to dig deep and understand the people we are going to work with";
- Be a learning organisation: Be open to collaboration, cross-learning, and new ideas;
- Be "sportsman like": Have some humility and know you aren't going to win every time... your goal is to have more wins than losses. And be mindful to be part of a team; and
- In hiring, Zhang looks for intellectual curiosity, intellectual honesty, intellectual ability, and empathy: "We don't care about your pedigree."

Mega trends and investment strategy:

- *Innovation 1.0* was about connection: People to People. People to Products. People to Information;
- *Innovation 2.0* is about bringing information and tools to traditional businesses making businesses more adaptive, catering to evolving needs more quickly, and being more efficient and productive. "Give employees the tools to change shoe salesmen to into fashion consultants";
 - In that vein, Hillhouse which has a tech biased investment strategy -- has recently bought the largest global producer of woman's shoes.

- He suggests "Always go back to basic needs of people: Ask simple and basic questions, such as 'Why do people search?'. If you can understand the basic needs, then you can find the investment opportunity";
- Technology is not just about being a disruptor for the sake of disruption, but rather allows companies to reinvent themselves and it becomes an equaliser. Technology promotes opportunity -- disrupting incumbents in favour of new services and goods;
- "Empathy the ability to connect with the underlying business, consumers or entrepreneurs -creates the ability to succeed and to not become a victim-of-your-own-success." He urges investors to "connect to the fundamental needs of people"; and
- The tech elephants (e.g. Alibaba, Baidu, Tencent) are seen as a threat, but are also innovators, they are not resting on their laurels, are connecting to consumer needs, democratising credit, and creating platforms for countless businesses.

Investing in Nigeria: Exploring the Investment Potential of One of Africa's Leading Economies

Oscar Onyema (Nigerian Stock Exchange); James Benoit (FCMB Bank)

Big Idea: Nigeria is on the "Precipice of Greatness". Government policy, strategic position, demographics will drive opportunity.

Sitting in the high-growth region of Asia, to hear about Nigeria's indicated 2.5% growth rate for 2018 seems uninteresting. Further, the list of challenges for the country – including a rebel province – leaves one feeling somewhat chilly. The tagline of "*Nigeria... on the Precipice of Greatness?*" just about captures it.

- Tax revenues are very low at only about 6% of GDP;
- While oil dominates government revenues and exports (e.g. 90%), it is only 10% of the overall economy. Nigeria has 36 different exploitable minerals. Still, the oil price remains the leading economic force – and thus drives stock market returns;
- 65% of the population is under 30 years old, and there is high youth unemployment;
- Nigeria moved 24 spots up in the ease-of-doing-business survey in 2018 to #145 (from #169);
- P/E ratio of the Nigerian Stock Exchange is about 21x. Bond yields are in the low teens;
- Nigeria has multiple exchange rates an "official rate", an "investor window", and "street rates".
 This is confusing and clearly off-putting to the audience;
- Nigerian pension funds cannot invest outside Nigeria;
- There are substantial needs/opportunities in social and infrastructure development:
 - A significant gap in power supply—and a big opportunity in power plants;
 - Rail investment;
 - Road investment;
 - Mobile phone coverage is spotty; and
 - Weak quality of education.
- There is high income inequality; and
- There has been good progress in Fintech by the financial sector.

Lessons from the Financial Crisis

Steven Eisman (Neuberger Berman)

Big Idea: There are no big systemic risks in the world right now, as de-levering after the GFC has reduced volatility. Bankers are the primary source of risk to financial systems, and must be restrained.

Eisman became famous by being one of the few who foresaw the problems in subprime mortgage securitisations going into the financial crisis – and was profiled in the book (and movie) "The Big Short".

Here's a good reminder: https://www.youtube.com/watch?v=A25EUhZGBws The Big Short (2015) - Mark Baum (Steve Eisman) Meets a CDO Manager

The collapse of the housing market in 2008:

- Eisman had long history in the mortgage market prior to 2008: "The first generation of subprime mortgage lenders all went bust by 1998, and a lot of the same CEOs re-emerged in the early 2000s";
- He doesn't blame consumers for over-leverage, rather the issue was too much leverage by systemically important banks holding mortgage-backed securities and their related derivatives;
- For Eisman, a key moment was May 8 2006 when Golden West (a conservatively run savings & loan) was sold to Wachovia: The owners were good mortgage lenders, but could not compete in the race to the bottom;
- Perverse incentives: "Ratings Agents were paid 5x more to rate securitisatons than straight debt, and bank sales desks were incentivised to sell more instruments";
 - Credit ratings agents <u>have not</u> changed their models, because no new regulations were introduced.
- Pre-crisis, there was no supervision of the shadow banking system: "Greenspan actually thought Wall Street executives knew what they were doing: When the crisis hit, the Fed had no idea what the situation was";
- Eisman was focussed on the housing market bubble already by 2004 "my wife called me chicken little" and begged him not to talk about it at dinner parties. The whole world was on the other side of his view; and
- "Once subprime mortgages collapsed the financial crisis was inevitable".

