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This Week's Top Articles

Morrison delivers a Costello supersize opportunity

Graham Hand

Despite the determination to wind back the generosity of superannuation, Treasurer Scott Morrison has left open a wide window of opportunity to park money in this tax-advantaged system. Couples have a final chance to put up to $1.15 million into super in the next nine months if they have the money, even if they are already each over the $1.6 million cap. Such a window might never open again, and if history is a guide, wealthy people will pin their ears back.

The acclaim for the compromise on the superannuation changes announced last week has been widespread. *The Australian* called it "Turnbull's super week", while *The Australian Financial Review's* headline went as far as saying, "Morrison wins over everyone", adding that the change was, "welcome across the industry as a fair and sensible compromise". Such praise means votes in politics, and veteran journalist Paul Kelly, *The Australian's* Editor-At-Large, wrote:

"Finally, on superannuation Morrison and Financial Services Minister Kelly O'Dwyer have achieved an astute, multifaceted compromise. They have won industry backing and party room endorsement, removed the main retrospectivity peg, replaced the $500,000 lifetime cap on after-tax contributions with a $100,000 annual cap, won the budget savings and set up a negotiation with the parliament that will see the super package become law."

Apparently everyone's a winner.

What about the lost personal income tax?

But wait a minute. Wasn't the reason for the proposed change to stop superannuation becoming a store for the wealthy? And to fulfil the objective of providing an income in retirement, not intergenerational wealth transfer? And to stop the drain on revenue from assets being placed in a tax-favoured structure?

The removal of the retrospective elements and limitations of the proposed $500,000 non-concessional contribution (NCC) cap is welcome. However, it's surprising that a couple under the age of 65 (who have not already triggered the bring-forward) can now put over a million dollars (two lots of $540,000 or $1,080,000) into super as an NCC by 30 June 2017. Adding a last stab of up to $70,000 in pre-tax concessionals gives $1.15 million, a supersized top up for anyone with enough money.

Sure, each person will have a limit of $1.6 million in pension mode where the income remains tax-free, but the balance will be taxed at 15%. With franking, the average tax rate paid in superannuation outside pensions is about 9%. For those with multimillion-dollar super balances, their likely personal marginal income tax rate is the top 47% (excluding medical levy of 2%). They can reduce their marginal tax rate by 32%.

(People aged between 65 and 74 who meet the work test can make an annual $180,000 contribution but cannot use the bring-forward rule).

Assuming the $1,080,000 earns only 5%, or $54,000, the tax saving is $17,280 per couple per annum. Is it fully factored into the budget for the thousands of people who will do this?

Does all this sound familiar? Exactly 10 years ago …

The 2006/2007 Budget was wonderful for high income earners. I remember sitting at the ANZ Budget Dinner in the Westin Hotel ballroom with a thousand other financial market types as Peter Costello delivered the super goodies. The Reasonable Benefits Limits rules were abolished, payments received from a fund as either a lump sum or an income stream would be tax-free after the age of 60, and there was a $1 million top up each. The room was almost silent as executives imagined the dollar signs flipping through their minds. When Costello finished speaking, there was a hubbub as thoughts tumbled out. “Did you hear what I heard?” buzzed the tables as the waiters topped up the wine.

The coincidence in timing with the Morrison announcement is extraordinary, as it was almost exactly 10 years ago, on 5 September 2006, when Costello issued [this statement]:

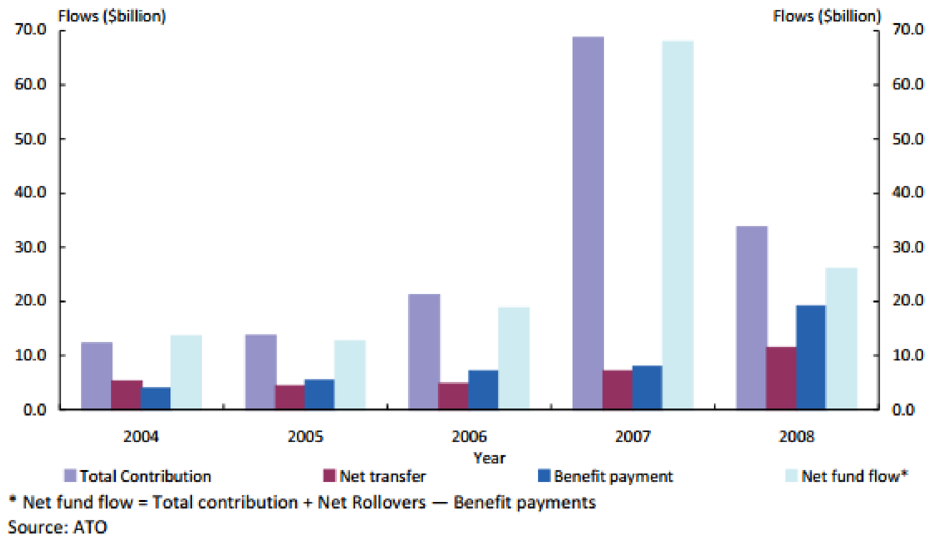
“People will be able to make up to $1 million of post-tax contributions between 10 May 2006 and 30 June 2007 which will allow people who were planning a large contribution under the existing rules to do so. The $150,000 annual limit on post-tax contributions will commence from 1 July 2007. People aged less than 65 will be able to bring forward two years of contributions, enabling $450,000 to be contributed in one year, with no further contributions in the next two years.”

