Cuffelinks
Connecting investors with ideas

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This Week's Top Articles

Your money or your life: what's more certain?

Jeremy Cooper

Death and taxes are the proverbial certainties in life. Life, however, is full of uncertainties, like just how long a recently retired 65-year old will actually live and what the share market is going to do for the first ten years of their retirement.

Using a concept first explored by Moshe Milevsky, it is possible to compare the relative uncertainty around retiree lifespans and equity market returns using Australian data.

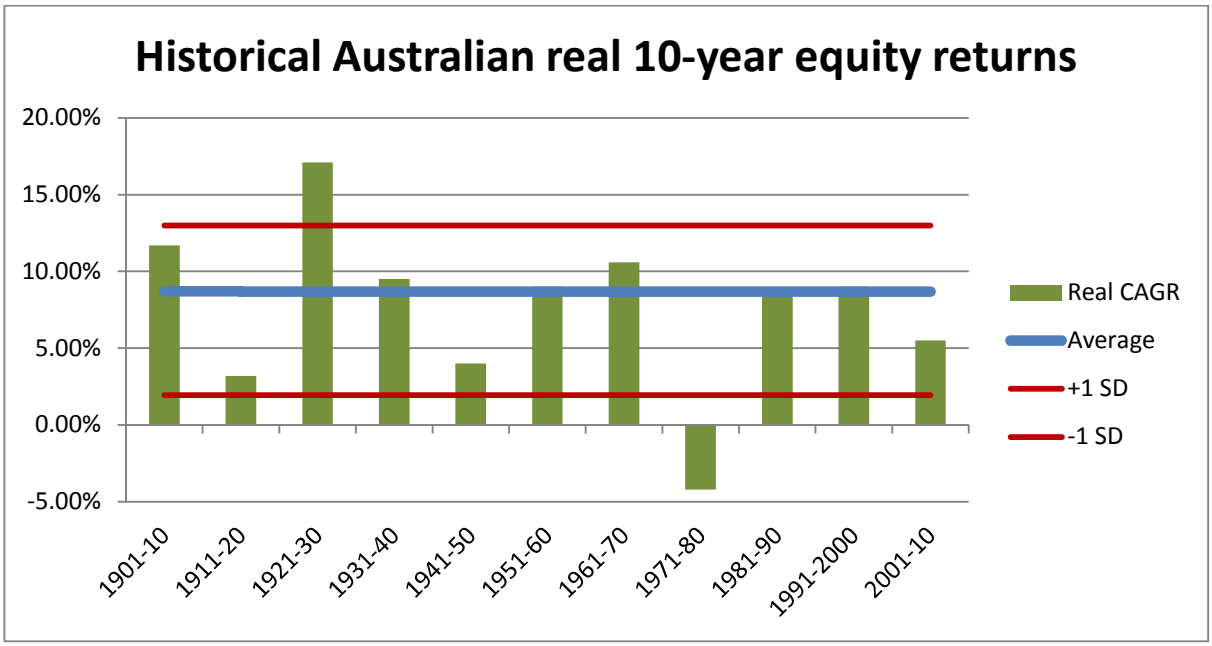
Market uncertainty

Investors are, of course, aware that equity markets are volatile. If a capital sum is invested for a period of time, the amount of capital available at the end of the period will be uncertain. The question is: how uncertain?

This question depends on the investment timeframe. As a rule of thumb, equity markets are volatile in the short term, but over the long run there is some reversion to the mean that partially reduces this volatility. For a retiree, the impact of returns in the first 5–10 years after retirement has a big impact on their capital base. So a 10-year period is an appropriate term to consider in a retirement context.

Data on equity markets from Credit Suisse, based on work by Dimson, Marsh and Staunton, provide the real returns on equities in Australia since 1900, split into 10-year periods. The returns for each decade can be seen in figure 1. These returns include all dividends and are before tax.

Figure 1. Real returns on Australian equities in 10-year periods.



Source: Credit Suisse using data from Dimson, Marsh and Staunton

One way to consider volatility is to look at the variation (standard deviation) from the average outcome (mean). Using Australian equity market returns, the mean real growth can be measured by the 10-year effective compound annual growth rate (CAGR): 8.7%. The volatility in this example is the measure of plus and minus one standard deviation from the mean, which is 13% and 1.9%, respectively.

