Cuffelinks
Connecting investors with ideas

Edition 209, 7 July 2017

This Week's Top Articles

- **Spaceship stalls on the launch pad** *Graham Hand*
- **It was a good year for shares, but what's ahead?** *Ashley Owen*
- **Tech stocks: balancing realism and evangelism** *James White*
- **Impact on estate plans of the super changes** *Julie Steed*
- **Housing affordability for millennials and boomers** *Jonathan Philpot*
- **Stock investors should protect downside** *Glenn Rushton*
- **How robotics can deliver smart wealth advice** *Jason McLean and Andy Gillard*

Spaceship stalls on the launch pad

Graham Hand

Yeh, no, yeh. Like, you know, whatever. Bro, that other super was so last year. OMG, check out the shop @SpaceshipAU. #theseguysarecool #supertechnology #newinvesting.

Anyone who follows superannuation must be living in outer space not to have heard about Spaceship. It is superannuation for millennials, or 'our generation', with technology investments at its core. It aspires to become the 'Amazon' of super, offering lower prices as it redesigns an entire industry. It is 'Australia's fastest growing startup' and winner of the Best Startup at the #FinTechAwards 2017. And the difference between the Spaceship product and the incumbents is "*the amount of thought given to the details*".

Spaceship recently said it had almost reached $100 million under management, an incredible amount for a startup. On 1 June 2017, The Australian Financial Review reported that the value of Spaceship based on a $19.5 million issue of convertible notes was $70 million, backed by a who's who of local and international venture capitalists. Over 20,000 people have registered with them.

At the risk of being the old fart rather than a blast from a rocket ship, this baby boomer's analysis of Spaceship will be as objective and dispassionate as possible. But passion, enthusiasm and marketing are at Spaceship's core, and it is difficult not to have personal biases.

I admit I had no idea who Ariana Grande was until a nutter walked into her Manchester concert, I can barely sit in the same room when MasterChef or The Voice is on television, I do not wear my underpants down below my bum crack and I prefer test cricket to Twenty20.

But I run an online business, I invest in fintech companies, I love smashing an avocado, I regularly visit fintech hubs like Stone & Chalk, I attend fintech pitches, my new iPhone is amazing and I expect to live forever. I love much of the techie stuff.

So here are the boring details of the Spaceship #assetallocation, #stockselection and #feesandexpenses and then we will uncover the secret sauce, the #customerexperience.

#assetallocation

Spaceship offers one investment option, called GrowthX, with investments "*where the world is going, not where it's been*". Spaceship's asset allocation is compared below with an industry super fund, Hostplus. Although this has a typical strategic asset allocation (SAA), Hostplus is chosen because they both use index exposure, and Hostplus has the lowest public offer superannuation fund fees in Australia (as far as I am aware). Such incumbent funds are the ones from which Spaceship needs to grab clients. Cuffelinks has no arrangements with either fund.

Spaceship GrowthX v Hostplus Balanced Index Fund, Strategic Asset Allocation

Asset Class	Spaceship GrowthX	Hostplus Balanced Index	
	SAA (%)	Range (%)	SAA (%)
Cash	**2.0**	0-20	**10.0**
Fixed interest	**5.0**	10-30	**15.0**
Listed property	**6.0**	-	**-**
Australian shares	**40.0**	25-55	**37.5**
Global shares	**47.0**	25-65*	**37.5**
TOTAL	100.0		100.0
Target return	CPI+2.5%		CPI+4.0%

Source: Spaceship and Hostplus Product Disclosure Statements, 2017.
**Range is 25% to 55% plus 0% to 10% in emerging markets.*

What conclusions can be drawn?

1. Spaceship has a larger allocation to global shares to accommodate its technology focus, but in the breakdown of its portfolio (see below), the technology allocation in the overall portfolio is 34%. For a fund which pitches a strong technology focus, a one-third allocation is barely true to label, although it is overweight compared with most balanced funds. With 40% in Australian shares, Spaceship will have a decent exposure to the old-world shares like banks, mining companies and retailers.

2. Both target returns are after fees, and despite the claim of a growth focus, Spaceship's return is a modest CPI+2.5%. As we will see later, Spaceship is more expensive, so it has a significant performance drag to overcome.

3. A balanced fund like this from Hostplus has a 75% growth allocation, and in theory could have as little as 10% in defensive, although this is unlikely.

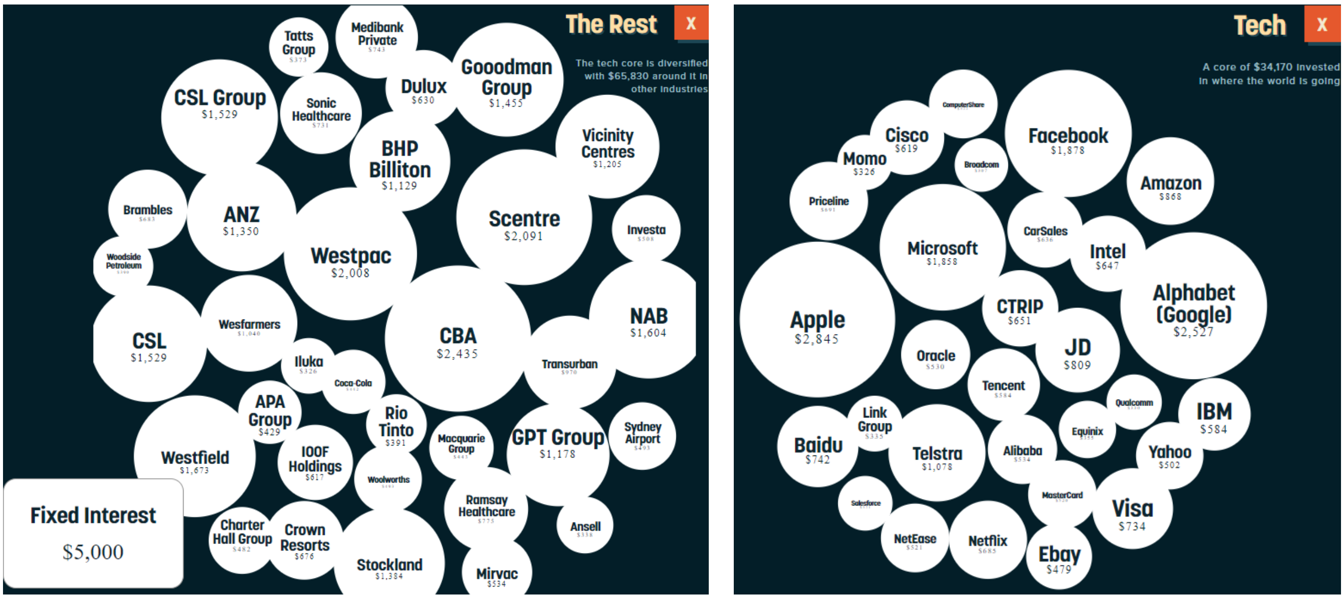
Many in Spaceship's target market are already working in the technology industry. Many advisers suggest their superannuation should be a hedge against the loss of a job or decline in value of the equity in their own company or employer.

#stockselection

The diagram below shows how $100,000 placed with Spaceship is invested, company by company. *"Know exactly what you own,"* the website says. Spaceship prides itself on investing transparently.

> At Spaceship, we believe in returns and transparency.
>
> We think it's crazy that each week 9.5% of your salary is sent to someone, somewhere, to do something. You probably haven't checked your Super recently.
>
> At Spaceship, you know what you own and why you own it.

Why is it crazy to send it to someone, somewhere? Isn't Spaceship someone, somewhere?



Source: Spaceship website. Representative portfolio as at 21 April 2017.

On the Spaceship website, under the 'Info' tab, there is a page headed, 'Investment Portfolio'. It says: *"We believe you should know where your Super is invested. It's time to start becoming more informed about your Super."*

Take a closer look at the portfolio, and three things become apparent.

First, does the Australian portfolio look familiar? The big banks, the big property groups, BHP, Rio, CSL, Wesfarmers. Is that the Australian index weights?

