

Edition 205, 9 June 2017

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Mary Meeker's amazing Internet Trends Report 2017

Graham Hand

Each year, Mary Meeker of venture capital firm Kleiner Perkins Caulfield Byers produces a report on global internet trends and technology. It has become the 'must-read' for technology and business, and the 2017 Report fills 355 slides (up from 213 last year).

There is so much in it, including global macro trends, it's almost impossible to summarise unless a single topic is chosen. It was delivered by Meeker at the Code Conference in a rapid-fire <u>33 minute presentation</u> but she says the material is meant to be read, not presented.

It's worth flicking through the 2017 Internet Trends Report in full, but here are the 'focus topics':

- Online Ads and Commerce: A review of current advertising trends shows an increased focus on the measurability of online ads and the interconnectedness of ads and commerce (slides 10-79).
- Interactive Games: Evolving and driving innovation, becoming leading spectator sports with growing use of games for education, learning and driving the consumer and tech landscape (slides 80-150).
- Media Distribution Disruption: Digital streaming businesses have changed the media game through scale and personalisation. Consumers want choice but are concerned about privacy (slides 151-177).
- Healthcare: Digitisation of patient data, pharmaceutical testing and medical records lead to more accurate diagnosis (slides 288-319).
- China: Mobile user engagement is creating an evolution in mobile-centric entertainment and financial technology, plus leading on-demand transportation (slides 193-231).
- India: Behind China, but leapfrogging to new technologies and 1.2 billion people with digital identity profiles (slides 232-287).

Almost every business is affected in some way by the changes Meeker describes. There are now 3.4 billion internet users worldwide, growing at 10% a year. Online advertising is rapidly increasingly, with mobile gaining share over desktops. Internet advertising exceeded television advertising for the first time in 2017, with an



incredible 85% of ad growth going to Facebook or Google. Meeker describes the type of ads that work on different platforms.

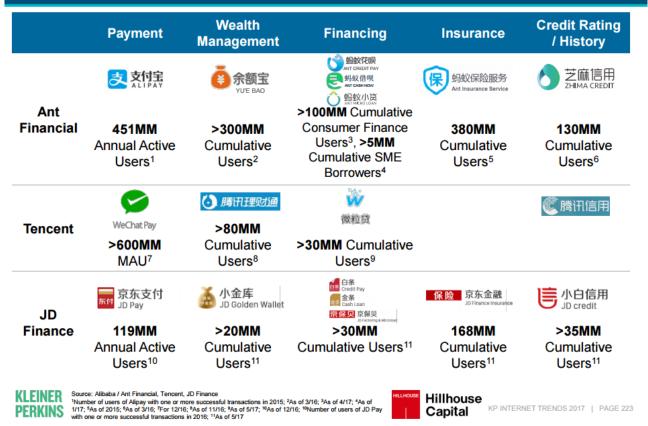
The future will be about pictures rather than words, with algorithms interpreting content. Machine learning is improving rapidly, and real-time online customer conversations are rising.

There's an incredible rise of global interactive gaming, which Meeker describes as the 'motherlode' of tech product evolution and learning. There are now an unbelievable 2.6 billion gamers in the world versus 100 million in 1995. It is now mainstream, and the average age of gamers is 35 years. The games are not all trivial, as many involve planning workflows, resource efficiency, social connections, interactive learning, personal finance, esports and even surgery.

Other sections in the presentation are on media, music, health, video, augmented reality, retailing, China and India. Phew ... it's hard not to be overloaded with data.

And what about financial services? Try slide 223 for rapid take-up of payments, wealth management, financing and insurance and hundreds of millions of online users.

Mobile Payments = Gateway for China Internet Leaders to... Become Diversified Financial Services Platforms



If you don't have time to scan the 355 slides because you're too busy in the present or worrying about the past, at least look to the future for half an hour by locking yourself in a room with a laptop and watch her presentation. It will reframe how you think about the coming years.

Graham Hand is Managing Editor of Cuffelinks.



Shopping centres: back to the future as community centres

Adrian Harrington

The speed of transformative changes in technology and society is ricocheting through the retail sector. The retailing environment is currently the most challenging it has ever been, driven by both structural and cyclical headwinds.

The arrival of international retailers in recent years has reshaped the retail landscape – Zara, H&M and Uniqlo to name a few. At the same time, local retailers such as Dick Smith, Payless Shoes and Rhodes & Beckett have disappeared from the scene. The latest ABS retail sales numbers reveal anaemic retail spending, while online retail spending continues to gain momentum.