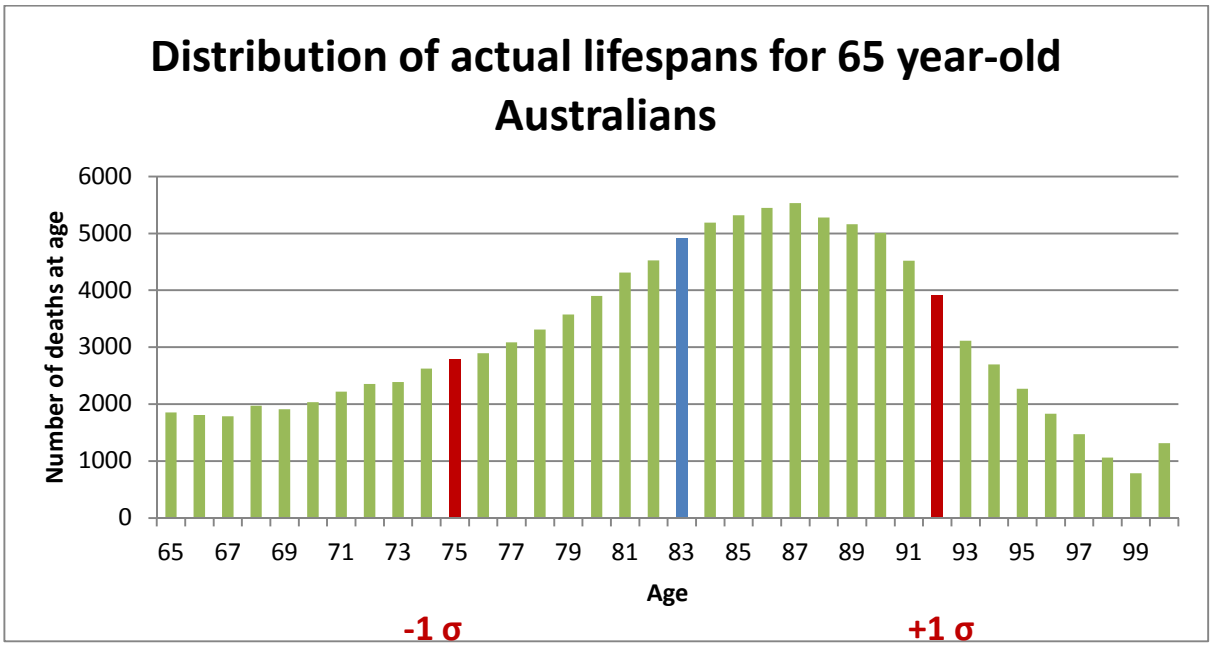
Another way to look at volatility is to use a co-efficient of variation (the ratio of the standard deviation to the mean). Using the same average 10-year Australian example, the co-efficient of variation is 47%.

Life expectancy vs actual lifespans

What about the variation of actual retiree lifespans from average life expectancies? How much certainty can a retiree have about the length of their own life from retirement onwards? The answer to this question might be a surprise for most retirees and their advisers.

In 2012, the most common age at death for someone who was 65 years-of-age or over was 87 (the mode). Despite this, taking the probability of survival from age 65, the mean 'expected' length of life for a 65-year-old was 18.1 years or to age 83. In reality though, very few people live exactly that long. Some live longer and some not as long. The range of actual lifespans around this mean point is represented by a standard deviation of 8.4 years either side of 83, figure 2.

Figure 2. Number of deaths (males and females) by age at death, Australia 2012.



Source: ABS

For a 65-year-old, it is also possible to measure the volatility as a ratio between the variation of actual lifespans to the average life expectancy. Remarkably, the co-efficient of variation, the range of actual lifespans proportional to the mean, is also 47%. So it turns out that a 65-year-old has to cope with a lot of uncertainty around how long they are actually going to live.

Relative uncertainty

Both equity market returns over 10 years and actual lifespans (versus average life expectancies) for 65-year olds have the same relative level of uncertainty: 47%. While this result is generated through some selective data use, it does highlight that both the equity markets and actual lifespans at retirement are similarly uncertain.