Wealthy Australians and their advisers set about accumulating as much in the superannuation environment as possible. It was the best tax management programme in town. Post-tax contribution $450,000 brought-forward. Tick. Annual pre-tax contribution $50,000. Tick. And the granddaddy of them all, the one-off $1 million. Big tick.

These were the good old days of mining booms, budget surpluses, reductions in marginal tax rates and even baby bonuses without a means test. And here was superannuation – not some dodgy and doubtful tax-minimisation scheme at the bottom-of-the-harbour – as a centrepiece of government policy, allowing millions to be parked tax-free.

It was a godsend for the wealth management industry. As the chart below shows, there was a massive spike in contributions during 2007. Of the $70 billion in total SMSF contributions, member contributions comprised $57 billion or 80% of total SMSF contributions in that year, and retail and industry funds experienced billions more.

Breakdown of total SMSF fund flows, 2004 to 2008 (with $1 million allowed in 2007)



Largely as a result of these limits, 2.6% of the 550,000 SMSFs now have balances over $5 million, according to the Australian Taxation Office (ATO). That's 14,300 funds representing about 28,000 members.

Massive inflows in the short term, then a drop off

The removal of the $500,000 NCC and its backdating is not only good news for those who can afford large contributions, but also for the wealth management industry – fund managers, platforms, industry and retail funds, planners, accountants, SMSF administrators and thousands of others – in the short term. The public awareness of superannuation is higher now than it was in 2007, and this window of opportunity is special because the door to NCCs closes for many on 1 July 2017. In 2007, Costello allowed ongoing after-tax contributions of $150,000 a year, so there was not as much need to rush.

Under Morrison, from 1 July next year, anyone with $1.6 million or more in super cannot make further NCCs. Even those with smaller balances have a lower annual cap of $100,000, with a bring-forward. Particular attention will focus on property. The next nine months might be the last time the limits allow a lumpy asset like a property to be placed into super.

There may be some tempering of enthusiasm due to the ongoing tinkering with the superannuation system ensuring there is no certainty of the tax treatment.

In following financial years, the new limits will bite, as the wealthy make no more NCCs and the concessional limit drops to $25,000. With an ageing population drawing pensions approaching $80 billion a year and asset earning rates low, it's possible that super assets might peak for all time in the June 2017 quarter.

If this plays out, and given the stock market's usual myopic focus, wealth management businesses will be a good buy into 2017 as strong inflow and funds under management announcements are made to the market, followed by disappointments into 2018 and beyond.

Is the work test really such a stretch?

What about the reintroduction of the work test for people aged between 65 and 74, who cannot make NCCs unless they pass the test of being 'gainfully employed', contained in the SIS regulations 7.01 (3):

"A person is gainfully employed on a part-time basis during a financial year if the person was gainfully employed for at least 40 hours in a period of not more than 30 consecutive days in that financial year."

I have a friend who is over 65 and he took some part-time work (babysitting? gardening? acting?) for a few weeks. Is 40 hours within 30 days or 10 hours a week difficult to organise? A financial adviser told me, "I have a few clients that step in when local businesses need to replace a receptionist or clerical employee for holiday leave." Arrangements should be checked with the ATO but might be worth it for a last shot at a decent NCC.

What could Morrison have done?

There were two major issues where the politics forced Morrison and Turnbull to negotiate a compromise to the budget proposals: the retrospective treatment of NCCs to 2007, and the $500,000 limit. However, there was widespread (not universal) acceptance that the $1.6 million cap on tax-free income was a decent number.

So given all the 'budget repair' arguments, why didn't they simply remove the $500,000 limit and the 1 July 2017 start date for the new rules, leaving in place the requirement that anyone already over $1.6 million could not contribute more NCCs. It would have achieved the vast amount of the political outcome without the drag on future income tax caused by the new proposal.

Not everyone should stick more into super

Of course, the vast majority do not have a cool million lying around. For many, super may not be the best place to lock up their money, especially above the $1.6 million cap where the tax rate becomes 15%. They can take advantage of the tax-free threshold of $18,200 on income earned outside super, and perhaps the Seniors and Pensioners Tax Offset, which allows tax-free earnings of up to $32,200 for singles or $57,800 for couples. If earnings rates are low with franking credits, it's worth calculating how much is better held outside super in individual circumstances.

And of course, these proposals are not yet legislated, although given the political wins for the Government this week, and the previous hammering it took with a public and backbench revolt, they may be reluctant to revisit the rules any time soon. Longer term, governments cannot resist fiddling.

Watch what happened in 2007

The timing of allowing $1 million into superannuation in 2006/2007 was unfortunate for some, as it was during a major bull run on the stock market, and thousands ploughed the money into shares. The GFC then hit and wiped out far more than the gains from the tax savings. The point to note is not to confuse the investment vehicle (superannuation) with the investment market (such as shares, cash, bonds, property, etc).

Every financial adviser (as soon as the changes are legislated) will be telling their better-off clients to ship as much into super as possible this financial year. Ever since Australians realised the mining boom and the good times were over, many have blamed Howard and Costello for frittering away the large surpluses, and the $1 million super allowance is often cited as an example of poor policy that the proposed changes are designed to address. Is Morrison creating a similar legacy?

Graham Hand is Editor of Cuffelinks. This article is based on a current understanding of the proposals but these may change and individuals should seek financial advice based on individual circumstances.

10 quick points on super reform for dummies

Gordon Mackenzie

This is a quick snapshot of the proposed superannuation changes announced by the Government (as at 10.08am Friday 16 September 2016, that is.)

1. The Government is legislating an objective of superannuation against which all changes will be measured. Broadly, the primary objective of super is to supplement or replace the age pension. Problems include that super funds currently pay out on many events unrelated to pensions, they pay out lump sums and they pay money to beneficiaries other than the superannuation fund member.