Second, the investments in the diagram add up to about $60,000, meaning $40,000 is invested elsewhere. Where could that be in this transparent portfolio?

Third, if they are managing a small portfolio and disclosing the stocks, who is doing the asset selection, and how are they managing the implementation costs on many small holdings?

Answer: there is no stock selection. Spaceship is simply investing in index funds or ETFs. As far as I can see, the website and the PDS fail to mention this.

How is the index exposure achieved? In a document called the Reference Guide, there is this:

"The exposure will be obtained through a mix of index funds and exchange-traded funds (ETFs) (directly or through a Depository Interest) which seek to replicate, as closely as possible, the price and yield performance of a reference index in different ways."

And then under a list of risks, is this:

"Swap counterparty risk: the risk that the counterparty to the True Index swap may not be able to pay for the potential underperformance (i.e. short-fall) between index performance and net asset value of a fund."

True Index is a product of Macquarie Bank, used by many other wholesale and retail investors, and an explanation of the fund is linked here. There is swap risk because the counterparty is Macquarie Financial Holding Pty Limited. There is not enough space here to reproduce the relevant terms of the PDS, except this on Termination Risk:

"If True Indexing ceases, investors will no longer receive the Index return, and may also be required to pay higher management fees."

Investors then become *"exposed to the risk of the underlying investments*". On the 'underlying investments', Macquarie says True Indexing seeks to achieve index returns by investing in shares and derivatives (including options, futures, warrants and forwards). On a direct investment with Macquarie in the Macquarie True Index Linked Australian Share Fund, the management fee is 0.103%, with no administration fee, exit fee or other expenses.

Index funds and ETFs have experienced massive growth in recent years, but that is overwhelmingly due to the low cost. And not all index funds and ETFs are the same. While Spaceship mentions the True Index funds, there is no detail on the exact funds used and the ETFs, and True Index does not cover all sectors.

So I rang Spaceship to find out which index funds are used. I was told that information was not available to the public. When I said that does not meet the 'transparency and 'know what you own' beliefs espoused by Spaceship, I was told, "If people knew the funds, they could invest directly in them." Bingo.

I was told to put my request in writing, which I did, asking exactly which funds and ETFs are used and who issues them. I am waiting for a reply, four days later.

#feesandexpenses

There are two ways a disrupter can steal significant market share from incumbents in superannuation: cost and customer experience. The performance undertaking is nothing more than an aspiration that will only play out over a long-term cycle, perhaps 10 years or more.

Spaceship v Hostplus Balanced Index Fund, fees and expenses

Expense	Spaceship GrowthX	Hostplus Balanced Index
Indirect cost ratio	**1.60% pa**	**0.02% pa**
Administration fee	$78 pa ($1.50 a week)	$78 pa ($1.50 a week)
Buy/sell spread	0.28%	nil
Exit fee	$38.50	nil
Example cost on $50,000	**$878**	**$88**
Cost to exit	$180.05	nil

Source: Spaceship and Hostplus Product Disclosure Statements, 2017.

Where is the Amazon of super? At this point the rubber fails to hit the road, or in the case of Spaceship, the rocket stalls. It is expensive with multiple fee levels. It is aimed at millennials with little in super, and the fixed cost of $78 on $10,000 is 0.78% pa. Are their clients checking the costs versus the fees on the funds they are leaving?

While the cost implications of the fixed cost are similar for many super funds, including Hostplus, there are other funds with no administration fees. For example, Colonial First State offers balanced funds for as low as 0.65% with no additional administration fee and a minimum of $1,500.

(For an example of a tool which compares fees across a range of retail and industry funds, and explains the fees, see Virgin Money's comparison page).

Quoting from the Spaceship PDS, page 3:

"For example, total annual fees and costs of 2% of your fund balance, rather than 1%, could reduce your final return by up to 20% over a 30-year period (for example, reduce it from $100,000 to $80,000)."

Exactly. And the difference in fees on Spaceship compared with competitors is more than 1%. Putting aside buy/sell spreads and ignoring exit fees, a young person with $10,000 in Spaceship would have an annual fee of 1.6% plus 0.78%, or 2.58% pa.

If this were my millennial daughter making an investment, I would tell her to wait until they do something with their fee structure, even if it is an amazing customer experience.

So what is the customer experience like?

#customerexperience (or as the techies say, CX)

A successful disrupter or tech company does not need to be cheaper than competitors to be successful. The iPhone is expensive, but it is such a great device supported by the best ecosystem that people queue overnight to buy it. The first CX with a new iPhone is amazing. It becomes the centre of our lives, the first and last thing we check every day. Same with Tesla. Not cheap, but great CX.

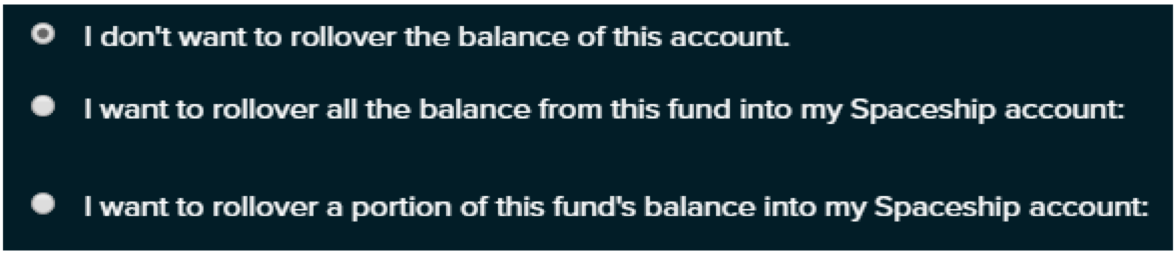
But this is superannuation, yawn. You cannot touch it until you are older than Granny. Most people want a house, house, house before they care about super. Even if they think they can never afford a home in Sydney, they will not want to save in a vehicle where they cannot touch the money until 40 years hence. Life is about experiences, holidays, gap years and yes, smashed avocado.

Wait, that is old thinking. Nobody has succeeded in engaging young people with super due to these baby boomer beliefs. And that is the very point of Spaceship's success. They have redefined CX in super and thousands are flocking to them.

What is it like?

The online application process is pared back to the minimum required and is relatively easy, although identification based on the tax file number has become reasonably common in the industry, with no 'wet signature' required. There is disagreement in wealth management about whether this is sufficient identification and compliance, but Spaceship has taken a user-friendly rather than legalistic approach.

The process then finds the applicant's existing super, giving a choice from which fund to transfer money. There appears to be no way to make a new contribution as it only allows for rollover. Then this box appears:



I found this confusing. If every transaction is a rollover, there should be only two choices: rolling over the entire amount, or rolling over a portion of the balance.

Soon after application, an email arrives with the subject, 'Spaceship: Forward to Your Employer'. The content says,

"Attached is your Employer Superannuation Guarantee Contributions form. Your employer needs this to make contributions to your Spaceship Super account. You can forward this email directly to your employer."

Anyone who applies to invest into Spaceship is asked to instruct their existing employer to direct all future SGC payments to Spaceship. It is likely that many of Spaceship's young clients are coming from default options at industry funds, and as we have seen, these are usually cheaper, with an average ICR across the industry of about 0.6%. How many investors know they just added at least 1% to their investment cost, which as Spaceship says in its own PDS, could result in 20% less over 30 years? And Spaceship does not currently offer life insurance, which the customer may be leaving behind (although Spaceship warns about this).

The Welcome Letter makes its target market clear: *"You probably won't be retiring for decades and your portfolio should reflect that."* Stay away, boomer.

What about their other communications, such as their regular newsletters? There is good engagement material about winning awards, drink sessions to meet other clients and speakers at breakfast events. This regular email is more frequent than other super funds, and no doubt is of interest to many clients.

But what insights do they give into how to manage superannuation? How is this from the CEO of Spaceship on 23 June 2017:

"Regulatory update: The Government will introduce a $500,000 lifetime cap for non-concessional contributions. The lifetime cap will limit the extent to which the superannuation system can be used for tax minimisation and estate planning."