Summary

Longevity risk is not just the risk of living longer and outliving retirement savings. Uncertainty around a retiree's actual lifespan is another, more complex, aspect of longevity risk. Financial models and retirement plans generally revolve around average or expected life expectancies, done so for the sake of convenience. This is a serious industry shortcoming.

Two known retirement uncertainties – a retiree's actual lifespan and the money earned on equity investments (pre-tax investment returns) – have a surprisingly similar dimension. Both forms of uncertainty need to be managed in retirement at the same time. The first step in doing this is to move away from planning for averages. Retirees know that they won't achieve average share market returns and will build a portfolio to adjust for this.

What far fewer retirees will have realised is that they will almost certainly not live to their average life expectancy either.

Jeremy Cooper is Chairman, Retirement Income at Challenger Limited.

Ian Macfarlane on emerging markets, banks and property prices

Edited by Graham Hand

Ian Macfarlane, AC, was Governor of Reserve Bank of Australia from 1996 to 2006. He is a Director of ANZ Bank, Woolworths and the Lowy Institute for International Policy. He is a member of the International Advisory Board of Goldman Sachs and the International Advisory Board of the China Banking Regulatory Commission.

This is Part 2 of an edited transcript of a Q&A session at the Morningstar Investment Conference on 15 May 2014.

Q. On the emerging markets other than China, what do you see as the investment paths and which countries do you favour?

This is more a story about last year than this year. When people started realising that at some stage, the US would return monetary policy to normal, there was an outflow of capital from emerging market economies, their exchange rates and share markets went down. There was a lot of alarmist talk. For some people, their only frame of reference was the Asian crisis of 1997-1998. It was wildly alarmist, it was never going to occur anything like that. I think by early this year, the smart money was moving back into Turkey, South Africa, Brazil, India and Indonesia. Many of their currencies have gone up this year. Let's put it in perspective – the developing world is still growing a lot faster than the OECD, twice as fast, so I'm reasonably optimistic.

A broader point is that since the financial crisis, we have tended to exaggerate every story or problem to think they are worse than they are. I think it's because the financial crisis itself, concentrated in the final quarter of 2008, was worse than anyone expected. That mindset has continued when every pothole comes along. Small problems are really exaggerated. The financial press and others tell a far more compelling story about a crisis than the 'muddle through' story. People who have held a steady course have done a lot better than people who are too influenced by the scare stories. I do a lot of talking to people and my story is more a 'muddle through' story and I think people are disappointed. They think I should be some stern moralist telling them all the problems they face and the errors of their ways.

Q. Can we focus on Australia and the banking system? Does the concept of 'too big to fail' apply in Australia and to the government guarantee on banks?

IM: … on deposits, not banks. Australia is in a unique position. No depositor in Australia has ever lost a cent. And no regulator has ever had to spend a cent to bail out an Australian bank in all the time since Federation. So on the basis of our track record in Australia, you would not change anything. But of course we are signed up for the Basle rules, tightened because of the disastrous performance of the North Atlantic banks, so we all need higher capital and liquidity ratios.

What about 'too big to fail'? The first point is in Australia, it's a relatively recent concept, and secondly, it's not a policy, no regulator has such a policy. It is a public perception. The public is probably right, but it is just a perception. You cannot credibly say that in the next financial crisis, we'll let the big banks fail. Even if you say it, nobody would believe it. What do you do about it? In 2008, people took money out of small banks and building societies and put them with the big banks. They were awash with cash. Some people say they should pay a fee, but it's not a government policy. It's a perception. We've settled on a half-way house where the big banks have to have a higher capital ratio. Does it make sense? The ones who are safest now have a capital penalty, widening the gap even further between the safe and less safe. In so doing, you've reinforced the concept of 'too big to fail'. That's where we've ended up today.

Q. Australia had little stimulus during the GFC but we contracted only half a percent. Isn't fiscal policy as dead as monetary policy?

IM: I disagree, we did have fiscal expansion. And it was quick, the first part was very successful. The money came out in the fourth quarter of 2008 and early 2009. Where fiscal policy has a bad name is instead of doing the simple things the government decided to make it sound much more responsible, we need to help education, we need to help the environment. So we ended up with all these school

classrooms being built, whether they were needed or not, and I believe they are still being built. And we also did the pink batts thing. But there was fiscal expansion in Australia.