2. Income on account balances paying a pension up to maximum of $1.6 million will be tax-exempt. Any income from assets above that will be taxed in a fund at 15% or the excess can be taken out.

3. If taxable income is above $250,000 pa, the tax rate is 30% on contributions to a super fund, not the usual 15%.

4. Non concessional contributions will be capped at $100,000 pa or $300,000 over any three-year period before age 65, and once there is $1.6 million in a fund, no more non-concessional contributions can be made.

5. If income is less than $37,000 pa the Government will refund the contribution tax to the fund.

6. Employees can receive a deduction for up to $25,000 pa of contributions less what their employer has contributed.

7. One spouse can contribute up to $3000 to the other spouse's super account whose income is less than $40,000, and the first spouse gets an 18% tax offset on what they have contributed

8. Income on deferred annuities will be tax exempt.

9. Extra payments made by funds on the death of a member will not be tax deductible.

10. Fund income supporting a pension while a person is still working will be taxable at 15% not 0%.

All these changes commence from 1 July 2017 so get cracking!

Gordon Mackenzie is a Senior Lecturer in taxation and superannuation law at the Australian School of Business, University of New South Wales. This article is a brief summary of the major points, it does not consider the needs of any individual and does not summarise all aspects of the proposals, which have yet to be legislated.

Five things bond investors are doing now

Elizabeth Moran

There has always been two easy ways for bond investors to increase returns: by investing for longer terms or by increasing risk by moving down the credit rating spectrum. Both of these options remain popular with investors. Here are some trends among bond investors at the moment.

1. Supply is down and fewer investors are selling

Not long ago, we had access to plenty of bonds and could readily find sellers in the market. Over the last few months, we've seen a number of forces at play including:

- the RBA cutting the cash rate to 1.5%
- investors now realising interest rates will be much lower for much longer
- a number of favoured bonds have matured, putting cash in investor's pockets, much of which went back into buying other bonds
- limited new supply of corporate, non-financial bonds in Australian dollars - domestic issuance is low with many corporations issuing into the US market or reluctant to take on more debt.

Combined, all of these factors have cut supply. We've seen growing appetite for all bonds, and while they can still be found, investors may need to wait a week or two to have their orders filled.

2. If they are selling, it's inflation-linked bonds and cyclical resource bonds

Low inflation and rebounding resource prices have prompted sales of some holdings.

The outlook for inflation is low, in line with low growth rates. Headline inflation for the June 2016 quarter was 0.4% and trimmed mean for the past year 1.7%, lower than the Reserve Bank Board target range of 2% to 3%. Lower inflation results in lower growth in capital indexed bonds and lower income compared to a higher inflationary environment.

Theoretically, the global stimulus should work to increase inflation and we still view this as a risk worth protecting against. Two favoured inflation-linked bonds are seeing some turnover: Australian Gas Networks (previously Envestra) has a capital index bond maturing in 2025 with a yield over inflation of 2.87% per annum and Sydney Airport, a similar bond maturing in 2030 with a yield over inflation of 3.23% per annum. Even if inflation drops to zero or is negative, these fixed yields will help maintain a positive return.

The strong performance in resource bonds since Christmas – for example Fortescue Metals Group USD bonds are up between 30 and 80% - have seen some investors take profit and invest in other bonds that they consider have a better potential to outperform.

3. Diverging groups - one preferring investment grade, the other high yield

There has been a clear split in strategy, generally between institutional and private investors.

In Australia, institutional and middle market clients are often bound by mandates that restrict investment to certain minimum investment grade ratings for maximum terms. They are natural buyers of high grade bonds, with recent additional emphasis on quality. These investors also look for bonds that have stand out returns. A few months ago, we saw good institutional buying of a highly rated AUD Swiss Re old style hybrid paying 4.25% which we expect will be called in May 2017.

High yield bonds help deliver much needed income to SMSFs in drawdown and it's perhaps natural that they would seek additional risk in this market. Our suggestion to anyone with this strategy has been to adopt a more equity-like approach and invest smaller amounts so that if any company gets into difficulty, then it has much less impact on the overall portfolio.

4. Buying longer dated, fixed rate bonds – investors don't mind adding duration

Earlier this year, investors thought we had hit the bottom of the interest rate cycle and adopted a short duration strategy to prevent losses on long dated fixed rate bonds should interest rates rise. The thinking has shifted and they're now comfortable investing for much longer to get better returns.

(Note: Modified duration is a measure of the price sensitivity of a bond to interest rate movements. Typically, modified duration provides an estimate of how a bond will change in price for a 100 basis point or a 1% movement in interest rates. For example, say interest rates change by 1% then a $100,000 par value bond with a six-year modified duration could expect a corresponding 6% change in its price, that is 1% x 6 years = 6% change. If the traded yield on that security moved up by 1% the next trading day, then the market value of that bond would fall roughly 6% from $100,000 to $94,000. Alternatively, if the traded yield on that security declined by 1% the next trading day, then the market value of the bond would rise by 6% to $106,000).

Long dated, fixed rate bonds of ten years or more are growing in popularity. For example, gold miner Newcrest has a US dollar bond maturing in 2041 paying a yield to maturity (YTM) of 5.35% per annum and Canadian diversified power producer, TransAlta has a bond maturing in 2040 with a YTM of 6.91% per annum. Both of these bonds are investment grade rated BBB-.