This update was given at a critical time, one week before the end of the financial year, when many people were planning last-minute contributions. It is incorrect. This proposal in the 2016 Budget was replaced by the $1.6 million Transfer Balance Cap and Total Superannuation Balance. Big difference, and a major reform change. Superannuation rules are complex and most people struggle to recall the detail but this was a major oversight. I immediately wrote to Spaceship advising of the error, and as far as I know, no correction has been issued.

Other Spaceship communications contains spelling errors that I could nit-pick about, but there's something else that matters far more ...

What about a transaction and performance report?

Assume you were designing a new super fund from the ground up. You would consider it an essential requirement from the start to show the client how their fund is performing and what transactions have been made. Surely every super fund should provide details of investments, fees, withdrawals, unit prices and fund performance in an online statement.

In the personal dashboard for its users, after the login page, Spaceship provides an 'approximate account balance'. There is no list of transactions or unit prices. The client does not know the impact of fees or market movements on the balance. When asked about this basic transaction feature, Spaceship responded by email:

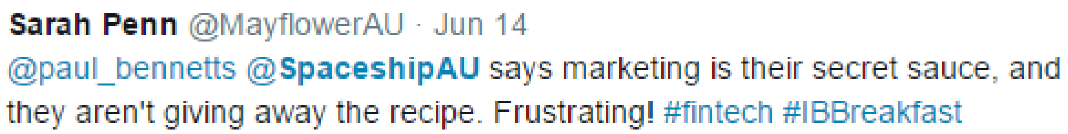
"This is not currently a feature of the web portal. We're working on adding it in, in the future. If you like I can send you an account statement that will show the net gain/loss of your portfolio since it has been in Spaceship?"

A copy of a piece of paper? Didn't expect that on a spaceship.

A friend opened an account with Spaceship in February 2017 but did not fund it until May 2017 with $100 to test the experience. His current balance is $72 as Spaceship backdated the weekly fee to February.

Why Spaceship is popular with millennials

The success of Spaceship is not about anything described above: not the fees, the product, the asset allocation or the customer experience. It is the marketing.



Spaceship is backed by Atlassian's founder, Mike Cannon-Brookes, and other high-profile executives in technology companies. Cannon-Brookes is arguably Australia's most successful fintech entrepreneur, which makes him a huge influencer. His success draws a crowd. His @mcannonbrookes Twitter account has made 8,000 tweets to 22,000 followers. Thousands of people listen when he writes about and praises a product. They forward and like the Facebook posts and spread the word quickly among like-minded people.

The CEO of Spaceship, Paul Bennetts, is a successful fintech entrepreneur and an Advisor to Daniel Petre's Airtree, a leading Australian VC company with holdings in successes such as Canva and Prospa. Clearly, Paul knows his way around social media and marketing in a VC world.

So Spaceship hosts events, creates a community, shares trendy content on its blog called 'The Dish' and does engagement with younger people better than incumbents. It talks their language to drive lead generation.

Speaking to two millennials who work in investment management demonstrated why Spaceship had attracted so much attention. One said that judging from her Facebook feed, it would be easy to think that Spaceship is the only super fund available. Incredible! The other told me she was bombarded with Facebook ads for Spaceship, and her friends regularly forward articles to her.

A third millennial told me, *"I was a little disappointed that what feels like a young team didn't make sustainability of investments (contended a concept though it may be) a priority."*

What do other market professionals say?

Spaceship has received more publicity than any other superannuation, roboadvice or digital advice 'fintech', and let us focus on three commentators:

Michael Rice of actuarial firm Rice Warner told *The Australian Financial Review*:

"It doesn't sound like a good proposition to me. Spaceship appears to be charging more and taking on more risk with a lower objective of projected returns than a MySuper product." He later added in a more general context: *"The fee levels on many of these products are outrageous. We don't need greater control but we do need some rules to stop poor value products being marketed to gullible people."*

Jordan Eliseo, Chief Economist at ABC Bullion, jumped to Spaceship's defence, writing in *The Australian: "That comment regarding the gullibility of young Australians is almost offensive."*

But not all the millennials are on Spaceship's side. Chris Brycki of Stockspot told *Business Insider*:

"They get full marks for the use of flashy marketing and celebrity endorsers to distract people from the underlying financial product being sold. Look under the covers and you won't find a tested process behind their investment strategy (to buy tech stocks), and no track record to support their high fees. Just clever marketing."

Will Spaceship succeed financially over the long term?

I meet regularly with fintech startups and attend pitch fests, and there are some great ideas in with the rubbish. Most of them will not survive long enough to become commercial, and they hope a large business will buy them before the money runs out. Check the ASIC registers of many startups, and they show regular rounds of funding as costs exceed revenues. Many are a punt on a dream or solving a problem that does not exist. Forbes Magazine claims 90% of startups fail, but clearly, there are spectacular successes among the survivors.

I do not know whether Spaceship will be a winner, beyond the success they have already achieved. I am not in their target market, but I cannot see serious disruption in this model.

In my view, the current offer is not strong enough to match the competition. It is expensive, and despite the impressive design backgrounds of their staff, the sign-up process and communications are not engaging or exciting. There are unexpected shortcomings. They are not transparent about their investments, refusing to reveal in which index funds and ETFs they invest. It is hard to believe there is no online report of transactions, fees charged or unit prices.

Spaceship illustrates a common startup Catch-22. They do not have the critical mass of say a billion dollars which allows low pricing, and the fees restrict the build-up of the critical mass.

The other factor is whether their returns will justify the costs. This article is not the place for a full analysis of the potential of technology stocks, but the NASDAQ index of technology stocks has already had a great run in recent years. The index has fallen about 5% in the last month at the time when many Spaceship clients have been onboarding.

NASDAQ index from 1985 to 4 July 2017

Source: Yahoo Finance

If millennials are checking their balances regularly, they will be expecting success. There are many wonderful technology companies, but consider this analysis of the so-called FANMAG (Facebook, Apple, Netflix, Microsoft, Amazon, Google) stocks from the US firm that originated the smart beta concept, Research Affiliates:

"Consider the FANMAG stocks. Based on a few common metrics, this group collectively exhibits steep valuations. On a weighted-average basis, the group currently trades at a price-to-earnings multiple of 56 times, more than twice that of the S&P 500. In aggregate, the six are currently trading at a price-to-sales multiple of 6.9 times, a 67% premium to the market. Finally, with all but two generating no dividends, the group is now delivering a weighted dividend yield of 0.85%, 56% lower than the S&P 500. Are these lofty valuations justifiable? That is, can we expect popular expensive stocks to reliably deliver excess returns in the long run?

A look at the historical evidence over the last 60 years suggests poor odds of the popular pricey stocks outperforming in the long run, even if they are shares of large, growing, and profitable companies."

There is no doubt the FANMAGs are great companies, and they have driven US equity markets to all-time highs. Anyone who wants to invest in an index or smart beta fund that is dominated by these companies can use an ASX-listed technology ETF for a fraction of the cost, such as NDQ (issued by BetaShares, management fee 0.48%) or TECH (issued by ETFS, management fee 0.45%).

This will not be the first or last battle in an intergenerational, intergalactic war for superannuation, with millennial rivals like Zuper and Grow Super on the horizon. This rebel Spaceship aspires to become the (New) Emperor, but it has stalled on the launch pad. It will need to improve dramatically, or the most likely outcome is The (Old) Empire Strikes Back.

Graham Hand is Managing Editor of Cuffelinks. If any company mentioned in this article, including Spaceship, wishes to correct or comment on any matter, Cuffelinks will publish the response.