Risks and observations on the world:

- Securitisation is fairly benign today, with low "opportunity for mischief";
 - Subprime credit cards and auto loans are risky, but very small;
 - $_{\odot}$ Student loans are big, but are guaranteed by the U.S. government; and
 - "Credit Default Swaps (CDS) are more regulated than you think" -- capital requirements imposed by regulators are very high. However, a flaw of CDS remains that there can be more CDS outstanding than actual underlying loans.

- Leverage in the U.S. banking system is much lower today than in 2008, so Eisman doesn't see systemic risk in the U.S.;
 - For example, Citibank was levered 35:1 pre-crisis, and is now 10:1;
 - "The Dodd-Frank Act has altered the financial landscape dramatically. For the country it's a great idea, but not for the banks";
 - The cycle is now turning, and we will have a period of deregulation and slightly higher leverage. "Citibank will go back to 14:1 leverage"; and
 - The banking industry is far better now at managing and monitoring risks than it was precrisis.
- The U.S. property market is pretty healthy: A shortage of new homes is causing prices to rise at 9% per annum;
 - One identifiable risk is that Canadian house prices are starting to drop, for the first time in a generation: "People are going to be surprised that there are going to be credit losses in Canada".
- He notes that there is too much high yield debt and corporate debt, and that will be a problem in the next recession – but does not represent a systemic risk;
- Post-GFC the U.S. banks raised capital, booked losses and took their medicine quickly. By contrast, European banks deferred losses, and chose a "slow death" – so the NPL problems still persist;
 - The bank stress tests in the U.S. are meaningful and hard (some have failed), but in Europe "everyone passes the stress test and then nine months later a bank fails".
- Except in housing, credit is broadly available in the U.S.: "Credit is not restricted by regulations, the issue is that demand for loans has dropped";
- The Peer-to-Peer (online) lending model is unsustainable: "Making a loan is not a once-off transaction, it's the beginning of a relationship";
- Quantitative Easing (QE) and it's unwinding:
 - QE has incentivised companies to buy back stock, rather than invest in the real economy; and
 - QE was "monetary policy for rich people: It made asset prices go up, but didn't affect the real economy".
- A Cyclically-Adusted-Price-Earnings and interest rate model currently indicates a 1% excess long term return from equities (over bonds): So if you were limited to the U.S. and to stocks and bonds, then you would favour equities. However, he notes that you have to have a very long term perspective and the ability to withstand volatility!
 - QE and low interest rates have caused asset inflation: "*The biggest risk in markets is that rates rise too quickly*".

Hedge fund industry:

- "In a world where interest rates are zero, companies that have problems tend to be forgiven quickly" making short trades difficult ("Equity is worth an infinite amount at zero rates");
- But rising interest rates will make long:short strategies much more attractive;
- Hedge fund fees will continue to be whittled down.

Final thoughts:

– An unregulated financial system is prone to boom and bust: Banks must be highly regulated.

Asia's Fixed Income Market: The Elephant in the Room

Emil Nguy (Income Partners)

Big Idea: China is aiming to have a large trade block, and a reserve currency. The Chinese bond market is already big, and will grow along with China's influence. Investors should be in it.

Nguy argues that the Chinese Renminbi bond market will be a large and growing asset class in coming years.

ACC Comment: Nguy's firm invests in this asset class, so he seems quite quick to dismiss the key concerns about Chinese over-indebtedness.

The dominant post WWII trade model was "Vendor Financing": Selling goods to consumer countries and providing finance for them to buy your goods (e.g. Japan selling to the U.S.; Germany to Euroland; China to the U.S.). All three examples have had relatively fixed exchange rates (Euro is fixed; Japan had a US\$ linked rate; China still has a US\$ link).

For Japan, the Plaza accord of 1985 – which caused the Yen to rise sharply (impairing their exports to the U.S.) -- burst their bubble. As a consequence of the slow-down, the debt:GDP of Japan rose from 30% in 1985 and to 245% 2018. Japan has been monetising its debt, and the Bank of Japan owns 50% of outstanding Japanese Government Bonds (JGBs). Virtually all JGBs are locally held and in Yen. Japan however continues to run a trade surplus, and is the biggest creditor in the world. "When your debt:GDP is 245% it is mathematically impossible to pay off the debt" and Nguy argues that "the debt will simply be cancelled as it rolls off." Despite its size, the Yen is not a reserve currency, has no trading block and international trade is not conducted in Yen.

Europe has internal trade imbalances, with Germany using the "Vendor finance" model to sell goods to other countries in Euroland: But because the Euro is fixed, there is no ability to use the currency as a release mechanism. "It is unclear how this plays out" says Nguy ominously.

Post-2008, the big shift is that China has emerged as a currency block – with international trade settlement in Renminbi (RMB) expected to rise from 0% in 2008 to 25%-45% by 2028. This is a step toward a world with multi-reserve currencies -- proportional to trading-blocs: US\$; EUR, RMB. Note: The Chinese currency may be called, the Chinese Renminbi (RMB) or Yuan.