5. Adding USD and GBP bonds to their portfolios

A growing trend has been the addition of foreign currency bonds especially with those investors who hold foreign currency deposit accounts or who have assets in other countries. The strategy also provides a hedge against the depreciation of the Australian dollar and allows wholesale investors to access a very broad range of companies and other entities, adding further diversification to their portfolios.

Recent popular targets have been BHP Billiton in USD and GBP, and others, mainly in USD - Newcastle Coal Investment Group, IAMGOLD and the latest addition is a range of bonds from information technology producer, Dell Technologies. The yield to call for these bonds range from 4.62% p.a. for the BHP Billiton USD subordinated bond with a first call in 2025, to the Newcastle Coal bond maturing in 2027 with a yield to call of approximately 10.5% p.a.

Note: Prices quoted are accurate as at 8 September 2016 but subject to change.

Elizabeth Moran is Director of Client Education and Research at [FIIG Securities](). This article is general information and does not consider the circumstances of any individual.

Achieving real returns in a low growth world

Simon Doyle

This article is the first in a two-part series that looks at how investors can realistically assess current market challenges and what they can do to achieve meaningful returns with reasonable risk levels.

Overview

The idea that we have entered a 'low return' world now seems to be a consensus. The arguments are based on a combination of fundamental macro factors (a low growth world) and extended structural valuations in both equity and debt markets that suggest both bond and equity market returns face significant headwinds.

Achieving solid real returns consistently in this environment will be arduous. That said, at Schroders we believe beating inflation with a 5% excess real return over the medium term is still an appropriate and achievable objective. This view is based on several key ideas:

- the structural valuation challenges in equity markets are not uniform nor are they extreme (either in absolute terms or by historic standards).
- markets rarely move in straight lines, especially when conditions are challenging; it is reasonable to expect considerable cyclical volatility.
- flexible asset allocation ranges and active management are essential.
- approaches that embed the structural risk of either equities or bonds will likely struggle to deliver consistently. This includes balanced funds, with fixed strategic asset allocations or embedded duration risk (leverage) in the strategy, as the risk around bonds becomes increasingly asymmetric.

A low-return world

The concept of a 'low-return' environment is underpinned by a structurally weak global economy with consequences for growth rates, inflation, interest rates, bond yields, and earnings. The bleak growth outlook is due to a number of factors such as:

- high debt levels and pressure to de-lever across the broader global economy
- demographic influences (especially in China, Japan and Europe)
- moderating productivity growth and the potential 'normalisation' of a structurally high US profit share
- in Australia's case, the additional unwinding of the China/commodity induced terms of trade boom, placing significant structural pressure on national income.

Compounding these factors are doubts about policy makers' ability to effectively manage pressure from a number of areas including:

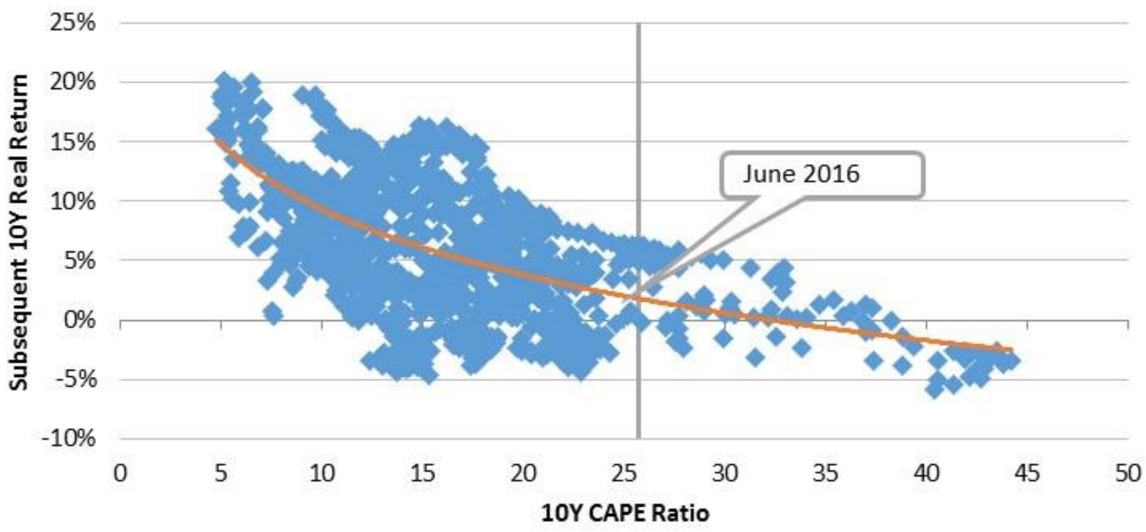
- the extent to which monetary policy options have already been largely (arguably) exhausted (Europe, US and Japan)
- Chinese debt and overcapacity against the backdrop of an economy undergoing a structural transformation
- fiscal and structural policy that has effectively been side-lined by high global debt levels (both public and private sector) and the absence of clear political mandates
- rising global income and wealth inequality and associated rises in social and political instability.

Valuations matter more than global growth

The correlation between economic factors and market performance is often over-emphasised. Strong economic growth does not necessarily mean strong market performance, whereas the link between valuations and future returns is significant – particularly over the medium to longer term. This is true for both equity and bond markets.

While there is no unique and absolute valuation metric for equities, research shows a strong relationship between longer run, cycle adjusted price-to-earnings (CAPE) multiples and subsequent 10-year returns for US equities (see graph below).

US CAPE Ratio and 10 year Real Returns for US equities since 1900.



Source: GFD, Yale, Schroders. The Shiller PE or Cyclically Adjusted PEs are calculated as price divided by 10 year trailing earnings, adjusted for inflation.