Amazon's imminent arrival is sending shock waves through the retail community despite bullish responses from the likes of <u>Gerry Harvey</u>, who said, "Amazon in Australia, it is not going to be as easy as the US ... most of the retailers there rolled over but they won't here."

However, the newly-anointed CEO of Wesfamers, <u>Rob Scott</u>, was a little more conciliatory. "We have been expecting this for a long time. We have a healthy sense of paranoia. We are not complacent around the competitive risks."

Market factoring in changes

Figures 1 and 2 highlight the relative underperformance of retailers and the listed retail A-REITs in the past 12 months, as investors become increasingly concerned about how both components of the retail marketplace respond to the significant headwinds.

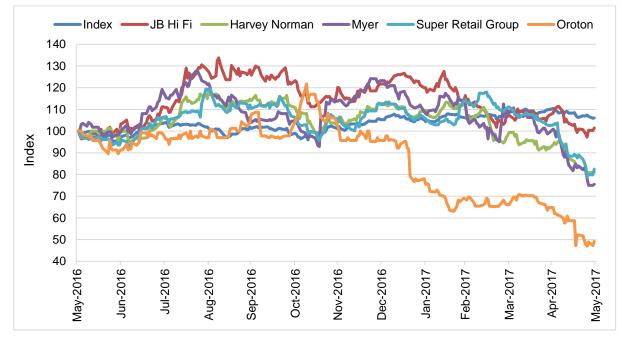


Figure 1: Performance of listed retailers: 12 months to 31 May 2017

Source: IRESS

Given retail assets comprise more than 55% of the listed A-REIT sector, it is not surprising that the relative performance of the A-REIT sector has been impacted. Westfield, Vicinity and Scentre, the three largest retail A-REITs, have all significantly underperformed the Index in the past year.



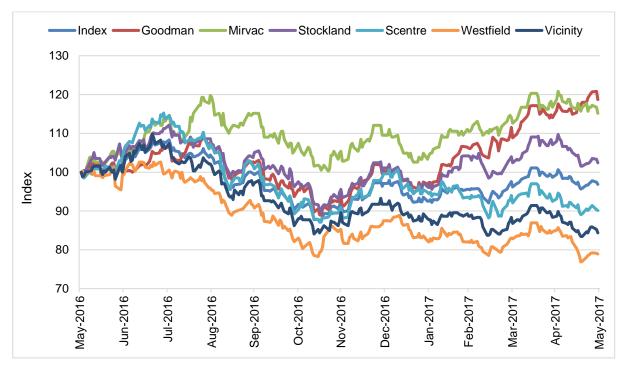


Figure 2: Performance of listed A-REITs: 12 months to 31 May 2017

Source: IRESS

A revamp of retailing strategies

Retailers are revisiting their whole retail strategy from store network to customer experience within the store. The longstanding model of rolling stores out in every shopping centre has been revised with fewer but more innovative retail stores located in the larger, more productive 'destination' centres that offer consumers more than just a retail experience.

<u>Victor Gruen</u>, who in 1956 designed the first shopping mall in the US, the Southdale Centre in Edina, Minnesota, believed that "*The merchant has always been and will always be most successful where his activity is integrated with the widest possible palette of human experiences and urban expressions.*"

Southdale incorporated many of the features that have become synonymous with today's modern shopping centre. including enclosed and climate controlled, anchor stores at either end of the mall, escalators connecting different levels and a public area in the middle.

Gruen was a passionate advocate of the shopping centre as a community centre, a hub of activity that extended beyond just pure retail. In 1960, Gruen wrote in his book titled <u>Shopping Towns USA</u>:

"Good planning, however, will create additional attractions for shoppers by meeting other needs which are inherent in the psychological climate peculiar to suburbia. By affording opportunities for social life and recreation in a protected pedestrian environment, by incorporating civic and educational facilities, can fill an existing void. They can provide the needed place and opportunity for participation in modern community life that the ancient Greek Agora, the Medieval Marketplace and our own Town Squares provided in the past."

By the mid 1970s, Gruen had become disillusioned with what shopping centres had become. He felt "the new malls had no community, they are not places for people to bloom and grow and share. The mall has become a monument to consumerism, not a community ..."

Imagine what Gruen would have thought of how shopping centres continued to evolve over the next 30 years. Large, bland centres offering almost identical product, inward focused with their back turned on the surrounding community.