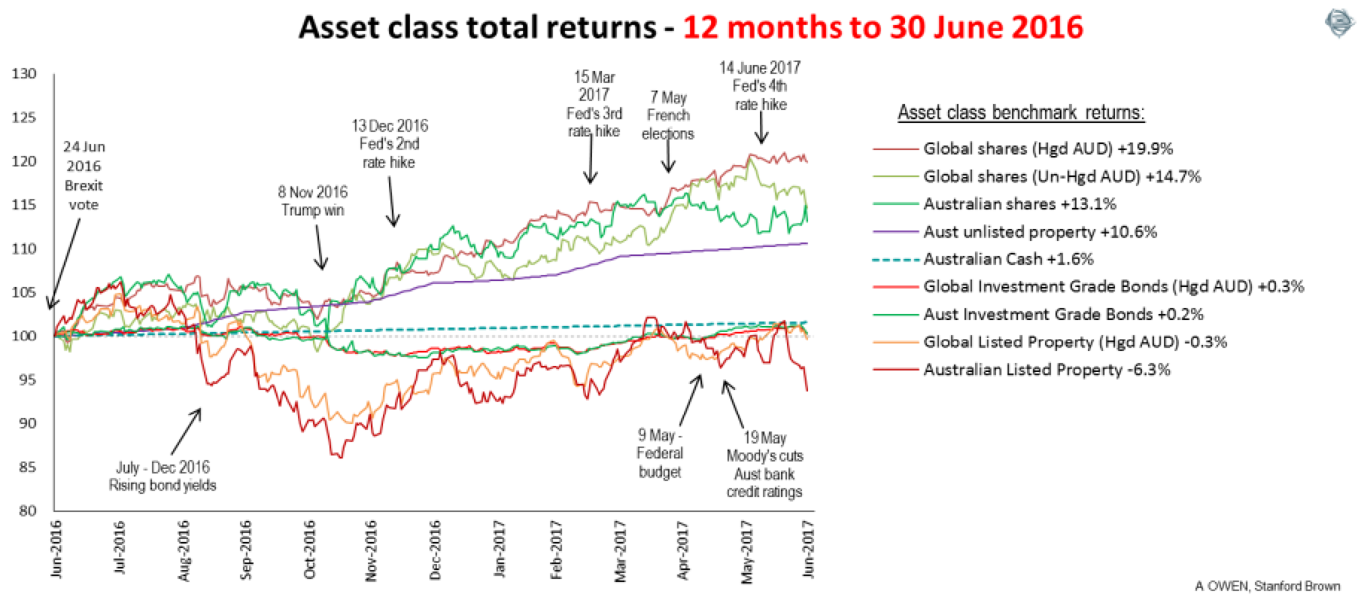
It was a good year for shares, but what's ahead?

Ashley Owen

The past 12 months have been good for shares in Australia and around the world. In the local market, upward profit revivals in the large miners were triggered by last year's commodities price rally following the Chinese stimulus announcements in March 2016. South32 (spun off from BHP) was up 74%, Fortescue +49%, Rio +39%, BHP +25%. Also benefiting from the mining and oil rebound were Orica and Worley Parsons, both up more than 50%. (However, share prices in the resources and mining services sectors are still well below their boom-time peaks). The big banks ended up with double digit price rises apart from Westpac dragging the chain. Telstra (telco), Santos (oil/gas) and Newcrest (gold mining) were the only major losses over the year.

Global stock markets also had a good run. The big Asian markets were all up by more than 20%, as was most of Europe, and the US was not far behind. We remained relatively bullish on shares throughout the period despite the regular media frenzies about the potential negative impact of the Brexit vote, Trump victory, US rate hikes and a steady stream of other 'end of the world' panics and red herrings that may have scared investors off.

Currency hedged global shares did better than unhedged as the Aussie dollar rose over the year, especially since the Trump election.



While shares did well, so-called safe haven 'defensive' assets were flat. Australian and global bond markets fell as bond yields rose from July (after the Brexit vote in June) to the end of 2016, spurred by early signs of economic recovery and inflation in Europe and Japan and by the Trump victory. Bonds managed to claw their way back up to finish square by June 2017 when yields fell back again as the premature confidence waned.

Listed property markets here and globally were also dragged down by the rises in bond yields in late 2016 but prices recovered a little in 2017. In contrast, unlisted property generated steady returns as rents and capital values continue to remain relatively strong, especially in Sydney and Melbourne.

Three most common questions for the year ahead

In the year ahead the combination of economic recoveries, rising inflation and interest rates in the US, Europe and Japan are likely to continue to favour risk assets like shares more than defensive asset like bonds.

On the three most common questions I receive from investors, the answers remain little changed from the start of the year.

'Will China slow?' is a question that has topped the list since the peak of the mining boom in 2011. The Chinese stimulus spending that began in the depths of the GFC has been the driving force in global commodities prices and Australia's mining export revenues ever since. Global markets sold off during late 2015 on fears that the Chinese government would drop the ball and rely more on structural reforms for growth rather than straight out stimulus spending. In March 2016, the government gave up on reforms and addressing the mountain of bad debts in the banks, and instead said it would increase deficit spending to keep the train running. This triggered an immediate rebound in commodities prices, share prices and credit markets, and the effects carried into 2017.

'Will rising US rates hurt share prices' and its cousin ***'Will rising bond yields hurt share prices'*** also have the same answers as before the first Fed rate hike in December 2015. The US economy is still relatively weak and cash rates and bond yields are still very low. So far, we are still in the early stages of the economic cycle and this is where rate hikes and bond yield rises have historically not been damaging to share prices. These early stage recoveries are when share prices do best because rate hikes and bond yield rises are more a reflection on confidence in the economic recovery than they are of fears of over-heating.

However, over the past year the jobs market has improved significantly, wages are now rising, manufacturing activity has revived, confidence and spending are improving, and we are seeing signs of inflation returning. As the economy is still weak it has been our contention that the Fed's plan to keep raising interest rates will probably keep the brakes on the economy, and that should keep bond yields low for some time. In the second half of 2016 bond yields rose with the early signs of inflation and on the Trump euphoria, but yields have fallen back this year and share prices have kept rising.

The answer to the third question, ***'Will house prices fall'*** in Australia, has two answers - individual and aggregate. At an individual level, it depends largely on whether you paid too much for your place and if you are highly leveraged and vulnerable to becoming a forced seller when mortgage rates rise or if your income falls.

Watch the implications of a property slow down

In aggregate, there is a bigger issue at stake. If you are a shareholder or an unsecured lender (via hybrids or subordinated note holders) to the banks, then you are financing the current housing boom and your future wealth is highly dependent on the cycle not turning into another bank bad debt crisis. Worse if you have been lured recently into mortgage funds to chase higher yields. You are now a low-ranking unsecured lender to high risk property developers who have been rejected by the banks, or to high risk, high rise unit buyers who also have been rejected by the banks.

The vast majority of home (and unit) buyers bought many years ago and have plenty of equity. They present little risk to the banks as mortgage rate rise. The problem is the flood of buyers who came late to the party and are geared to the hilt. Many thousands of recent buyers and hundreds of property developers will be sold up by the banks and will lose everything. What is not as clear is whether it will infect the banking system enough to force a restructure of one or more of the banks (possibly), and whether it will hurt the broader economy (almost certainly). Another issue is timing - booms can run for years before finally collapsing.

Ashley Owen is Chief Investment Officer at privately-owned advisory firm [Stanford Brown] 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.

Tech stocks: balancing realism and evangelism

James White

Just as it is dangerous for anyone to argue "It's different this time", it is similarly risky for technology sceptics to doubt what seem like absurd ideas. For example, should anyone laugh at Elon Musk's latest argument that Teslas get better with age as software upgrades improve the car's functionality?

This battle between reality and hope, with the realists often looking as silly as the evangelists, is a constant in technology and technology investing. Technology has changed the world and created substantial value. Yet, tech history remains littered with the likes of Blackberry, Nokia and Geocities. The latest (modest) sell-off in technology is a good time to reflect on the value created by technology and where we currently stand.

Technology has supported much of the improvement in equities from 2009. The S&P 500 Information Technology index has risen 301% since March 2009, compared to 202% for the broad S&P500 index. In the last 12 months, returns in technology of 30% were double those in the index to the end of May.