By deploying the "Vendor financing" model, China now holds over US\$1 trillion of U.S. Treasury bonds. The RMB has been rising slowly since 2005 -- weakening exports slowly in order to avoid a bubble burst (e.g. like Japan in 1985-1989).

China is aiming for RMB to be a new reserve currency: This will allow it to print money, continue to use the Vendor finance model to promote growth, and broaden the RMB denominated debt market. Nguy

notes that one of the elements of the One-Belt-One-Road initiative is to create an RMB currency trade block.

RMB is currently a basket-linked (trade-weighted) currency, and therefore linked to US\$ and has low volatility.

ACC Comment: While Nguy argues for the Remnimbi as a reserve currency, he makes no reference to the limiting factors of government central planning and lack of democracy, which undermines trust in the currency.

Nguy thinks the RMB bond asset class - onshore and offshore - represents one the biggest investment 'opportunities' for the next 10 years.

China's onshore bond market is already US\$12 trillion in size -- about 40% in government bonds and 24% in 'policy banks' (e.g. government owned banks). There is a fiscal deficit of about 3% of GDP, and thus \pm US\$500-600 billion of new sovereign debt per annum.

Nguy notes China's bond market has some problems: There is a mismatch of the pace of capital market development (immature) versus financing needs. For example, there is a term-structure mismatch arising from using deposits to fund long-term infrastructure. To solve this, China created a municipal bond market to create longer term funding. Further, not all assets funded with debt are productive. Nguy seems unconcerned: "China has good economic growth, and the reserves and balance sheet to deal with credit problems."

Despite the onshore bond market's size, it was closed to foreign investors until July 2017. Currently foreign investors hold only 2% of the market, but this is expected to rise to 10-15% in next few years. Due to the market's opening, Chinese bonds are now being added to a range of bond indices.

Chinese yields (e.g. 10 year at 3.7%) are higher than the U.S. (3%). The yield curve is very flat, as the BOC has been tightening credit to reduce leverage.

Talkin' 'bout my Correlation

Joran Laird (T. Rowe Price)

Big Idea: The equity and bond bear market is coming, so build bond funds with unconstrained mandates, low duration benchmarks, and a range of global alpha sources.

Laird noted the common question: "Equities outperform fixed-interest over the long term, so why bother with bonds?!"

- Time horizon matters: Fixed Interest (FI) and Equity (EQT) don't fully correlate -- FI outperforms during EQT bear markets;
- High yield (i.e. credit) has a high correlation with EQT (0.6), but high-yield bonds outperform both EQT and Treasury bonds (TRY) during economic recoveries;
- Global treasuries (risk free bonds; TRY) usually have a low correlation to EQT, but in weak EQT markets TRY have a negative correlation to EQT;

- EQT market losses have tended to be short and sharp, while recoveries take a longer time;
- Laird argues one should look for assets with a negative correlation to EQT; and
- In answer to his own question, he says FI complements, not competes with, EQT.

Global Treasury bond indices are dominated by the top five borrowers – U.S., Japan, Europe, UK, and Canada. Those indices have a modified duration of about 8.

The U.S. will be selling \pm \$1.18 trillion of bonds in 2018 – which is a substantial addition to the total U.S. treasury market of \pm \$7 trillion and even the total global treasury market of \pm \$24 trillion. This is a bearish sign for bonds.

Laird argues that FI managers must move toward non-traditional assets, change FI mandates to be unconstrained, and shift to "Cash+" benchmarks (e.g. Libor+2% is his target). He favours wide, opportunistic, global, absolute return FI mandates at this point. He actively manages spread duration. In short, to sell funds with low modified duration, and several sources of FI related alpha.

His approach is to build funds with a "stable core" + "alpha opportunities" + "defensive positions":

- A Stable Core of high credit quality assets with no hedging costs to US\$;
- Alpha opportunities are more volatile and high risk high-conviction positions. These might have the ability to hedge when desired. Such bets might be in countries with improving fundamentals or a reform agenda.
- Defensive Positions will have low volatility during stable markets, but a negative correlation to equities (e.g. short credit default swaps on high yield.

ACC Comment: Laird is highlighting that "fixed interest" is not a monolithic asset class, it has various facets and alpha (or risk) sources, and he has made the smart step away from FI being merely duration. By now favouring low-MD benchmarks, as well as looking for negative correlation to equities, he is 'doubling up' on his bearish equity and bond view.

Abenomics: Japan's Macro and Markets Outlook Kathy Matsui (Goldman Sachs)

Big Idea: Japan is past the worst; macro reforms are having a positive effect, notably in corporate governance. The stock market is supported by rising earnings, dividends/buybacks and M&A. One can look forward to the (slow) normalisation of monetary policy.

Abenomics has had positive impacts: A weaker Yen; improved employment; GDP growth; and a rising stock market. While equities have done well, the TOPIX has de-rated (in P/E terms) – the market rise has been earnings driven.