If you look at patterns around the world, there was a good recovery in late 2009 and into 2010, but then Greece came along and the whole debate shifted to 'we have too much debt', and so some countries who'd had a period of fiscal expansion went to fiscal contraction. For many countries with debt to GDP around 100%, after a brief flirtation with expansion they went back the other way, leaving too much weight on monetary policy.

Q. Why are you not concerned by the expansion of the Fed's money supply?

IM: I would be concerned if I thought it would lead to inflation. I also believe it will not be that hard to reign it back. The first step is to stop buying these bonds, which is what tapering is. They have reduced the buying. The next step normally would be to start selling what you've already bought, push it back out there. Reduce the cash in the system, and eventually the cash in the system is back to where you want it. Then you squeeze a little bit and interest rates go up. That's the normal. The risk in the US is that they have bought so much, their balance sheet is so big, it will take so long to push the bonds back out. The Fed has announced they will raise interest rates long before they've got rid of the extra cash. How do they do it? They pay interest on the cash that the banks hold with the Fed. It should not be difficult for the Fed to restore rates to where they want them to be.

Q. What are your views on a potential residential property bubble in Australia?

IM: I think we faced a risk in 2003, not 2014. In 2003, we had lending for housing and prices rising at 20%, half of it speculative lending, negatively geared. There were seven prime time television programmes on how to get rich in property. Since then, on average, house prices have risen at the same rate as household income. For that reason, I don't think we have a bubble. We do have an affordability problem, it makes it tough for young people to acquire a house in a desirable area. This is characteristic of every major city in the world that has desirable job opportunities. London, Paris, Berlin, New York, Hong Kong, Singapore. Some of our policies make that worse, such as the extreme leniency we show towards negative gearing, but I don't think it's a bubble.

Footnote: There has been one case in the last 100 years where bank depositors lost a negligible amount of their deposits – Primary Producers Bank, 1931. If you are interested in reading more about the history and robustness of Australia's banking system, see the Australian Bankers' Association fact sheet.

'Outcome engines' should be the heart of your business

David Bell

Cuffelinks has been home to some articles (and lively discussion forums) on the need to develop tools which can accurately forecast and communicate the range of retirement financial outcomes that people may experience. I label such tools 'outcome engines'. Without doubt the information produced would be valuable for people saving for retirement. In fact, it could be the most important financial information they could be provided with. Furthermore, the engines would deliver exciting opportunities for financial service providers to better assist their members and clients, from which they can build longer term value-adding relationships. So why has the industry been so slow to react?

An 'outcome engine' is simply a computer programme which, as its core function, can project expected retirement financial outcomes for an individual or a couple. The information is richer if it further explains the range of possible outcomes. It sounds simple but the calculations quickly become complex. For instance, it might take as little as one hour to build a simple model that compounds expected contributions through time and then determines the optimal drawdown rate assuming death at a certain age. But the world is far more complex and it could take years to develop a fully detailed model which considers factors such as wage outcomes, taxes, age pension, asset returns, inflation, savings rates, house prices, mortality rates… the list goes on.

In the Australian financial services industry there are only a small number of outcome engines developed by well-respected firms, and the projections from each model do not always match. This is because there is subjectivity involved in the assumptions that populate such models.

With a quality outcome engine, a financial service provider could better go about its business. Consider the following examples:

- Provide fund members and financial planning clients with projections of the range of possible outcomes they may experience in retirement (for a good article on this see *"Super funds fail clients by not reporting retirement income"* by Bev Durston, Cuffelinks 2 May, 2014)
- The outcome engine could form the basis of an interactive tool which enables someone to understand how their savings and investment decisions impact upon their retirement outcomes
- It could be at the heart of default option design for superannuation funds. For instance, is a balanced or a lifecycle strategy the best approach from a return / risk trade-off? This could be extended to more advanced fund designs such as a cohort-based strategy (grouping fund members by different characteristics). Who knows where the future may take us? A powerful outcome engine combined with personal information from members through successful engagement strategies may lead to personal superannuation strategies (I call this mass personalisation)
- An engine could similarly form the basis for generic financial plan design, or depending on its flexibility, could be used to develop tailored financial plans
- It could assist in the design of new products such as post-retirement account based funds, life policies, hybrid products such as variable annuities, as well as mortgage equity release products and aged care solutions.