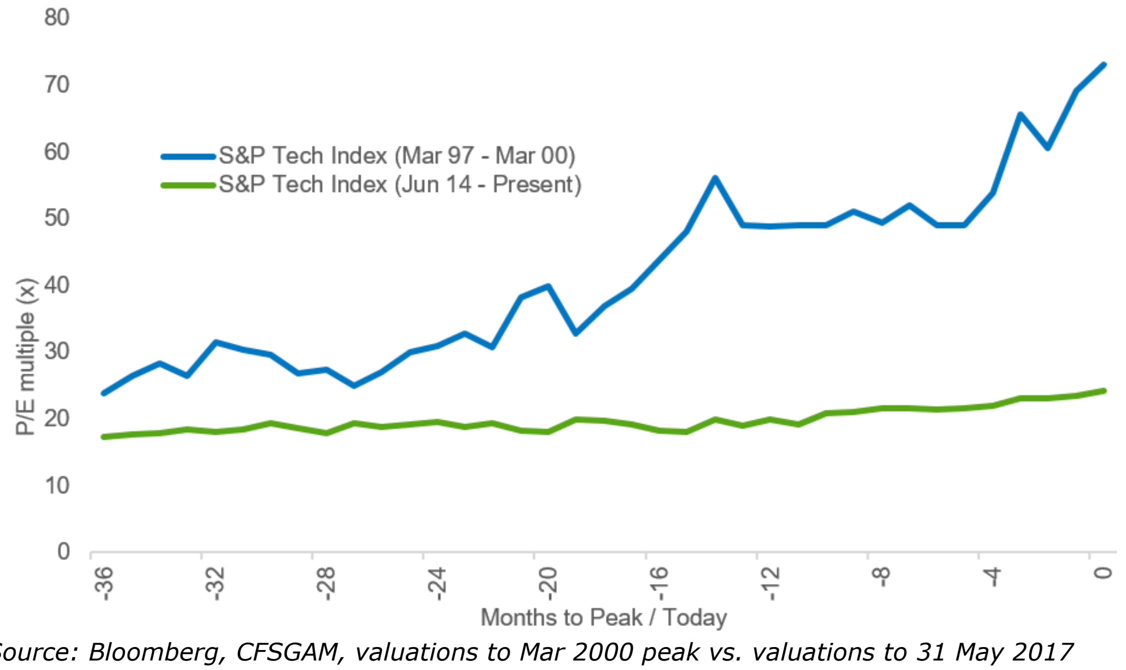
Performance of US tech stocks vs. the US market

Source: Bloomberg, weekly data, index = 100 @ 31 Mar 1997 to 19 Jun 2017

The evangelist and the realist

The balance between realism and evangelism is the combination of valuation and earnings. Fortunately, we have a benchmark for extreme evangelisation, the dot-com boom of the late nineties. From a valuation perspective, today in no way matches the experience of 1999. Yes, valuations have risen recently, but for both Price to Earnings and Price to Sales, the increase is barely noticeable by comparison. The Price to Earnings for the S&P500 Information Technology peaked at 80x and the Price to Sales peaked at a little over 7x around the year 2000. By contrast, today, the index is at 24x earnings and 4x sales.

Valuations of Tech stocks now (green line) vs. pre-2000 (blue line)



Source: Bloomberg, CFSGAM, valuations to Mar 2000 peak vs. valuations to 31 May 2017

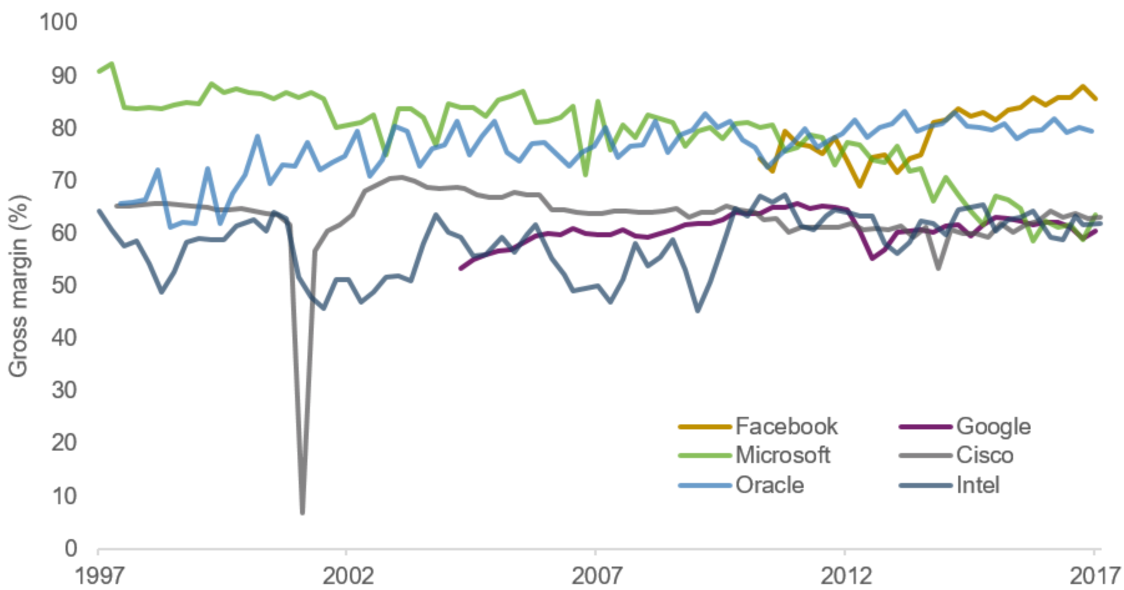
So, it is not a bubble. Indeed, it is possible, depending on your earnings view, to say that valuations in the expansion from 2005-2007 were slightly higher (with earnings higher than in 2000) than they are today.

But not being a bubble does not mean valuations are cheap. Much more important are earnings and their trajectory, and it's useful to look at four leaders from 2000 against two from today's FANG (Facebook, Amazon, Netflix and Google).

It is not clear from this analysis that the big constituents of 2000 were not as profitable as Facebook and Google are today. Gross margins were a little volatile around 2000 but future margins, which matter to long-term investors, have maintained high levels and greater stability. The ongoing profitability of Microsoft, Cisco, Oracle, and Intel (MCOI) is remarkable.

The evangelism of 2000 was misplaced yet the scepticism of 2010 and 2011 when valuations were at their lowest, was similarly misplaced. Oh, to have bought Facebook in September 2012!

Gross margins of the major tech companies from the year 2000 to now



Source: Bloomberg, MCOI vs. Facebook & Google, quarterly data (%), Mar 1997 - Present

The fundamental evangelist: Facebook, Adobe and Nvidia/Micron

The profitability of the industry as a whole reflects two consistent themes across a variety of sub-sectors: strong demand for products and services with increasing utility and high margin business models. For example, four companies across three sectors include Facebook on the Internet, Adobe for enterprise software and Nvidia/Micron in semiconductors.

Facebook

Facebook is a dominant player in contributing to substantial productivity improvements generated from the sharing of information and commerce.

"But the kids don't like Facebook anymore". This standard view misses the essential value of Facebook to its users, shareholders and the broader economy. To go all evangelist, Facebook is the social network or, alternatively, social infrastructure, creating value as users' bulletin board. These interactions provide Facebook with the ability to offer advertising that is extremely well targeted, with businesses receiving high, measurable Returns on Investment. Many of these advertisers are new advertisers looking to advertise to a customer base that is geographically close. Facebook is changing the world, but more importantly, it is changing your neighbourhood.

The resulting profitability, particularly in the US, is astounding. Each user in the US attracted $67 in advertising in the 12 months to March 2017.

Facebook's profitability growth depends on finding new use cases and building a sales infrastructure. The monetisation of Facebook Messenger is a good example of new use cases. The forced adoption of Facebook Messenger has been the fastest adoption cycle in internet history. It allows Facebook to drive transactions in ways similar to WeChat in China. For instance, the e-gaming company Activision used a chat bot to engage with users via Facebook Messenger. In the first 24 hours, the chat bot had six million interactions. Similarly, tools that improve the quality of advertising enable smaller and smaller businesses to have a professional online presence.