There are two main points to highlight:

- high CAPE ratios have consistently been followed by structurally low returns. The current CAPE ratio of around 23x, while high in an historic context, is well below the 45x level that prevailed at the end of the tech boom of the 1990s, which was subsequently followed by a decade of negative real returns
- while current structural valuations in the key US equity market are extended and consistent with longer-run returns below long-run averages, there is not the same downward pressure on returns that prevailed at past extremes (like the 1970s or 1980s).

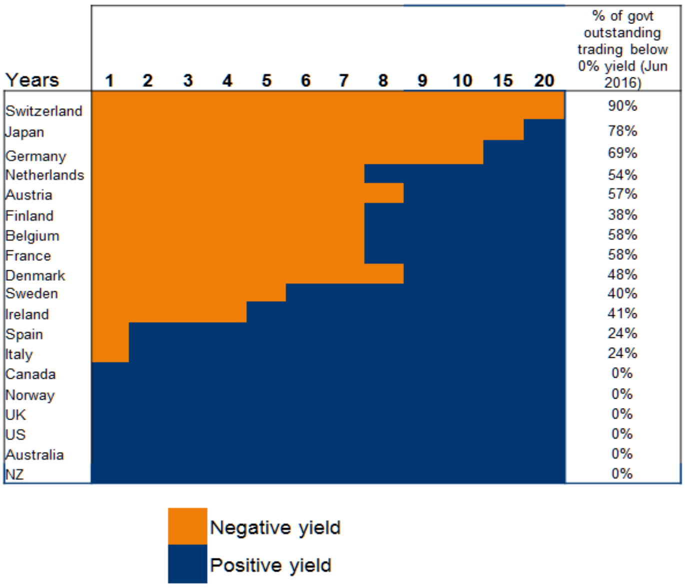
This relationship also broadly holds for other markets, but structural valuations are moderately extended in the US, consistent with relatively low (albeit not extremely low) prospective returns. However, in the UK, Europe and Australia, structural valuations are reasonable (around long-run averages) and therefore consistent with longer run rates of return.

While it will be challenging in some areas (especially the US), we expect a positive longer run trend (unlike in Japan over the past two-and-a-half decades or in the US through the 2000s.)

The problem with bonds

Bond markets are potentially more difficult, with record low bond yields implying low/negative returns from sovereign bonds and for assets priced directly from bond yields. This issue has become particularly more acute, with negative yields prevailing across large swathes of the global sovereign bond market (especially Europe and Japan), with extremely low yields in the residual, as shown in the figure below.

Negative yields don't auger well for future bond returns



Source: Bloomberg, June 2016

While bond returns will vary in the short run as expectations about the future course of interest rates ebb and flow, over the longer term we know with some certainty (in nominal terms anyway) what returns will be. Holding negative yielding bonds to maturity will generate negative returns.

Typically, bonds have been held in portfolios to help diversify equity risk. Structurally low yields limit the ability of bonds to perform this function. The exception is in the context of deflation where the risk to nominal bond yields would still be to the downside. That said, it does have implications for portfolio construction.

Long-run returns

The issues outlined above are factored into our long-run return forecasts for key asset classes. These are primarily derived from a combination of the broader macro-economic backdrop and an adjustment for long-run valuations. While we expect modest long-term returns from equities, they should nonetheless still be positive in real terms, as shown below.

Asset Class	Actual Returns (100 years to June 2016 p.a.)	Actual Returns (10 Years to June 2016 p.a.)	Expected Returns (7-10 years p.a.)	Difference V 10 Year Returns
US Equities (local)	9.9%	7.4%	4.2%	-3.2%
European Equities (local)		2.5%	5.2%	+2.7%
UK Equities (local)	10.0%	5.4%	5.3%	-0.1%
Japan Equities (local)		-0.5%	6.8%	+7.3%
Australian Equities (local)	11.9%	4.9%	8.0%	+3.1%
Global Equities – Ex Aust (Hedged $A)		6.5%	6.0%	-0.5%
Emerging Market Equities (Hedged $A)		6.5%	10.0%	+3.5%
Asia ex Japan Equities (Hedged $A)		8.7%	11.4%	+2.7%
Global REIT's (Hedged $A)		9.5%	1.7%	-7.8%
Australian REIT's (local)		3.1%	1.4%	-1.7%
Global High Yield Bonds (Hedged $A)		10.2%	5.9%	-4.3%
Emerging Market Debt (Hedged $A)		11.0%	5.3%	-5.7%
Australian Hybrids (Hedged $A)		5.9%	5.3%	-0.6%
Global IG Credit (Hedged $A)		8.2%	3.5%	-4.7%
Global Composite Bonds (Hedged $A)		8.1%	2.1%	-6.0%
US Government Bonds (Hedged $A)	5.3%	6.2%	1.5%	-4.7%
Australian Government Bonds (local)	6.7%	7.8%	2.0%	-5.8%

Source: Schroders as at 30 June 2016

In summary, while the structural valuation backdrop is challenging, it is not uniform, nor in the case of equities as extreme as it has been historically. For example, while US equities look structurally the most extended of the major equity markets they are far from the extremes that prevailed at the end of the 1990s tech boom. Australian equities, on the other hand, having devalued against the collapse in commodity prices, look like reasonable long-term value. The situation in bond markets is more problematic given prevailing negative nominal and real yields.

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Smart automation provides a competitive edge

James D Hamel and Michael A Schneider

A relatively slower capital expenditure cycle is often cited as one factor behind the current tepid economic expansion in many developed markets. However, we believe this top-down view obscures a healthy albeit different sort of capex cycle, one that is more technology-driven and focused on efficiency.