Shopping centres must create a unique experience

Yet Australia's major shopping centre landlords are recognising what Gruen envisaged almost 60 years ago. Our shopping centres need not be just a place of selling, but a place where the retail space is complemented by



entertainment, cultural and community services. Shopping centres need to be recast. They need to recognise people want not just a transaction. They need to create a unique customer experience, one that engages with consumers, embraces technology to enhance the experience and inspires people to visit not because they have to, but because they want to. In effect, they need to become a community gathering-place where people shop, play, work and live.

Some of the best shopping centres in the country are becoming mixed-use spaces comprising hotels, residential and community facilities. The powerhouse Chadstone Centre, Australia's largest shopping centre, has introduced the first Legoland Discovery Centre, is adding a hotel and 17,000 square metres of office tower. Scentre, owner of the Westfield centres in Australia, is looking at residential and other entertainment options to complement their retail space.

When it comes to retail disruption, we expect the biggest impact will be on sub-regional and lower quality centres. These centres tend to have a higher exposure to discount department stores, limited space to incorporate non-retail drawcards, and lower productivity of their retail space.

Investors looking at the retail sector are at a cross-road. Not all retailers and centres will survive the onslaught of Amazon, other online retailers and shifts in consumer preferences. The gap between the winners and losers will widen and picking winners will be lot more difficult.

Adrian Harrington is Head of Funds Management at <u>Folkestone</u> (ASX:FLK). Folkestone offers investors a range of both listed and unlisted property investments. This article is general information that does not consider the circumstances of any individual.

From deflation fears to inflation worries

Ron Temple

Over the past three years, inflation expectations have come full circle, falling significantly in mid-2014, rebounding from a low in February 2016, and stabilizing in 2017. Contrary to some market commentary, we believe that the US economy has reached the point where the risk for inflation is substantially tilted to the upside.

This shift to an environment in which inflation may return to more normal levels has important implications for investors. An allocation to real assets can protect against inflation and diversify a portfolio while generating current income and offering capital appreciation.

Emerging inflationary pressures

Measures of core inflation (which excludes volatile energy and food prices so more accurately reflects underlying inflation) gradually began to rise in the second half of 2015, as the US economy continued its long recovery from the GFC. The year-on-year change in the core Personal Consumption Expenditures (PCE) price index (the preferred measure of the Federal Reserve) rebounded from a near-term low of 1.3% in July 2015 to 1.8% in February 2017. The year-on-year change in the core Consumer Price Index (CPI) rose as well, from 1.6% in December 2014 to a range of 2.0%–2.3% over the past year.

This acceleration in inflation has been slow in part due to the plunge in oil prices and the rapid strengthening of the US dollar, but the recent rise in core inflation roughly coincided with the fading base effects of low oil prices and rising import prices.

The acceleration in US wage growth is evidence that cyclical pressure is building, as labour markets tighten and the economy nears potential. The year-on-year change in average hourly earnings bottomed at 1.5% in October 2012 and has since risen to 2.7%. Rising wages also broadened in the last two years. Unlike in the early 2000s, when workers at the top end of the wage scale experienced the strongest gains while workers with lower income experienced none, recent data shows a meaningful increase for nearly all income levels.

A strengthened global economy also is providing support, as highlighted by the <u>International Monetary Fund</u>, which recently reaffirmed its view that the global economy will grow more rapidly and more broadly across developed and emerging economies in 2017.



We believe we have reached an inflection point for inflation. Deflation risks have been replaced by rising inflation expectations and, based on cyclical factors alone, we believe inflation of 2.0%–2.5% is likely. Furthermore, there is structural risk from a possible backlash against globalisation, which could lead to protectionism and higher prices. In this scenario, inflation could exceed 3.0%.

Hedging against inflation

Given this risk, investors should revisit their portfolios to ensure they have assets that can protect against inflation. Inflation can corrode purchasing power even at moderate rates. A 0.25% month-on-month increase in the CPI, or about 3% annualised, compounds to around 15% loss in purchasing power over five years.