The TOPIX forward P/E was 18x in 2012, now it is 15x, and 38% of Japanese companies are trading at discounts to NAV. Matsui says this indicates that investors are sceptical about Japan going forward, a view that might be expressed as 'it's cheap for a reason, there is weak governance and too much cash which can't be productively deployed'. She notes that while global investors account for 70% of market trade, they are broadly underweight Japanese equities.

The TOPIX can rise another 8% to 9% based only on earnings growth in the next two years. A 'normal' post-WWII Japanese market cycle was driven by exports: Rising exports = rising economy = rising earnings = rising TOPIX. Only in recent years (during Abenomics) has it seen a weak Yen drive the TOPIX up.

- Trend economic growth rate is about 1%;
- Japanese unemployment is at a record low, with the job offers:applicants ratio at 1.6x (i.e. there are 60% more jobs than applicants);
- Wages are rising (wages per capita are up about 3.3%), as is the labour participation rate (and older workers in the work force);
- Women are being encouraged to rejoin the workforce: The cohort of 25-44 year old women will rise from 68% of the workforce to 73% by 2022 (but this is no higher than the U.S.);
- Consumption is 55% of GDP (similar to the U.S.), and rising employment and wages are leading to rising consumption;
- Japan has had a 'lifestyle' problem of over-work: There is a new overtime limit of 45 hours per month and 360 hours per year; and
- Capex is rising, with growing investment in robots/AI.

Japanese structural reforms:

- Deregulation has not been addressed by Abe: This expected "3rd arrow" has not been deployed;
- A new corporate governance code has been introduced: More than 50% of companies (up from 17% in 2010) now have at least two independent external directors or have more than 1/3rd independent external directors;
- There is a rising number of reported accounting scandals, but this is seen as a positive sign (i.e. housecleaning);
- Matsui says shareholder activists are returning, and taking aim at small and mid-cap companies;
- Votes by shareholders are now counted and disclosed after each AGM; and
- The finance regulator (FSA) is charged with protecting the interests of shareholders.

Japanese companies are holding \$945 billion of cash, and are starting to increase share buybacks and dividends. There is rising Merger & Acquisition (M&A) activity – so far mostly aimed outside Japan, but Matsui expects more domestic M&A: "There are quite a lot of listed companies who do not need to be listed" (due to industry consolidation, weak succession plans, no need for fresh capital).

Japan's debt load and widening the tax base:

- 95% of Japan's debt is held by Japanese people;
- Rising interest rates do not affect the government's costs of historically issued debt;
- The key to debt sustainability for Japan is to broaden the tax base;
 - Japan's tax revenue:GDP ratio is about 30%, but the tax base is very narrow (70% of companies pay no tax); and
 - $_{\odot}$ $\,$ In 2013 Abe introduced a universal taxpayer ID system, and this should broaden the tax base.

- The longer term end-game is to a) widen the tax base, b) cut (fiscal) costs, c) achieve economic growth, and d) aim for fiscal surplus.

Monetary policy:

- The Bank of Japan (BOJ) owns about 5% of the overall stock market (much of it via ETFs). This
 is part of the 'QE stimulation' framework trying to push up inflation toward 2%. These equities
 are likely to be held for a while;
- BOJ has been targeting negative short-term rates, and aiming for Japanese Government Bond (JGB) yields to remain near 0%;
- Setting a high (2%) inflation target is intended by the BOJ to eliminate the 'mindset of persistent deflation', as is (the unhealthy) negative interest rate policy and BOJ's equity holdings;
- BOJ does not want to tighten prematurely: "They've made that mistake once before"; and
- "The economy is no longer in a coma, it's out of ICU: It's time to move from NIRP [a negative interest rate policy] to ZIRP [a zero interest rate policy]".

While there is agreement that Japan needs to import workers from abroad, there is a very strong bias against allowing permanent immigration (versus allowing temporary workers in, such as construction workers or caregivers): "Immigration is a dirty word".

Developments in Financial Technology: A Conversation with Cutting Edge Leaders Will Anrich (ThalerOne); Gabriel Hai (Lendit Fintech); Ting Li (Yunfeng); Ming Shu (Lingfeng Capital)

Big Idea: Fintech will continue on the ascendant. The Chinese market size and underserviced population creates an enormous testing and scaling opportunity.

The high growth rate in the consumer finance sector is driven by:

- Fintech;
- Infrastructure (e.g. payment mechanisms, consumer & business credit ratings); and
- "a/b/c/d": Artificial intelligence, Blockchain, Cloud computing, Data tech.