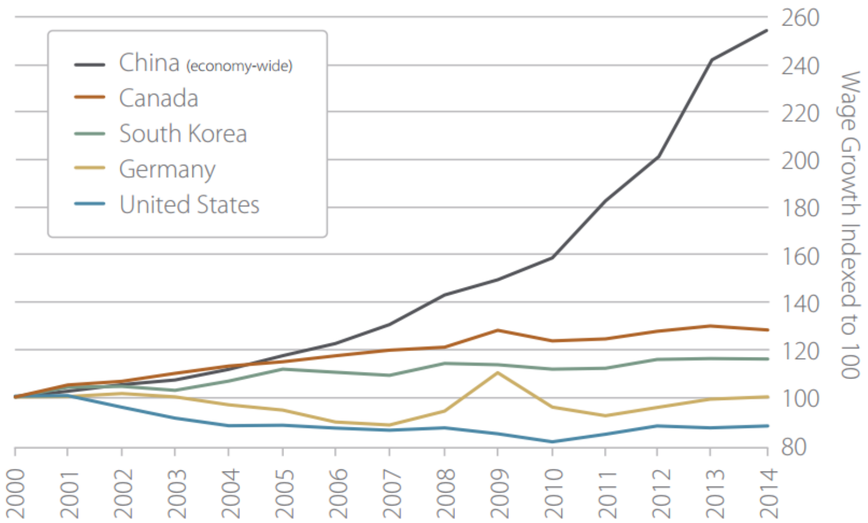
Profits for companies that execute automation well

Rather than driving volume via heavy spending on traditional fixed equipment, companies globally seem focused on gaining more lasting competitive advantages by reducing labour costs while increasing throughput and innovating faster via software-driven automation. We believe this trend of increased industrial process innovation is durable and could accelerate profits for companies that execute well. Automation has long been commonplace in manufacturing, logistics and other areas, but we are now seeing a differentiating factor with the rise of 'smart' automation and instrumentation.

Underpinning this drive for industrial process innovation and accelerated profit are several things we believe should continue for some time.

Outsourcing, often to emerging markets, has been one common way for companies to lower labour costs. While there are concerns now of moderating emerging markets' growth, the prior decade or so resulted in high and persistent wage inflation (see table below). In China and other parts of the developing world, these inflation pressures remain largely unchanged despite expectations of more modest top-line economic growth. Rising wages compress the payback period for automation, creating incentives for investments in equipment rather than labour.

Fifteen years of global wage inflation



Source: Economics and Statistics Administration analysis of data from US Bureau of Labor Statistics, International Labor Comparisons program and National Bureau of Statistics of China.

Cost containment and operational flexibility

Automation gives companies greater flexibility to manage a range of costs since operations need not necessarily be close to a large, manufacturing-based labour pool. Other factors, including local taxes and regulations, existing infrastructure and the political environment, may further increase demand for automation equipment globally. Shipping costs are another key factor.

Despite the recent fall in commodities prices, North America's ongoing energy renaissance has resulted in all-time high US natural gas and crude production, possibly prompting some companies to locate next-generation automation facilities closer to their large North American customer bases.

These factors are behind the recent trend of manufacturing 'near-shoring' to Mexico, which is poised to overtake Canada and Japan as the number-one source of US car imports. As of the end of 2015, Mexico is now producing nearly one of every nine light vehicles bought by US consumers. Global automakers have been building state-of-the-art manufacturing centres in Mexico, attracted in part by cheaper wages than in the US and Canada as well as proximity to America's massive car market.

Consumers and governments are also demanding improved quality and safety profiles on goods, especially in emerging markets, where growing wealth correlates with demand for higher quality. Across industries, product failure and/or tampering can cause an immediate and lasting, even terminal, backlash. Additionally, many governments are making quality a legal requirement via more rigorous safety regulations and product specifications, a trend we expect to continue.

Investing in industrial innovation, including robots to improve precision, vision systems to manage quality control, and automated packaging and fulfillment systems to mitigate contamination and/or tampering, can help manage these costs.

Government-directed initiatives

As the world's largest command economy, China can wield tremendous power in influencing certain sectors. As part of its 12th five-year plan, announced in 2011, the government emphasised seven key sectors, including next-generation information technology and advanced equipment manufacturing for attention. In 2015, it announced its 'Made in China 2025' initiative, designed to transform the country into a global manufacturing power not only in terms of volume, but also in efficiency and sophistication.

While China has not traditionally been transparent about the progress of its five-year plans, the intensive focus on these areas, combined with any spending the government commits now or in the future, should add materially to demand for next-generation automation systems, instruments and components.

How can investors benefit?

Benefits from increased industrial process innovation are fairly broad-based, potentially touching any industry employing automation or sophisticated instrumentation. From an investing standpoint, we believe there are several interesting opportunities.

Traditional industrial equipment manufacturers that have shifted to become hardware/software fused offer good opportunities, as do companies producing industrial robots or machine tools overlaid with next-generation instrumentation and smart automation.

There are also opportunities among components designers and manufacturers such as companies designing infrared componentry, advanced sensors or advanced location devices. Investing in components providers allows us to invest in the broader trend of more sophisticated instruments without trying to select which software platform will ultimately win.

Managing risks

We are mindful of inherent risks that could derail the profit-acceleration potential from this trend, such as competition from lower-cost start-ups, particularly from emerging markets. Profit growth could also be tempered by a slower pace in artificial intelligence take-up, which could limit industrial robots' dexterity.