When one considers all these possible uses, it seems such an obvious leadership opportunity for major super funds and wealth managers. For major wealth managers the opportunity is most compelling – they pretty much undertake every activity listed above, and they desire to communicate with their clients better.

And yet, beyond consultants and specialist financial software firms, there are hardly any groups in Australia who have their own outcome engine at the heart of their business. Even the bigger wealth management groups tend to fall back on consultants to produce case by case project information. Why would this be so? It is hard to understand but I suggest a few reasons: the development spend would be large and shared by many cost centres (which can create headaches for large firms in terms of ownership); the internal design skills may be low, having been whittled down through years of internal cost cutting; finally outsourcing provides a degree of assurance (but this may not guarantee accuracy which one major financial firm unfortunately discovered recently with their retirement calculator).

It requires a heavy investment in technology, including a decision whether to buy or build. But designed well so it can be used across all of a company's relevant business, it can be a transformational process – the language of the firm would shift to being retirement outcomes focused.

All this could well contribute to the renaissance of the actuary (and note I have refrained from making any more actuary jokes following received threats of a left skewed outcome!). The educational grounding of actuaries in Australia is highly suited to this task. An actuary is versed in the statistics and modelling of finance, mortality and risk. They have programming skills and a strong focus on communication. With defined benefit funds in decline we have seen the role of actuaries diminish in the superannuation industry; the next 10 years will see increased demand as their skills become highly valued and relevant.

The most important point is a question for all financial services firms: what resides at the heart of your business?

David Bell's independent advisory business is St Davids Rd Advisory. In July 2014, David will cease consulting and become the Chief Investment Officer at AUSCOAL Super. He is also working towards a PhD at University of NSW.

Impact of deficits and surpluses on stock market returns

Ashley Owen

In Part 1, we looked at the record of Labor versus Liberal governments in running surpluses or deficits. Both sides have run very few government surpluses during their respective years since Federation.

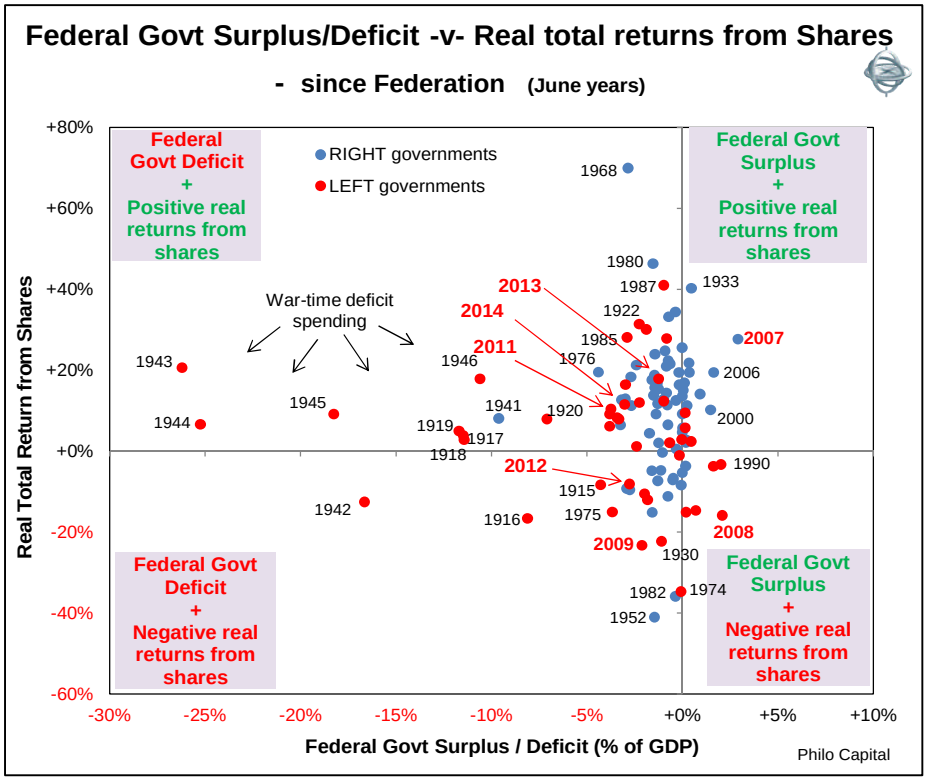
In Part 2, we looked at the record of Labor versus Liberal governments in running up (and occasionally paying off) government debt. We saw that the current level of Commonwealth government debt (relative to national income) is modest, and is lower than almost any other time since World War 1. It is also lower than almost all other countries today.