Some of the dominant trends in Fintech for the next year:

- Blockchain! More uses are being found.
- Consumer Fintech: "Fintech is a 'leapfrog' technology, jumping over the slow, non-responsive banking sectors" particularly in China:
 - Chinese banks are business orientated, by contrast to the U.S. where banks are largely consumer banks: In China this leaves a gap for consumer finance services, and notably Fintech;
 - China's banking system is poorly evolved, by contrast to the U.S. which has a robust banking system (e.g. large infrastructure, consumer credit scores, deep penetration of products [for example, "each U.S. consumer has an average of three credit cards"]); and

- China's consumer finance company growth has been huge and will continue to grow sharply alongside rising spending-power and attendant consumption.
- Disruption: There has been disruption in payments and micro-lending (e.g. cell phone companies utilizing usage data to assess consumer credit quality, and therefore make loans). There has not been meaningful disruption in the investment and insurance sectors as yet. Traditional financial institutions are waking up to the risk of disruption.
- Client Acquisition Costs: The costs of hiring coders and buying data means the cost of 'client acquisition' in Fintech is rising sharply. As a result Fintech must be applied in scale to large populations ("Finance is always a game of scale").
- Fintech is moving into regulated banking: "Large Fintech companies are already 'Fin' companies, as much of their business is licensed" -- and they will continue to move up the food chain into traditional banking. There is substantial opportunity for banks to partner with Fintech companies.
- Regulatory Shifts: "To survive in China you must be very attuned to regulatory change: Sometimes there is no regulation, sometimes there is very austere regulation". Fintech businesses must be nimble to respond to changing regulations.

Silicon Valley has the edge in fundamental technology (i.e. coding), but China has more applied Fintech.

The Blockchain platform now allows investors to buy small parts of large assets (e.g. property).

Alternative Investment Opportunities in Asia: A Conversation with Institutional Allocators and Managers

Amy Flikerski (Canada Pension Plan Investment Board), Chris Gradel (PAG), Carl Huttenlocher (Myriad Asset Management); Mario Therrien (Caisse de depot Quebec) Big Idea: Chinese equities have positive tail-winds: The market is globally under-owned and is being liberalised.

The outlook for Chinese equities is positive:

- China is moving into a period of more sustainable economic growth, and probably rising corporate profits growth (but note that "good economic growth does not always translate into shareholder returns");
- The Debt:GDP ratio rise from 110% to 270% was led by capacity expansion (e.g. infrastructure, SOE), but that is shifting toward consumer lending (e.g. mortgages, consumption): Thus, away from deflationary capacity creation toward demand side (expansionary) lending;
- Private enterprises generally are driving economic activity;
- MSCI inclusion of China's "A" shares in the global index will be a big flow-of-funds story, increasing inflows to China, and price volatility;
- The Chinese market regulator wants to make it a fully functional market—including index futures, short sales as hedging instruments:
 - "Stock market and currency liberalisation will proceed stepwise";

 Capital flow regulations are present, but manageable: "It is possible to move money in and out of China, but it's a process and you have to follow it. If you use the money for what you said, then it's not a problem to take it back out";

- For short sales, investors can currently borrow only in the offshore "A" share market, but not the onshore market. As the number of listed names broaden out, there will be a broader pool of shares to borrow;
- While price discovery has been weak, there are prospects for more differentiation between issuers; and
- China is moving toward more open and liquid markets, but India seems to be "going the other way", for example, by imposing capital gains tax on foreign investors. "The opportunity set is rising in China and dropping in India". While the Indian long-term capital gains tax is a problem, there are some opportunities in alternatives (e.g. property, private credit, infrastructure). While India has an improved bankruptcy code, no company has been through the bankruptcy process yet.
- "As with any emerging market there are risks of bad behaviour and you have to do your work";
- The anti-corruption drive has helped the legal system to work more fairly;
- International money managers are setting up to invest in Asia (and so, become a channel for capital); and
- China is globally under-owned by global investors: Chinese equities' weight in the MSCI World Index is well below China's GDP weight in the world.

Addressing the question of how to access the Chinese market:

- For investors, "manager selection matters" with a focus on transparency and alignment:
 - "Manager transparency has improved markedly since financial crisis";
 - \circ $\;$ Large investors are moving away from pooled funds; and
 - Fees: In equity mandates, funds want to keep 70% of the alpha. There is a new fee model, wherein the manager earns the greater of 1% flat or a 30% alpha share.
 - https://www.biznews.com/asset-management/2017/02/22/asset-managers-cost-structures/
- For asset managers, investor flexibility matters:
 - "It's good to have flexible partners who can provide capital to be able to capture opportunities";
 - "If you have a few large clients they tend to ask for more work at lower fees and it's generally good to have a wider client base. But on balance it's really useful to be able to call a client for capital quickly"; and
 - Despite Fintech's rise, there is an opportunity for asset managers in the retail market (in both China and India).
- Managers should be cautious about creating lots of different vehicles: "The number of people grows more than linearly with the number of products!";
- To investors dealing with the problem of efficiently deploying large-scale capital, it is suggested to a) have a core portfolio with established firms in scalable strategies, plus b) a selection of smaller, younger managers;
- Investing in Chinese real estate: Property is registered with a land bureau, and mortgage bonds are registered; and

- Investing in Chinese debt instruments: For senior secured creditors the court system works well, less so for unsecured creditors:
 - Investing in Chinese Distressed Debt: There is +\$600 billion of distressed debt on bank balance sheets in China, and +\$200 billion in India. Chinese banks have had a strong bias toward SOEs and large corporates, while smaller companies have been forced to pledge security (e.g. property): That makes distressed debt more attractive (for recovery prospects);
 - Global credit spreads in the public high yield debt market are tight and therefore not an opportunity. That said, China credit is considered "investable", and defaults in China have been low.