We look for companies with a large and powerful installed base of hardware with existing clients. Dominant market share can result in an effectively locked-in audience, aiding in future profits from product-replacement cycles, upgrades and cross-selling.

We also prefer those willing to invest heavily in research and development now. Such investments do impact margins; however, investing strategically is one way to fend off lower-cost upstarts and amplify scale advantages.

Companies with scientific research-driven backgrounds have good prospects. They often develop products or software for extreme situations and can alter them for more common applications, giving them a technological head start over competitors or a low-cost advantage.

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Search these unique investing tools

Jason Sedawie

Hedge funds are renowned for using cutting-edge technology to conduct research. Satellites are used to watch car parks outside Walmart stores to estimate retail sales. Some track corporate aircraft to understand where the jets are going in anticipation of acquisitions and deals. If you're interested, you can track the FAA aircraft registration database where you can find registered aircraft and search flights under flightaware.com.

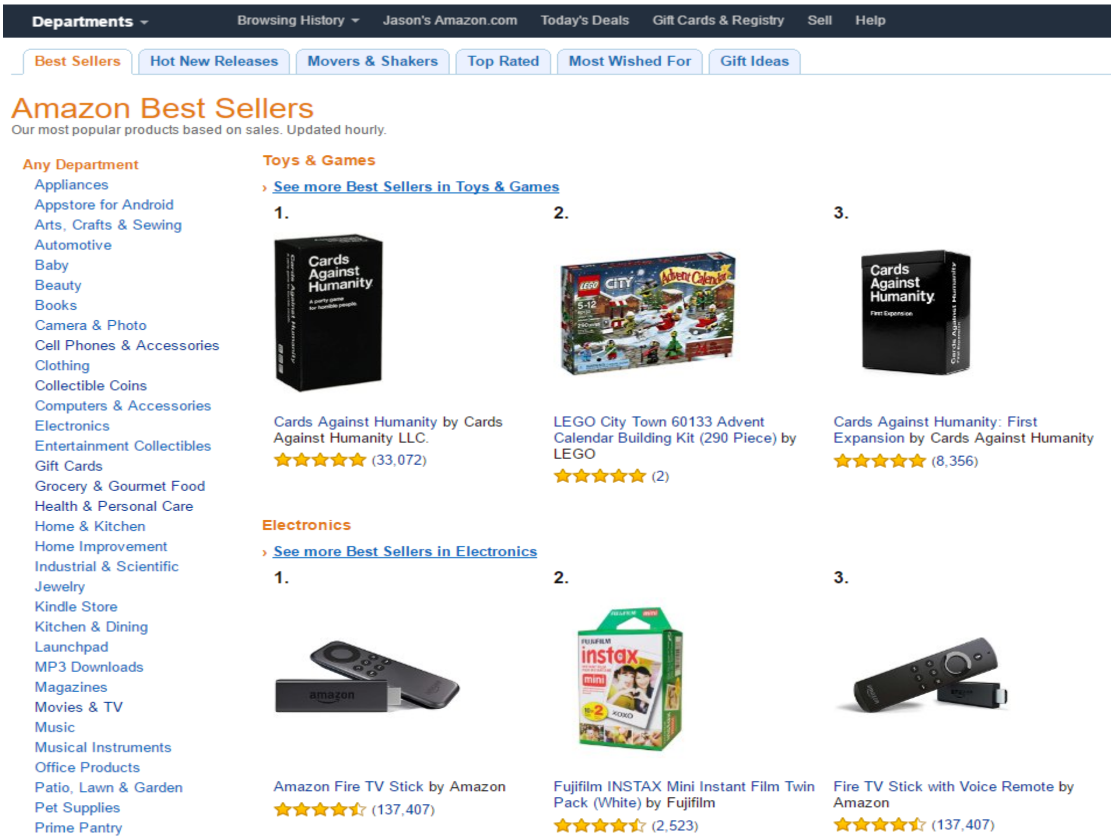
Like everything else, using this sort of technology is not at all perfect. Kellogg shares rose then fell sharply after hedge funds bid up the stock due to Kellogg corporate aircraft visiting Omaha, Nebraska (Buffet headquarters), Chicago (Kraft/Heinz 3G) and Southern California (where Berkshire director Charlie Munger resides), but no offer was made. It's public information available for anyone who bothers to search for it.

You don't need a satellite

Satellites and plane tracking are helpful for traders looking for takeovers. For everyone else, I recommend the internet. Popular sites that we use every day as consumers are very helpful for investors. Some of my favourite research sites are Amazon and Google.

Amazon best sellers

Amazon is the largest e-commerce company in America. Under the best sellers tab you can see the most popular items under each category. It shows what consumers are buying. The number of customer reviews and ratings are important to see how consumers react to new product releases well before any financial data is released. Two of the top five toys are Lego. Some of the most popular electronic products are the Amazon Fire and Kindle. No surprise there, but the most popular gift card on Amazon is Amazon. If you are ever caught on Amazon at work you can now say you are doing market research.



Google Trends

Google has a similar database in Google Trends, which is great for seeing how searches trend over time. If someone is googling a product they are likely to be interested in it and it may lead to increased sales. An example is Netflix, the top searched for item in Australia for 2015. Amazingly, it also topped Google searches for 'What Is?', edging out 'What is love?' and 'What is the meaning of life?' Globally, Australia was the 18th most popular region for Netflix searches. For those interested, Pokemon Go searches peaked in mid-July, though searches are now down 85%.

The internet is allowing information to flow more freely, giving us access to information that previously did not exist. Thankfully we don't need satellites, just an internet connection.