Thirty years ago, investment options were limited, mainly to gold and large cap equities, but today's investors can hedge against inflation while also maintaining their investment plans. Because inflationary pressures are likely to be relatively moderate, investors should consider assets that also offer capital appreciation or income. Thus, investors can be 'paid to wait' if inflation is dormant. These include real assets – real estate, commodities and infrastructure – as well as inflation-linked bonds and equities with 'pricing power'. Key features of these inflation-hedging assets include:

- **Real estate,** which includes rental apartments, businesses, and office complexes, can offer stable cash flows because many have lease structures in place.
- **Commodities** contribute to headline inflation, and have historically outperformed equities and bonds when inflation rises.
- **Infrastructure** assets are positively correlated with inflation because they tend to consist of monopolies (e.g., bridges, toll roads, airports) with few alternatives for consumers, giving the ability to maintain margins by passing on price increases.
- **Inflation-linked bonds** provide a real yield for investors by contractually linking inflation to principal and interest payments. When issued by government entities, they are usually seen as low-risk diversifiers.
- **Companies with pricing power** enjoy sustained demand for their product or service, passing on price increases to customers without losing market share. Equities also offer exposure to growth, and may provide returns even if inflation is dormant.

Liquid versions of these assets offer the added benefit of flexibility, allowing for allocation changes in response to different manifestations of inflation. For example, real estate would benefit from rapidly rising property prices and rents. Commodities would benefit if the US dollar weakened. Infrastructure would benefit from fiscal stimulus targeting increased infrastructure spending.

Ron Temple is Managing Director and Portfolio Manager/Analyst at <u>Lazard Asset Management</u>. This document is for informational purposes only and does not constitute an investment agreement or investment advice. All opinions expressed herein are as of the date of this article and are subject to change.

8 factors to consider when assessing LICs

Chris Stott

Driven by a range of factors, including strong investor demand for fully franked dividends and the introduction of the Future of Financial Advice (FOFA) reforms, the popularity of listed investment companies (LICs) has surged in recent years. Currently, there are almost 100 LICs, up 83% since 2012, offering investors exposure to a range of asset classes, investment styles and markets.

As LIC managers, we believe LICs are a superior investment structure for a range of reasons, as described below. To access these benefits, we invest in other LICs through the LICs we manage. When assessing a LIC as an investment proposition, we consider the following key factors:



1. Quality and integrity of management

Fundamentally, funds management is a people business. It is essential to have confidence in the integrity and ability of the investment manager. An assessment of LIC investment managers should give consideration to the 'bench strength' of the entire investment team, not only the high-profile personnel.

Investors should also consider the investment manager's expertise in managing funds using the LIC structure. We favour specialist LIC managers, as opposed to those who manage money through a number of different types of investment structures.

2. Track record of performance

The performance of a LIC's investment portfolio reflects the quality of the investment manager and its investment strategy. A proven investment approach will deliver consistent performance in both up and down markets, and the track record must be judged in variable market conditions.

In our view, a truly active investment approach which gives the manager maximum flexibility, including the ability to hold cash, increases the opportunity to outperform the market.

3. Ability to pay fully franked dividends

For many investors, the principal benefit of LICs is their ability to pay a consistent and growing stream of fully franked dividends. In addition to receiving franking credits from underlying investee company dividends, LICs also derive imputation credits from tax paid on realised company profits, unlike managed trusts, LICs retain these franking credits and capital profits in a profit reserve.

Therefore, it is critical to consider a LIC's ability to pay franked dividends over time. While listed companies are not permitted to disclose future dividend payments prior to board approval, a LIC's capacity to pay dividends can be determined by referring to its franking account balance and profit reserve in its annual report. For example, a LIC with a franking balance of 50 cents per share, has the ability to pay out a fully franked dividend of \$1.17 per share, subject to its profit reserve.

4. Discount or premium to NTA

Distinct from unlisted managed funds, a LIC's shares can trade at a premium or a discount to its underlying assets, referred to as net tangible assets (NTA). If the per share NTA is more than the share price, the LIC is trading at a discount to its NTA. This can present an investment opportunity as it allows an investor to buy a portfolio of shares for less than their current market value. It can also represent a buying opportunity for investors given the potential for its shares to trade at or above its NTA. If a LIC is trading at a discount, prospective investors should evaluate the likelihood that the LIC will trade closer to or at its NTA by assessing the factors outlined in this article.

5. Marketing and communications

Effective marketing and communications initiatives, such as presentations and regular market updates, are important for building a LIC's reputation. They raise its profile among investors and the broader investment community, such as financial planners, advisers and research houses. This can increase demand for the LIC's shares and assist in narrowing or eradicating a discount to NTA.

6. Shareholder engagement

Pro-active, consistent and responsive shareholder engagement demonstrates an investment manager's respect for their shareholders, without whom they would be redundant. A regular programme of initiatives to engage and communicate with shareholders may include presentations and email updates about the portfolio and market conditions. Effective shareholder engagement can also assist in reducing a discount to NTA.