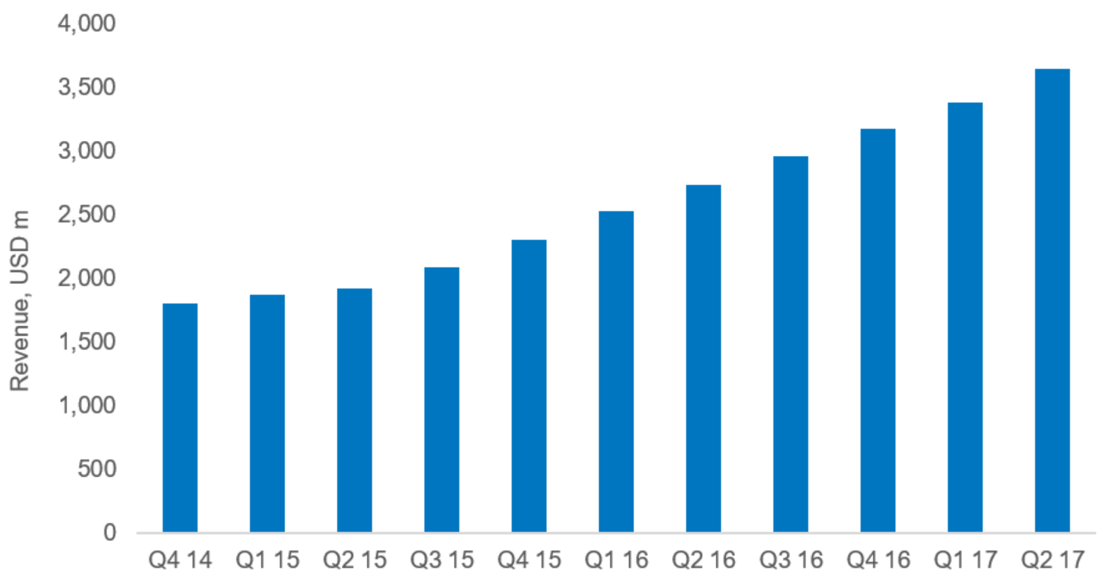
Adobe

Enterprise software is a key productivity theme in the technology sector. Firms are continually looking for ways to improve their business processes to focus on and invest in the things that matter: product development, product marketing and customer service. Adobe not only improves efficiency in many marketing functions, it also adds value to the process.

Demand for Adobe's product comes from increasing online content, especially as the demand for professional content rises similarly. Adobe delivers that content. It uses a Software as a Service (SaaS) business model where it charges users an annual subscription for access to its Creative Cloud. Since 2014, revenue from the Creative Cloud has risen 75% on a gross margin of greater than 65%.

The use of the Cloud to drive growth for Adobe highlights two key points: new use cases and the explosion in data creation. Adobe now uses Machine Learning to help improve searches of its stock photo gallery, which in turn requires greater data storage and computing power.

Adobe Digital Creative revenues



Source: Adobe, Bloomberg, rolling four quarters (USD million), Nov 2014 - Jun 2017

Semiconductors: Nvidia and Micron

Semiconductors are the 'picks and shovels' of information technology. As the uses of the internet, software and computing power expand, they drive an increasing requirement for data. At the heart of data processing is the chip.

In early 2016, the market expected stable to lower demand for semiconductors over the next two years. The price of DRAM and 3D Nand had collapsed, and smartphone demand seemed to be tailing. Instead, growth has improved as new use cases for semiconductors have emerged. It started with Nvidia's new chips for gaming but has morphed into cars, data centres, machine learning, a doubling in the memory on a standard smartphone, increasing use of sensors in industrial processes and payments. It has also emerged in demand for crypto-currency mining.

Importantly, it has also occurred at a time when the industry is as under-invested as it has been in some time. Semi-conductor companies have entered a period of demand with limited plans for capacity growth. For once, the industry seems capable of benefiting from a demand upswing.

Conclusion

Technology evangelism has been a formidable strategy over time. Amazon was $107 at the peak of the dot-com boom in March 2000, and it hit $1,000 in June 2017. That is a 13% CAGR for 17 years. And, if you bought at the bottom, the CAGR is 39%. But there have been other disasters, and every so often, a little realism does not hurt.

James White is a Portfolio Manager with Colonial First State Global Asset Management. This article is general information and does not consider the circumstances of any individual.

The impact of super changes on estate plans

Julie Steed

The introduction of the $1.6 million transfer balance cap will affect the insurance and estate plans of many superannuation members. In my last article, I discussed why members must review any insurance they hold in super. Additionally, the transfer balance cap places a limit on the amount that can be paid as a death benefit pension and any excess benefits must leave the super system.

This article outlines how the use of testamentary trusts can provide estate planning certainty for super members with minor children and also allow for tax-effective distribution of income among family members.

What is a testamentary trust?

A testamentary trust is a trust that is created within a person's Will but does not take effect until after their death. A testamentary trust may be created using specified assets, a designated portion of an estate or the entire remaining balance of an estate. Multiple testamentary trusts may be set up by the one Will.

What are the advantages of a testamentary trust?

There are some advantages creating a testamentary trust including:

- **Protection of beneficiaries**

  Many parents appreciate the tax efficiency of paying death benefit pensions to minor children but balance this with their fear of what their children may do with a large sum of money. A death benefit income stream can be commuted at age 18, which is not an age that many parents feel their child would make responsible financial choices (red sports car anyone?).

  Directing some or all of the super balance to a testamentary trust can address this issue because the parent can control when a child has access to funds. A testamentary trust is particularly important for clients affected by the $1.6 million transfer balance cap where excess monies must leave the super system.

  Clients may have other beneficiaries who will benefit from not having direct control over an inheritance. These can include spendthrift beneficiaries, those with gambling, alcohol or drug addictions or people who are easily influenced by others.

- **Taxation advantages**

  Trusts can retain taxable income or it can be allocated to the beneficiaries in a tax-effective manner. The trustee can be given discretionary powers about the distribution of income, which makes the testamentary trust a flexible tax-planning vehicle.

  Beneficiaries pay income tax at their individual marginal rates on the amount of income they receive from the trust. However, unlike tax on income from other sources, beneficiaries of testamentary trusts under age 18 are taxed at normal adult rates rather than the penalty tax rate applied to minors. As a result, the potential for tax savings when trust income is allocated to children can be substantial.

- **Flexibility for a primary beneficiary**

  If included within the terms of the trust, the trustee can exercise discretion as to the distribution of income to beneficiaries at any time and in any proportion. There may be tax planning reasons for a primary beneficiary, such as a surviving spouse, to request the allocation of income to other beneficiaries.

- **Protection of assets**

  As the beneficiaries do not legally own the assets of the trust, testamentary trusts provide a level of protection in the event of a beneficiary's relationship breakdown. Assets are held in a trust and the income and capital are distributed at the discretion of the trustee (who would typically not be the child in the difficult relationship).

  The use of a testamentary trust can also be helpful for clients with beneficiaries who are at risk of bankruptcy. If a Will leaves assets directly to a beneficiary, if they become bankrupt, their inheritance may pass straight through to the trustee or to creditors. Assets held in a testamentary trust are usually better protected.

Case study - Margaret

Margaret is a single parent aged 42 who has two minor children. She has an accumulation account which holds $400,000 and life insurance of $2 million.

If Margaret dies, each child will be limited to a death benefit pension of $800,000 (half of the $1.6 million transfer balance cap). The remaining $400,000 for each child must leave the super system as a lump sum payment.

It suits Margaret's plans for each of her children to have $800,000 as a death benefit pension, but she does not want them to have immediate access to the additional $400,000. Margaret changes her death benefit nomination to direct the excess to her estate and establishes a testamentary trust for each child via her Will.

All of the death benefit pension is a taxable component and is eligible for a 15% tax-offset.

If the $400,000 for each child were paid from the super fund and invested in a bank account at 3% per annum, the children would each earn $12,000 in interest. The tax due on the interest would be $5,400 (66% of amounts between $417 and $1,307 and 45% of amounts over $1,307). However, if the $400,000 was invested via a testamentary trust, the penalty minor tax rates do not apply. If $12,000 were earned and distributed to the children via the trust, the amount would be taxed at ordinary adult rates.