Jason Sedawie is a Portfolio Manager at [Decisive Asset Management](), a global growth-focused fund. Disclosure: Decisive owns Amazon and Google. This article is for general purposes only and does not consider the specific needs of any individual.

Revolution in Australian money markets: a tribute to Ellis Bugg

Peter Sheahan

My relationship with Ellis goes back to 1986 when I moved to Sydney. He was a senior manager in financial markets in the Commonwealth Bank. A few years earlier, Bill Evans had recruited him from Perth. Managing the Bank's liquidity was Ellis's specialty. The gyration of interest rates moving between 12% and 22% was par for the course in the 1980s and early 1990s.

Ellis used the full resources of the broader market, positioning players to be either "with him or against him". He weathered 10 or more mini financial crises before the big one hit in 2008. His skill was juggling many moving parts. He knew an exceptional number of decision makers within the Federal Treasury, Reserve Bank, official dealers, competitor banks, brokers and clients. If you wanted context, wanted to know what others were thinking and how they would behave, you just needed to ask Ellis. He was a tactician at heart, understanding the plays six moves ahead.

In the 1980s deregulation of banking was rapid. New foreign banks were setting up, Federal and State central borrowing authorities, superannuation asset managers and swift fast moving technologies were emerging.

Ellis occupied a unique seat in this evolution. Literally, the front seat. Sharing insights, building on the knowledge base, challenging traditional thinking, playing the politics and keeping on top of the real issues were all important daily pursuits for Ellis. His conversation circles were about giving and receiving information. He instructed me to talk and listen in the required proportions when amongst important contacts.

Ellis had his supporters and detractors. In political battles, he won a fair few and lost a fair few as well. When he lost, he cathartically chose to talk through the issues, question and understand the opposing viewpoint, chat about the personalities and essentially move on the best way possible.

I have one story that encapsulates his professional qualities in particular.

The birth of Austraclear, a world renowned securities settlement system

Once upon a time, there were retired bank managers walking the streets of the nation's financial capitals, settling high value transactions in bonds, semis government securities and bank bills. Their satchels had signed ownership transfer forms, negotiable securities and bank cheques for hundreds of millions of dollars.

Risks abounded in this process. It needed to be comprehensively reengineered using modern electronic technologies. Ellis wanted the physical objects to dematerialise or disappear like a "Star Trek Transporter".

The four major banks and other key stakeholders came together in a cooperative venture to build this better mousetrap. The goals were achievable, there was evidence of similar undertakings around the world, but the devil is always in the detail. The banks appointed an independent CEO to build a team and deliver the technology platform. Ellis was involved early in the project, in addition to his main day-to-day role. The goal was critical as it would allow CBA and the whole market to scale daily activity hundreds of times.

The design and development of Austraclear had very rocky beginnings. The project used all its available funding on two occasions. With the cookie jar empty, the CEO began to hijack the agenda and hold a gun to the heads of the Board, comprised of persons like Ellis from each of the stakeholder banks.

Austraclear was failing on many fronts and the common objectives were being lost in tense negotiations. A massive crisis was unfolding. Ellis single handedly devised a plan, which was nothing short of a political coup. He shared his plan only with Bob Challis at ANZ, Ray Terkelsen at NAB and his Westpac counterpart. A new CEO, Keith Usher, was chosen and another round of funding was injected to overthrow the current CEO.

Ellis was holding the defibrillator paddles to a dying corporate corpse. He was cool in a crisis. Others looked to him for leadership and a way forward. The immediate objectives were to re-contract the staff, secure the software code and own the design plans and the end-to-end process specifications. If you are thinking Mission Impossible, you are on the right track.

Late one Friday night, Austraclear's key operations manager was approached at his home by Keith Usher, someone he had never met, representing the big four banks. The plan to take control was shared quickly and comprehensively. This key person's salary was trebled and he was given an immediate mandate to speak to all the other staff and offer them jobs on the payroll of the big four banks. They were made to understand Austraclear was failing and would not survive in its current state.

By Monday morning all staff were galvanised into action. The new management was in control and Ellis was steering the ship. It was now or never! All issues that were impeding progress were identified. Renewed commitments with a tight timeline were agreed. Banks had to integrate their systems to the new platform. They were required to upload all their securities, abandon the use of secure vaults and put high dollar values into operating accounts. Commenced as a concept vision in 1981 and delivered into production in 1990 is a hell of a gestation period. Austraclear was about to be born.

Ellis's good friend of 35 years, Tess Kyprios, settled the first Austraclear trade on behalf of the CBA. Today Austraclear is one of the world's most prestigious securities settlement systems. A great debt of gratitude should be awarded to Ellis. In my mind he should be inducted into a Banking Hall of Fame. Ellis eventually became Deputy Chairman of Austraclear.

Ellis taught me that a crisis is merely an instant in time when you have to make decisions. Think through the options, talk to stakeholders, organize and motivate all involved and move forward.

Ellis was a unique and special person. In business Ellis was a highly respected, passionate and knowledgeable leader who was confident and decisive. He was curious and questioning with a strong work ethic and a great sense of team and community. Ellis' opinion, insights and advanced thinking were constantly sought out by many associates in the financial markets arena, a business that he loved.

RIP dear friend Ellis Bugg, we will miss you every day.

Ellis Bugg, 28 July 1949 to 25 August 2016

Peter Sheahan is now Director, Interest Rate Markets at Curve Securities Australia. This is an extract from the eulogy Peter gave at a Memorial Service for Ellis in Sydney on 15 September 2016.