7. Liquidity and structure

Liquidity is important, particularly when investing large amounts of capital. As a LIC grows through capital management initiatives, such as dividend reinvestment plans, option issues and capital raisings, its on-market liquidity can expected to increase.

The LIC structure also provides an inherent advantage for investment managers. Unlike a managed fund using a trust structure, a LIC provides a stable and closed-end pool of capital, ensuring the manager is not forced to



sell investments to fund redemptions (often at the bottom of the market) or buy investments due to inflows (often at the top of the market).

8. Variety of investment exposures

Taking into account their own investment objectives and strategy, investors should consider the investment exposure a LIC provides. LICs offer a diverse range of investments, including different sized companies, asset classes, industries, investment styles and geographic regions. More recently, two philanthropic LICs, Future Generation Investment Company (ASX: FGX) and Future Generation Global Investment Company (ASX: FGG), offer access to a group of fund managers, while also supporting Australian charities.

With minimal investment and for the cost of brokerage, investors can utilise LICs to create a diverse investment portfolio, or compliment directly held investments.

Gathering insights

There are a range of sources to consider when researching and assessing LICs. LIC investor websites, shareholder presentations, reports by independent research houses, media (such as Cuffelinks) and the ASX website all provide useful information to understand and evaluate Australian LICs.

Chris Stott is Chief Investment Officer of <u>Wilson Asset Management</u> (WAM). This article is general information and does not consider the needs of any individual, and WAM may or may not hold some of the investments mentioned. For more investment insights, follow Wilson Asset Management's website and social media.

Find a 'sweet spot' rather than complexity

Greg Cooper

There is a distinct trend in finance towards increasing complexity over time, including individual security structures, derivatives, the creation of new 'asset classes' or portfolio construction techniques that combine these in different ways.

With the pressure on headline fees and costs continuing to mount and as the desire to be seen as increasingly sophisticated or differentiated grows, there is a temptation to use more complex methods of portfolio construction in building multi-manager portfolios. It might be to incorporate 'cheap' factor tilts, barbell strategies of passive or semi-passive and high alpha concentrated portfolios or top 20 and 'ex-20' mandates. The ability to slice and dice a relatively fixed pool of assets into different constructs is ever present.

As a case study, in 2009 we <u>undertook some analysis</u> to determine whether the increasingly complex methods of constructing Australian equity multi-manager portfolios were, in aggregate after fees and costs, adding value. Our conclusions at that time were:

"Appointing fewer managers, to larger more diversified mandates with an after-tax focus, at a point on the cost curve where average fees are minimized, would result in better after-tax and fee returns at lower aggregate risk. Such structures are simple, require less governance and lower monitoring costs and will make it easier for internal investment teams to aggregate and monitor total portfolio risk.

Complexity is over-rated."

Our 2009 study was based on all long-only large/broad cap active managers within the Mercer MPA Australian equity universe who had a three-year track record to either January 2000, January 2005 or January 2009. We specifically excluded long short, ethical/SRI or other overly thematic portfolios from the analysis universe (for example, income). Taking the 2009 data, there were 80 managers with a three-year track record. We note that of this 80, by February 2017, only 50 remain (in their current form).

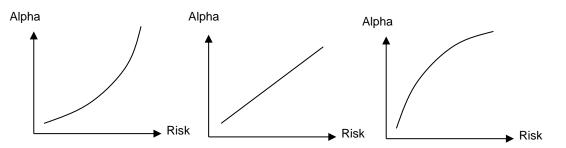
Alpha versus risk

While we observe that fees generally increase with the level of expected alpha (and complexity), investors should have a view as to how the reward for risk (sometimes called the 'information ratio') might change with increasing alpha. Given the asymmetry of payoffs between managers of assets and their clients, for these



higher fees to be 'worth it', the information ratio needs to be increasing with the alpha expectation. This is particularly the case for strategies having fixed plus performance fee structures.

These payoffs are represented below ('alpha' is the excess return of a manager relative to a market index).

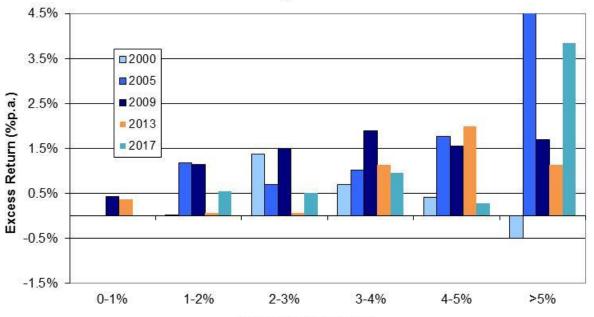


Source: Schroders, stylised charts for illustrative purposes only.