If the children are each drawing the minimum annual pension of $32,000 their total position would be $1,935 per annum better off each by using a testamentary trust, as detailed below:

	$400,000 via a testamentary trust	$400,000 via a bank account
	Amount	**Amount**
Super death benefit pension	$32,000	$32,000
Testamentary trust distribution	$12,000	
Bank interest	$0	$12,000
Total income	**$44,000**	**$44,000**
PAYG tax (at adult tax rates, incl. Medicare levy)	$6,727	$3,262
PAYG tax (minor tax rates)	n/a	$5,400
Less 15% tax offset on pension	-$4,800	-$4,800
Total tax payable*	**$1,927**	**$3,862**
Net income	**$42,073**	**$40,138**

**Ignoring the low-income tax offset*

Conclusion

The introduction of the super changes from 1 July 2017 is a catalyst for super fund members to review their estate plans. Professional estate planning advice can provide members with peace of mind that their super death benefits will be distributed to beneficiaries as per their wishes in the most tax-effective way.

Julie Steed is Senior Technical Services Manager at Australian Executor Trustees. This article is general information and does not consider the circumstances of any individual.

Housing affordability for millennials and baby boomers

Jonathan Philpot

When talking with our clients, it is clear that housing and property ownership is a major concern. The implications for their financial plans are significant, whether they are worried about:

- how their children will be able to afford their own home
- where they will live in retirement
- what to do with the family home once their children move out.

It is hardly surprising, therefore, that two of the most talked-about measures in the May 2017 Federal Budget were to do with housing and affordability – the super tax break to encourage downsizing, and the First Home Super Saving Scheme.

While the measures deal with opposite ends of the property owner spectrum, first home buyers and downsizers, they both respond to the same issue of the lack of housing supply in key markets.

The key question is: will the new policies achieve what they are intended to achieve, or are they simply policies in response to populism?

First Home Super Saving Scheme

There have been previous government measures to attempt to help young people get their foot on the property ladder, but their success has been debateable. Some schemes, such as the First Home Buyer Grant, were criticised for doing more to push up house prices than help buyers.

The First Home Super Saving Scheme (FHSSS) attempts to avoid such issues by instead offering a tax-advantaged way to save for a first home, but there are a number of questions unanswered.

The idea is to allow first home buyers to take advantage of the lower taxed superannuation regime to save for a deposit, as well as allowing them to benefit from the deemed earnings generated by the super fund. If the proposal is passed, people will be able make voluntary contributions of up to $15,000 per year to their super fund which they can then withdraw to help buy a first home.

One key question is how super funds will honour the deemed earnings (calculated at the bank bill rate plus 3%). Investment earnings can't be guaranteed so how will the deemed earnings be funded in years when the fund doesn't generate returns above the rate used?

Another question is how quickly super funds will be able to release the money for practical purposes. With a house auction, funds for the deposit are required on the same day as the offer while for a sales process, the exchange cannot occur until the deposit is received.

Another concern is how this scheme will operate for couples where one partner is a first home buyer and the other is not.

The reality is that the amount that can be saved through the scheme alone won't accumulate enough for most home deposits in major cities. Most people will need a multi-strategy approach in conjunction with the FHSSS to accumulate a meaningful deposit.

Nonetheless, the discipline of sacrificing regular amounts to superannuation could be a way for younger people to engage with their superannuation.

Downsizing incentives

The Budget also included changes designed to encourage retirees to tax-effectively downsize from their family home, but they may leave some retirees worse off financially, particularly with the potential impact on the age pension.

The government has proposed that retirees will be able to put an extra $300,000 each (or $600,000 per couple) into super from the proceeds of selling their family home after they turn 65. Overall, it is a positive move for many people who are over 65 and no longer able to contribute any more into super.

This could include those who do not pass the work test (this would be the majority) or who have total super balance above $1.6 million (this would be the minority). A couple with accumulated assets outside of their home of greater than $821,000, or a single person with more than $546,000, may benefit from these changes.

However, selling down the home and placing the proceeds into super may not be the best strategy for everyone. The family home is exempt from the assets test for the age pension, but super is included. With the new assets test taper rate of $3.00 a fortnight for every $1,000 of assets, this works out as a reduction in pension payments of $78 in pension payments for every $1,000 now included in the assets test.

It is unlikely that these changes will be the driving factor into downsizing. Lifestyle factors nearly always head the list, such as being closer to family or the home just being too big to look after.

Future success

Perhaps the best measure of success for these proposals will be whether they encourage people – both young and old – to engage more with their superannuation and consider strategies to put more money in, while they can. On their own, the proposals are unlikely to have a significant impact on housing affordability, but they may, in small, incremental steps, make it easier for older people to move out of big homes that they struggle to maintain, and for young people to take their first foray into property ownership.

Jonathan Philpot is wealth management partner with accountants and business and financial advisers [HLB Mann Judd] *Sydney.*

Stock investors should protect downside

Glenn Rushton

The possibility of rising interest rates, uncertainty about President Donald Trump's policy directions, rapidly rising government debts and the risk of a 'hard' Brexit have given Australian stock investors plenty of worries in 2017. Added to this is the threat of an Australian housing bust, with UBS recently calling the top of the market.

How can investors, particularly those nearing retirement, protect themselves and their portfolios against such market volatility?

Unrealistic return expectations

The ASX Australian Investor Study 2017 revealed a disconnect between investor risk profiles and their return expectations, with 60% of retirees wanting 'stable or guaranteed returns', but an even higher 81% of younger investors seeking the same. Yet 21% of the most risk-averse investors still expect annual returns over 10%.

A December 2016 report by State Street Global Advisors predicted a long-term (10 years plus) return from global equities of only 6.2%, with just 1.3% from global government bonds, while US inflation is expected to average 2%.

For a typical balanced portfolio comprising 60% equities and 40% bonds, this equates to an after-inflation return of just 2.24%, which is insufficient for most investors' investment objectives.

Added to this is the risk of a significant stock market downturn. Long-term US data shows a bear market occurs once every 3.5 years, with an average fall of 35%.

Another such plunge now, as seen during the GFC, would devastate the retirement savings of millions of Australians, with those nearing retirement and existing retirees not having the luxury of extra working decades to recoup such losses.

Property may not be a safe haven either, given that the Sydney and Melbourne residential property markets have been rated among the world's most overpriced. Any crash in this sector would inflict further woes on a banking sector already reeling from the budget's recent bank levy and increased capitalisation requirements.

Bank deposits, while protected by government guarantee up to certain limits, are not offering sufficient returns, given the current inflation rate. And while bond yields spiked on Trump's election, yields have since eased back on concerns over whether Trump's planned infrastructure spending and tax cuts will get through Congress (let alone if he is impeached).

Unfortunately, in the search for yield in the current low interest rate environment, as the GFC has slowly faded from investors' minds, there has been a worrisome return to riskier growth assets by older investors, who should be seeking lower volatility investments.

Lower volatility solution

Combining a low-return investment, such as cash, with high-risk investments such as shares and property, does not necessarily produce a high overall risk-adjusted return, particularly since falling share prices can flow on to property prices if overall economic conditions deteriorate.

Many of the world's leading investors, such as Yale University's endowment fund, have pursued an alternative approach not heavily dominated by share market risk, such as in alternative investments, leading to Yale's superior performance.

To guard against increasing volatility, investors should consider allocating part of their portfolio to a highly diversified 'all-weather' investment strategy, such as a market neutral fund. This has the ability to perform equally well in both rising and falling markets. It should have little or no net exposure to global equity markets, with an overarching focus on capital preservation, a high level of diversification, and little or no leverage, with the aim of producing a high risk-adjusted return.

The theory behind a market neutral investment is that rather than the risk and return being reliant upon the overall market's movement, it is dependent instead on individual share selection, a risk that the investment manager has greater control over.