Global warming: Investors are paying attention to climate change, and some large funds are setting portfolio wide carbon-emission targets (e.g. "reduce carbon by 25% across the portfolio by 2025").

The Future of Investment Management: Asset Owners Panel

Roger Urwin (WTW), Christopher Ailman (CalSTRS), Hiro Mizuno (Japan Government Pension Investment Fund), Alison Tarditi (Commonwealth Superannuation Corporation)

Big Idea: A wide-ranging discussion amongst some very large funds about their thinking, goals and challenges.

WillisTowersWatson offered some high-level comments:

- The U.S. represents 56% (2017) of global pension funds;
- 51% of global pension funds are Defined Benefit, and 49% Defined Contribution (DC) (vs 67% and 33% 20 years ago);
- Globally there are 201 pension funds above US\$20 billion, and 26 funds with assets above US\$100 billion;
- Funds representing US\$45 trillion report average returns of 6.2% p.a. for the past 20 years;
- Pension funds' asset mix is an aggregate average of 46% equities, 29% bonds, and 25% alternatives; and
- The Top 5 issues for Retirement Funds are:
 - Low market returns;
 - Attracting and retaining staff;
 - Capturing alpha;
 - Private markets; and
 - Managing costs.

The <u>California State Teachers' Retirement System</u> (CalSTRS) is the largest teachers' retirement fund in the world: With US\$225 billion of assets it covers 950 000 members, made up of California's teachers. Members are not in the U.S. Social Security system, so CalSTRS is the only pension for them. Members are 75% active, and 72% female. It is a long-lived fund, because teachers live longer than any other profession – so the fund has a very long tail of liabilities, and its thinking is intergenerational. It is only

64% funded, principally as a result of "poor management of liabilities" (i.e. paying retirees too much) and lengthening longevity. Further the fund is shrinking. CalSTRS aims for a 7% return, on average.

The combination of being underfunded, having a high (unreachable?) return target, and being cash-flow negative implies that there will "have to be higher contributions from the employer." It has about 54% global equities; the combined real estate, private equity, and fixed income are 12-13%; "Risk-mitigation strategies" (which have a low correlation to global GDP) and cash make up a large portion of the remainder.

The <u>Commonwealth Superannuation Corporation</u> (CSC) of Australia services 500 000 government (or military) employees, and has A\$45 billion under management. CSC offers some Defined Benefits, but these are closed and new inflows come only from Defined Contribution funds. They offer "lifestyle funds"-- aggressive, conservative, balanced, capital stable – and the default option is a balanced fund. As they are mostly DC, they estimate the "implicit liability" for DC members, built around the idea of "retirement adequacy" which is "a comfortable retirement standard", coupled with estimated returns, the member's contribution period and contribution level. "We have an acute member focus." They have no investment committee, but rather operate with a set of delegated authorities (e.g. mandates) from the Board to the investment team.

The <u>Government Pension Investment Fund</u> (GPIF) of Japan is the sole asset manager for Japans public employee pension scheme. It is the largest such scheme in the world, with US\$1.4 trillion. As a result the fund thinks a) very long term (e.g. a 100 year time horizon), b) worries a lot about deployment and what ideas are actually implementable; and c) embraces sustainability.

It is holding \pm 50% in global equity, \pm 40% in fixed interest, and up to 5% in alternatives (such as private equity, infrastructure, real estate). The long-term return target of the fund is CPI+1.7%. The fund owns 10% of the Japanese equity market, and 1% of global equity markets.

It is "well diversified, but bears unhedgeable systemic risk": Thus GPIF thinks quite seriously about longterm ESG risks – in investees, countries and globally! They need the world to be sustainable on a 100 year view in order to serve their members.

GPIF considers that it cannot efficiently build an in-house equity team, so they hire equity managers. Their domestic fixed interest is managed in-house, and they out-source non-Japan fixed interest. GPIF "tries to be a role model for other asset owners in the outsourcing model".

Seeking returns in a 'lower-for-longer' environment?

For GPIF, they have a high bond weighting and low bond yields --- so they need some additional return source – thus moving toward private equity, but noted that "There are 7 000 companies listed in the U.S., but 8 000 held by private equity firms – so PE is no longer an 'alternative' asset class." For GPIF their minimum investment size is in US\$ billions – so they expect their own presence in PE is chasing up values and will drive down private equity returns! For GPIF, given the large size and needed return, "I have no choice... but to outsource asset management and also to be in private equity."

For CSC, they are very focussed on controlling investment costs. While that seems to argue against PE and hedge funds, CSC was an early mover in both (in 1990s). They ask the (possibly rhetorical question ... in response to the GPIF chasing down returns): "Can we find sufficient compensation for the risks we are taking, and do we have a competitive advantage?"