The general view in the industry appears to be that the first chart, and possibly the second, are what most investors expect. However, in our 2009 study we showed that, at least for Australian equity portfolios, the third chart is the reality. That is, as risk rises, there is a disproportionate fall in excess returns.

An update of the analysis and historical perspective

We have now updated this work. The chart below shows, for the 96 long only managers with a three-year track record to February 2017, how their actual average alpha compares with their realised tracking error (ie variation from the index, used here as a measure of risk). While tracking error is not our preferred measure of risk (in fact it is counterintuitive), it remains common, certainly in single asset class portfolio construction. In addition, we have also included data points for the three years to January 2013.



3 Years- Average Excess Return

Actual Tracking Error

Source: Schroders, Based on Mercer MPA data, all data is gross of fees.

Several observations are worth making:

- 1. The realised level of alpha in nearly all categories and time periods has been positive. Unsurprisingly, the high alpha category has been the most volatile in terms of delivery of excess return.
- 2. The 'sweet spot' for consistency remains strategies in the 2-5% realised tracking error range. These tend to be 'core' or 'core plus' strategies.
- 3. Very high tracking error strategies appear to have done well recently, as they did in the lead up to 2005.



However, we would hasten to add additional points in reviewing the data:

- 1. Survivorship bias (that is, the data is for managers who have 'survived' through the period, and perhaps the poor managers no longer exist) in the data is an issue. Several strategies in the 2009 data series have had their track records removed. In particular, for the high-alpha category, the survivorship bias is extreme with only eight of the 18 strategies from 2009 still 'alive' by February 2017.
- 2. Of the 80 (long only) strategies that had a three-year track record in 2009, only 50 remained by 2017, yet 46 new strategies have commenced in that time.
- 3. While this analysis looks at average levels of alpha, the most important thing for clients is real dollars of value add, not a percentage. For example, a strategy with \$5 billion that has generated 1% of alpha (that is, \$50 million) has performed significantly better than a strategy with \$100 million of assets that has generated 10% of alpha (that is, \$10 million). We note that almost all of the better performing strategies in the high-alpha category are very small in assets or closed to new business.

Constructing a portfolio

What happens when we construct different types of portfolios and allow for the costs of implementation?

In order to understand the likely post-fee impact of alternative strategy configurations, we need to make some broad assumptions about likely fee levels for different mandate types.

For the purpose of this analysis, we have made the following assumptions with respect to average fee levels. While one could 'argue the numbers', it is not so much the absolute levels that are important but the relativities between each type.

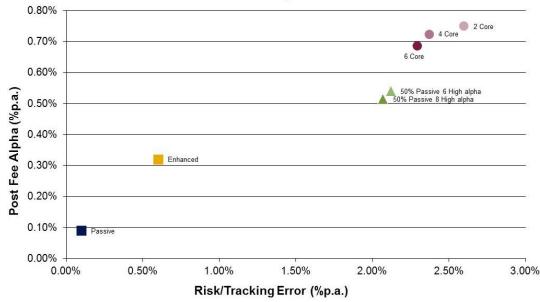
Manager type	Expected Alpha	Tracking Error	Inform- ation	Average fee in bp for size of mandate in \$million (inc performance fee)		
			Ratio	300	500	1,000
Index	0.10%	0.10%	1.00	6	5	2
Enhanced Index	0.40%	0.50%	0.67	13	12	10
Core	1.00%	3.00%	0.33	40	35	30
High Alpha*	1.80%	6.00%	0.30	85	75	n/a

Source: Schroders assumptions. The 'expected alpha' amounts have been determined with reference to the averages from our four analysis periods. Enhanced core uses the averages from strategies with 0-2% tracking error, core is 2-4% and high alpha is >4%. We have not allowed for survivorship bias which could reduce the high-alpha numbers further. Many high-alpha strategies have performance fees which can materially skew fees higher in a multi-manager construct. For index managers, we assume a slight positive 'alpha'.

Assuming a circa \$5 billion Australian equity portfolio, the chart below shows the outcomes of different manager configuration options.



Post Fee Alpha/Risk



Source: Schroders. The 2, 4, 6 and 8 refer to the number of managers in the various multi-manager constructs.