In a broad market crash such as seen during the GFC, even highly diversified portfolios of blue-chip shares suffered substantial losses. As Warren Buffett famously said, "Only when the tide goes out do you discover who's been swimming naked." Australian investors, particularly those in their 50s, simply cannot afford to be caught out in a market storm.

Glenn Rushton is Executive Director of Rushton Financial Services*, and Investment Manager of the Rushton Conservative Global Market Neutral Fund and the Rushton Global Market Neutral Fund. In his other life, he is the trainer of boxer Jeff Horn who stunned the sporting world with his victory over the legendary Manny Pacquiao in front of a crowd of over 50,000 and a global television audience of millions.*

How robotics can deliver smart wealth advice

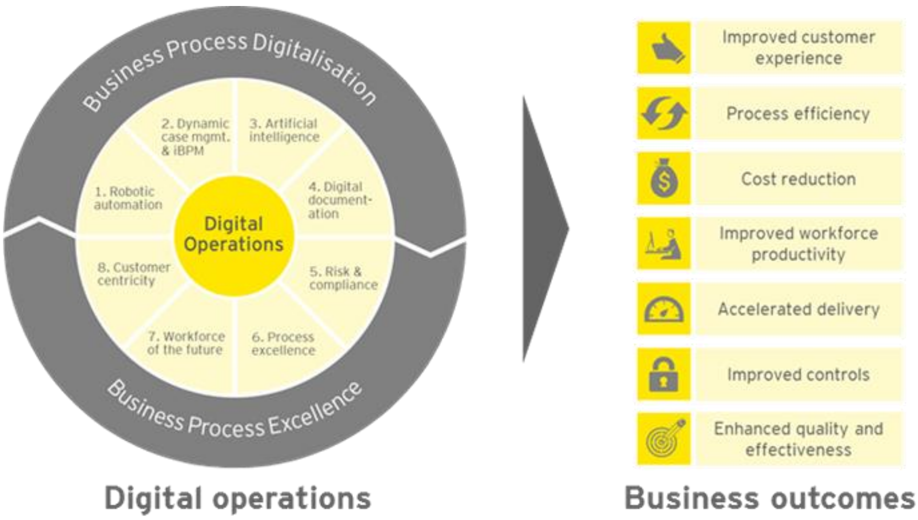
Jason McLean and Andy Gillard

Over the last three years, there has been a significant shift towards the adoption of new and emerging technologies leading to a widening mix of advice, administration and investment practices among wealth managers.

In the face of competitive market pressures, constant regulatory change and escalating data volumes, it is critical for wealth management firms to leverage technology and the underlying data creatively to improve service quality, personalise customer experiences and create platforms for smart processing.

How mature are your digital operations capability?

Wealth managers need to define and firmly establish digital operations as a capability within their businesses. EY's assessment framework of digital operations measures nine key dimensions that drive business benefits and outcomes.



One of the key drivers to the speed and adoption of digital operations is the maturity of the *Robotic Automation* solutions. There are two types of solutions in this marketplace: *Unassisted Automation* and *Assisted Automation*.

Both types of Robotic Automation can deliver significant time, processing and error reduction and service quality benefits to many areas of the wealth and asset management value chain.

For instance, Assisted Automation (often called Robotic Desktop Automation or RDA) could be used to augment workforce productivity. Unassisted Automation (often called Robotic Process Automation or RPA) could be used to reduce operational processing windows, operating costs and high-cost, low-value tasks.

Robotic Automation can also drive digital operations functionality, for example, by acting as a keystroke surveillance agent, enabling workforce intelligence and improved employee performance via data-driven coaching. Or it could be used as an engine to work alongside or supplement front-end robo-advice platform offerings.

How can software robotics provide assisted advice with front-end robo-advice?

Keeping a customer's best interests at the centre of an advice model is essential to wealth management success. Risk management in advice is also under increasing scrutiny from regulators. In the superannuation space for example, this message was highlighted recently by the Productivity Commission.

ASIC also published a review earlier this year, as part of its Wealth Management Project, identifying areas for improvement in how advisers are overseen within large organisations:

- "Failure to notify ASIC about serious non-compliance concerns regarding adviser conduct
- Significant delays between the institution first becoming aware of the misconduct and reporting it to ASIC
- Inadequate background and reference-checking processes, and
- Inadequate audit processes to assess whether the advice complied with the 'best interest' duty and other obligations".

Robotic Automation can help regardless of whether a robo-advice platform already exists within the organisation. One example of this is the data analysis and data crunching work used to prepare a Statement of Advice with a risk management overlay. Robotic Automation solutions can automate a number of these steps, such as dealing with data points, drawing information out of multiple legacy systems, stitching it together and providing an end to end audit trail.

EY's recent report, *Robotics and its role in the future of work*, found that the gains from automation can be considerable, but that even more is possible when robotics and digital are brought together. Robotic Automation can tap into shadow or legacy IT systems where it may otherwise be hard to create a new integration point, to feed a greater number of services or data points into the robo-advice channel.

What about investments and administration?

Non-indexed and unstructured investment instructions from different sources can lead to inefficiencies, errors and service quality reductions as data is reassembled into a variety of models to understand exposures, risks, performance and attribution.

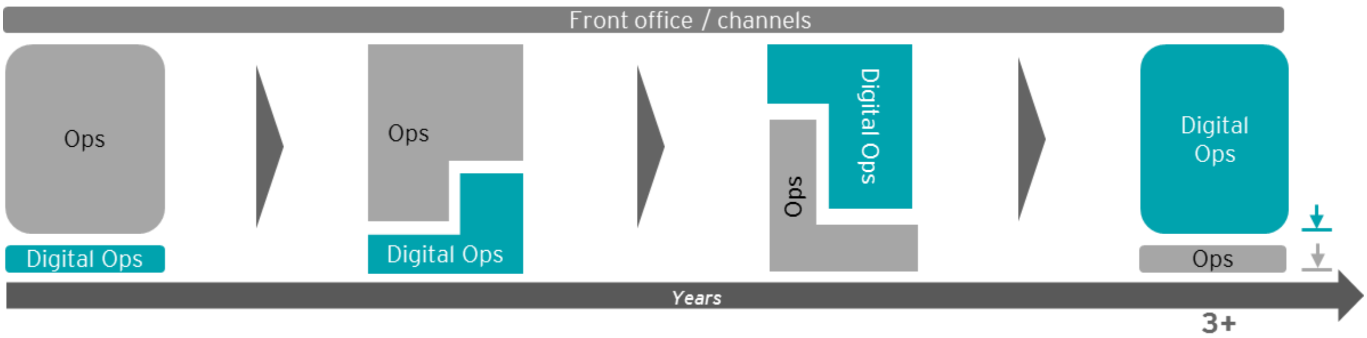
Many organisations face the challenge of managing critical information across a mix of core and secondary systems, requiring highly-skilled staff to undertake repetitive activities. Robotic Process Automation could be used to operate around the clock, managing data collection, augmentation, and analytics and reporting. This model would result in only exceptions needing to be escalated to skilled staff as required.

It's an especially good candidate where a set of steps occur each every day which is highly repetitive, rules-based, digitally triggered and based on structured data.

Where will your robotics journey take you?

Driving a Robotic Automation agenda into advice, administration and investments functions can help improve costs and significantly relieve pricing and margin pressure. The benefits, such as moving towards 100% paperless, can also be greatly accelerated through the use of a range of other capture and workflow tools.

Competing in the digital age means doing things differently. Wealth managers need to be laser focused on data management and analytical strategies, using a data-driven approach to derive key outcomes and measure the maturity of their digital operations capabilities.



Digital operations transformation journey

Jason McLean is the EY Oceania Wealth and Asset Management Advisory leader. Andy Gillard is the EY Asia-Pacific Digital Operations leader.

The views expressed in this article are the views of the author, not [Ernst & Young]. The article provides general information, does not constitute advice and should not be relied on as such. Professional advice should be sought prior to any action being taken in reliance on any of the information. Liability limited by a scheme approved under Professional Standards Legislation.