Relationships with asset managers:

The GPIF had intended to increase their actively managed portfolio, but found that in aggregate they had earned 0% alpha after fees for 20 years -- even though 80% of the GPIF team's time was spent on choosing and managing active managers!

- GPIF does not want their team to dig deeply into how/what the managers actually do but does look very closely into the corporate governance of their asset managers; and
- They determined the fixed fee model was adverse to the fun: Now they pay a passive base-fee, and participation in alpha. They are willing to give managers multi-year commitment, but impose a fee-clawback at the end (and also address managers' concerns about client timing risk – e.g. exiting after a bad spell).

GPIF has removed short-term performance from its reporting packs: "Short-termism is of no benefit to the asset owner, the asset manager or corporate managers."

Culture:

Culture should communicate a sense of purpose -- but "purpose should move from vague to specific".

Aim to have a culture of honesty – particularly about your competitive advantage, and doing what you say you are going to do. And have hard conversations when things aren't working.

Sustainability:

At CalSTRS "sustainability is ingrained into everything we do. It doesn't do any good to pay a pension in 20 years if the world is ruined, or pharmaceuticals are too expensive". ESG is integrated, but with an "E" team, an "S" team, and a "G" team. It is noted that younger employees are more willing to learn new metrics, such as ESG factors. Financial statements are backward looking, so CalSTRS wants to see forward looking material business risks. "We will hold companies for 30-40 years, so we care about the 5-10-30 year time horizons", and inherently that requires ESG assessments.

At GPIF they take the view that "any investment has an impact in a society: The strength of impact varies between investors, but all investments have impact". GFIP is a 'universal owner' – they do not consider they have to 'beat' anyone and can work to improve the market itself: They focus on systemic sustainability.

ESG is considered "a long-term contingent risk factor, which should be assessed and managed". All agree with that – and thus there is support of the U.N. Sustainable Development Goals -- even if there is not agreement that ESG work produces superior returns.

Staff:

At CalSTRS US\$1bn is managed by 0.04 people (or, differently, each person managers US\$25 billion). This compares to a global average of 0.50 people per US\$1 billion (for larger funds).

CSC offers 'horizontal' opportunity for growth (not merely vertical) – the team gets rotated around the various asset types. "Tean members should all aspire to be CIO, to build skills in a way where you do your original job much better". Also, CSC offers 'purposeful work' – the ability to see the face of their members. CSC recruits based on skill (not necessarily experience), and seeks a mix of young and experienced staff (a "barbell" of talent).

GPIF does not aim to be the best manager, but rather to be "the best-in-class fund-of-fund manager". They aspire to "build something different". "We can't pay for top player, but we can buy the stadium and management: We should be scout, coaches, and managers."

Artificial intelligence:

- AI will change asset managers over 15 years it will change the skills set of the investment team;
- AI is also a 'huge investment opportunity' as it allows understanding of customer needs, and to tailor products and information; and
- Technology is seen as helping to identify failures quickly, allowing faster pivots.

<u>Crypto-currencies/Gold:</u> No holdings by any of the panel.

Crypto-Assets: Redefining a New Asset Class

Sandra Ro (Vector Crypto Capital)

Big Idea: She can't quite explain the fascination with Bitcoin, but believes that "clearly something is going on", and that crypto-currency is an emerging medium of exchange.

Sandra Ro seemed to encourage the audience to engage with Bitcoin and other crypto-currencies, mostly on the basis that:

- Crypto might be part of the evolution of 'transfer of value' tools: From barter, to gold, to fiat currency... to crypto-currency;
- "Something is happening"... "the numbers don't lie";
- Crypto currencies align with the anti-establishment feelings of millennials; and
- Crypto may be no less tangible than other perceived stores of value, such as gold, diamonds, or fiat money. All these media are based on faith.

Still, she also hinted at a variety of reasons to hate Bitcoin, such as:

- Bitcoin is not as confidential as thought: "Bitcoin is more trackable than cash, for sure!"
- Il-Liquidity, with no central market-place and an inability to deal in size;

- High transaction costs (e.g. fees);
- The lack of central authority creates risk of loss (e.g. if you lose your key);
- Systems limitations (e.g. speed, size, embedded limits);
- Confusing debates about "forks" in a currency;
- Limited real life use of crypto-currencies; and
- The mystery of Satoshi Nakamoto, the mysterious "him" or "they" who created Bitcoin.
 [ACC Comment: Don't even get me started!].

Regulation is coming to crypto, but it is not clear how: Crypto currencies have been called securities, property, commodities, and currencies -- no one can agree on the nature of the instrument. Because it's a virtual system, any regulation has to be global in order to be effective.

ACC Comment: When asked about Bitcoin all professional investors at the CFA Conference indicated they cannot value it, don't trust it, and won't invest in it. Some argue that any investment is based on the present value of future cash flows and therefore Bitcoin has no value. But that assertion is somewhat flawed: For many assets – metals, art, commodities, currencies – the future value is dependent on an estimated sales price. In many cases you are really are taking a view on the acceptance and popularity of an asset to determine value. However, trust is the foundation of all these items: How much confidence do I have in the scarcity? the custodians? partners? my ownership? liquidity? Bitcoin fails many of these tests. Bitcoin also fails the basic tests of a currency: Medium of exchange (yes, but only partially and with high costs); measure of value (no, too volatile); store of value (no, too volatile and uncertain future).