There appears little benefit to more complex structures and the commensurate increase in fees and governance that result. By way of sensitivity, fees would have to be circa 30% lower than that assumed for the high alpha category to be broadly equivalent to the core structures (assuming no cost to the increased governance and similar levels of survivability).

In 2009, former Chairman of the Federal Reserve, Paul Volker, commented on a conversation with a Nobel Prize-winning economist about the value of financial engineering to the real economy,

"Much to my surprise, he leaned over and whispered in my ear that it does nothing. I asked him what it did do and he said that it moves around the rents in the financial system and besides that it was a lot of intellectual fun."

Greg Cooper is CEO at <u>Schroders Australia</u>. This article is general information that does not consider the circumstances of any individual.

Bitcoin as the new gold, or where I've seen this before

Ashley Owen

Over the past couple of weeks I have been bombarded by calls and emails about Bitcoin. The usual stuff, such as, "The price just has doubled! Should I buy some?" My response is the same as always, "Of course not! You want buy something *before* it doubles, not *after*! Anyway, are you an investor or a gambler?"

It reminded me of the last time people got themselves into a frenzy about Bitcoin when the price shot up rapidly in December 2013, before collapsing. And the time before that when it shot up in March-April 2013 before collapsing.

On those prior occasions, the outcome was the same. Late-comers to the party jumped on the bandwagon too late and suffered big losses when the bubble burst. They got despondent, licked their wounds, admitted defeat and sold out, only to kick themselves when they missed out on the next bubble!

The pattern of behaviour is the same in every bubble, whether it is Bitcoin, shares, flats off the plan, tulips or even garlic (yes, there was a garlic price bubble in China recently!).

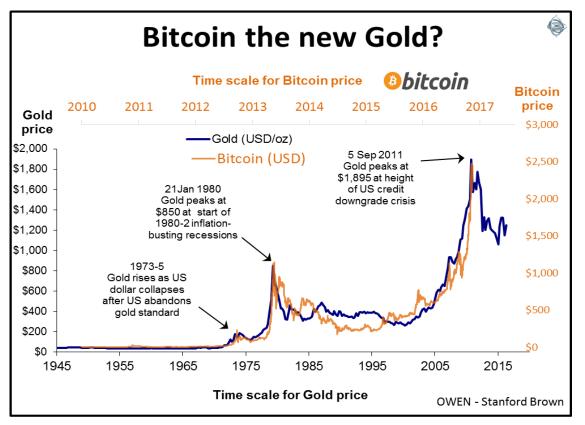


It's hard-wired into human nature, the fundamental tendency to get sucked into buying frenzies in the hope of making a quick buck. To follow the crowd and panic buy at the top of booms, then to panic sell in the busts that follow.

But Bitcoin is interesting for other reasons. It is an alternate form of currency that has been around since only 2009. It has many advantages over paper money. Supply is limited, you bypass the banks, it is global, and transactions are anonymous (hence it is the currency of choice for drug dealers and cyber ransom attacks like the 'WannaCry' virus last month). Many thousands of retailers are now accepting Bitcoin as a form of payment and the trend is accelerating.

So is Bitcoin the new gold? It certainly behaves like gold in its tendency to suffer price bubbles and busts. When I looked at the price chart for Bitcoin I said to myself, "Hang on a minute, I've seen that chart before!" Sure enough it is the same as the gold price chart, only the time scales are different.

Here are the price charts for Bitcoin and gold. For gold (black line) the time scale is from 1945 to now, but for Bitcoin (orange line) the time scale from 2009 (when Bitcoin was born) to now.



The price bubbles and busts are almost identical. This is not to suggest that the pattern will continue of course. But it does show that, like gold and just about everything else, Bitcoin is subject to wild price bubbles and busts. You can lose a lot of money if you follow the crowd and get caught up in panic buying at the top and panic selling at the bottom.

Ashley Owen is Chief Investment Officer at privately-owned advisory firm <u>Stanford Brown</u> and The Lunar Group. He is also a Director of Third Link Investment Managers, a fund that supports Australian charities. This article is general information that does not consider the circumstances of any individual.



Bitcoin and lessons from speculative bubbles

Wilbur Li

The media over the years have had a deep fascination with bubbles, but what exactly are they? Is there any way of knowing if we are in a bubble and what should we do if we are?

The 'Bitcoin bubble'

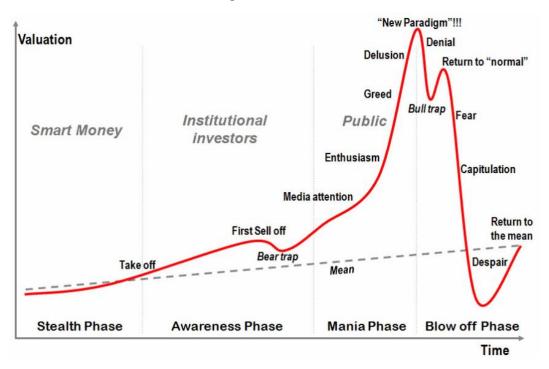
Bitcoin and other cryptocurrencies are currently in the midst of a massive speculative bubble. The market value of Bitcoin has tripled from the start of the year while other cryptocurrencies are rallying strongly.

But how should we think about bubbles more generally? And more importantly, what should we do if we find ourselves in one?

Bubbles should be viewed as part of a boom-bust cycle

Rather than examining bubbles in isolation, they should be viewed in the wider context of cycles and the inevitable booms and busts that have played out repeatedly in history. A bubble is just another phase in this cycle.

Bubbles often begin with some element of truth. In the tech boom, a common belief was that 'internet will change the world'. While the early stages of the boom-bust cycle is evidenced by 'smart money' making profits, the later and more exciting 'bubble' phase is characterised by a sharp rally fuelled by extreme greed. Fundamentals and valuations no longer matter and 'this time it's different'.



Source: realinvestmentadvice.com

Bubbles are about psychology not economics

When the powerful emotions of greed and fear are driving markets, we should exercise extreme caution. In the short-run, economics and fundamentals are out the window. Economic theory would predict that as prices rice, demand should fall. While this is true in many settings, this is not necessarily so in financial markets. People should like something less when its price rises, but in investing, they like it more. Why does this happen?

Traditional finance does not have a good answer. Instead, we should take a more behavioural perspective. At the heart of every speculative bubble is 'bubble mentality', a combination of greed and fear driving the actions of market participants. If the actions of market participants are no longer driven by logic and considered thought, it is no surprise that market prices deviate substantially from intrinsic value.



Bubbles are exciting. Our adrenaline is pumping. We are feeling greedy. As humans, we are fundamentally wired to have a 'fear of missing out'. If a price of an asset rises sharply and we see those around us profiting, we want a piece of the action. Knowing full well we are in the midst of a bubble, we begin to convince ourselves that investing a small amount wouldn't hurt.

This is contrary to fundamental logic: as prices rise, the less the future expected return. It is when we catch ourselves in this aforementioned process of irrational self-rationalisation when we should exercise the most caution.

Bubbles induce excessive risk-taking

What started out as a small 'investment' can quickly turn into betting the whole ranch. Ordinary investors get excited by the initial returns, they become inclined to bet more until they become heavily overleveraged. This is important. Market participants begin to take undue risks, focussing on the risk of the 'missed opportunity' rather than the risk of the investment itself. But there is a second important implication. The speculative game is addictive.

This is why informed investors avoid bubbles entirely. Crowded trades can be dangerous. Consensus is fallible. When we follow consensus, we become average by definition. As Buffett notes, "the less prudence with which others conduct their affairs, the greater the prudence with which we should conduct our own." This is not simply an exercise in philosophy or ideology, this is a fundamental pillar of sustainable, long-term investing.

What should you do if you find yourself in a bubble?

Avoid them entirely. Ordinary investors think about the opportunities during a bubble, informed investors think about the opportunities after a bubble. As prices reach a point where they can no longer increase, the inevitable crash occurs. Initial denial by market participants turns into fear, which culminates in despair. At this point, informed investors who have avoided the crash entirely have the luxury of purchasing assets at distressed levels. Never be a forced seller. It is only by resisting the temptation of 'easy money' that informed investors are in a position of sufficient liquidity to fund large purchases.

A final word on Bitcoin

Bitcoin is similar to a long call option. There is limited downside - the most you can lose is your initial investment - with seemingly unlimited upside. However, 90% of options expire worthless and Bitcoin is no exception. With volatility fluctuating between 40% and 80% per annum, Bitcoin is not for the faint-hearted investor.

I would feel comfortable with Bitcoin valuations only if there is sound proof that it is used for transactions and especially that central banks are comfortable having a parallel currency. As long as this does not happen, Bitcoin is in a traditional bubble: an asset whose value is solely determined by what people are willing to pay for it in the future.

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