Short Takes: New Perspectives on the Future of Global Investing

Three short "TED" style presentations

Altaaf Aboo (EdgeGrowth) / Impact Investing

Impact investing is part of the societal healing from apartheid, and aims for national development. It must earn commercial returns while also providing positive impact.

Brindha Gunasingham (FitzBiz Investments) / Time is of the Essence

When using Beta for risk-assessment or targets, then you must calculate your Beta using a period which matches your investment horizon. Beta can be materially different depending on your holding period.

Malcolm White (CI Investments) / Artificial Intelligence

Artificial Intelligence (AI) has come far: Accuracy in AI facial recognition is now about 97%, above humans' ability at 95% accuracy. "Machine Learning is the nexus of technology, statistics and knowledge". However, AI doesn't understand context, and AI can be gamed: Once parties figure out what your model wants to see, they can feed it. Ultimately, White encourages that people should not see AI as a threat, but rather as an adjunct. Human judgment isn't going away.

Thinking Fast & Slow

Daniel Kahneman

Big Idea: Human judgment is fallible. That can be a curse when applying the wrong judgment to a question, but can also be a blessing as an optimism-bias is necessary to undertake new endeavours.

- <u>Fast thinking</u> which is heuristic, automatic, pre-learned, it feels intuitive.
- <u>Slow thinking</u> requires engagement, calculation, "pause for thought", it feels clunky.

Fast thinking is confident thinking: "I've seen this before and know the answer". But Kahneman warns that we are not good at differentiating between the known and unknown – we apply our heuristics (e.g. mental shortcuts) in a sloppy manner.

- Slow thinking requires work, so, due to laziness, we like to apply 'rules' we already know;
- We tend to follow our intuition even when we are applying the wrong 'pre-programmed' answer to the question at hand;
- People underestimate the uncertainty of situations, and misinterpret risks; and
- Superstition develops when we correlate unrelated factors (e.g. we wear a certain shirt and get the market right – it becomes our 'lucky shirt');
 - Superstition is closely related to our frequent 'illusion of control' belief we can affect outcomes that are entirely attributable to chance (e.g. choosing numbers for a lottery ticket).

ACC Comment: "Gut feelings" and "Intuition" don't really exist – they are responses to actual inputs/information/observations. Investment professionals should be able to look "through" their hunches to explain the factors they are responding to.

Kahneman says the questions we must ask ourselves are: "Do we have expertise?" or "Do I have expertise in all the areas where I have intuition?"

Expertise is learned through a) experience, b) with immediate feedback, and c) applied in a consistent environment (e.g. the world doesn't change).

But this creates a paradox: "How can one learn that one has to learn?"

Some recommended remedies for humans' decision fallibility:

- "The safe thing to do is not to believe someone who has a strong hunch";
- When you immediately feel that you understand something that happened (and have a story line or explanation), you should actually question your own interpretation: Try to have a sense that you were 'surprised' again, and relook at the factors and circumstances;
- Avoid loss-aversion by not seeing each decision in isolation (e.g. a narrow-framed "right" or "wrong"), but rather see each decision as part of a class of decisions you have to make over time (with the goal being to be "more right than wrong, on average");

- Avoid over-confidence the belief in one's own judgment, insight, wisdom, or experience.
 Question everything, always;
 - Human judgment is 'predictably irrational', so use algorithms whenever possible --
 - \circ $\;$ An algorithm is just a rule: It is not complicated to create an algorithm;
 - There is noise in all areas of judgment (e.g. radiologists interpreting x-rays, actuaries interpreting data), and algorithms can often look through the noise;
 - Algorithms <u>only</u> apply where there is good data, developed rules, and no feedback loop (e.g. consequence of the decision on a future outcome); and
 - Be cognisant that all statistical models have limitations, and the more complex they are the weaker and less reliable they are.
- If you can't use an algorithm to improve decisions, then use guidelines or checklists to avoid mistakes.

ACC Comment: #checklistssavelives"

The planning fallacy:

"Optimism is everywhere in planning": People systemically underestimate costs, efforts and time required for tasks or projects. The remedy for this is the "outside view" -- look at similar cases for planning so as to budget time and money sufficiently. Try to get statistics of different initiatives which indicate their success and delivery.

Overconfidence bias and leadership:

- Because of optimism, we don't plan for the worst -- so loss aversion often does not come adequately into play in decisions;
- Creators consistently overestimate their own odds of success;
- Overconfidence is usually a curse -- but for some people it is a blessing: If you look at success stories, the founders were overconfident and optimistic; and
- The people who make things happen are overconfident: They make good things happen, and bad things happen:
 - Obama was a slow, deliberate leader but it cost him popularity. People want fast thinkers as their leader: Trump is a classic fast thinker, and over-confident.

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