Part 3 looks at what government deficits mean for share markets.

As investors we are not concerned here with debates about whether deficits are inherently good or bad, nor about inter-generational equity between current and future taxpayers, etc. We are primarily interested in the returns from shares in different fiscal conditions.

Chart 1 shows the annual Federal government balance plotted against real total returns from shares (including re-invested dividends and after CPI inflation). These are for years ending in June so they line up with the government's fiscal years. Labor government years are shown in red and right-leaning government years (including Liberal) are shown in blue.

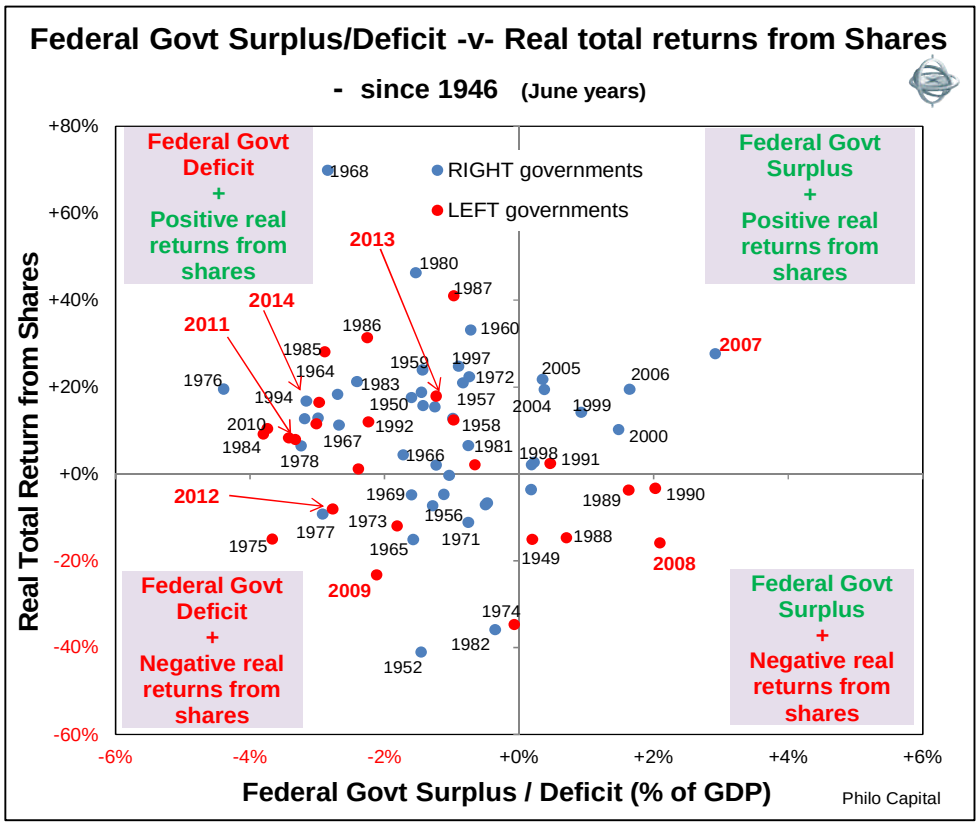
Chart 1: Federal government surplus/deficit versus real total returns from shares since Federation



Clearly the war-time years at the left of the chart dominate the overall picture, with very large deficits but also good stock market returns in most years (although returns during World War 2 were somewhat affected by war-time limits on share price movements). World War 2 was particularly good for business in Australia, despite the government's measures to control prices and limit profiteering.

Chart 2 shows the same story but for post-war years only.

Chart 2: Federal government surplus/deficit -v- real total returns from shares post 1946

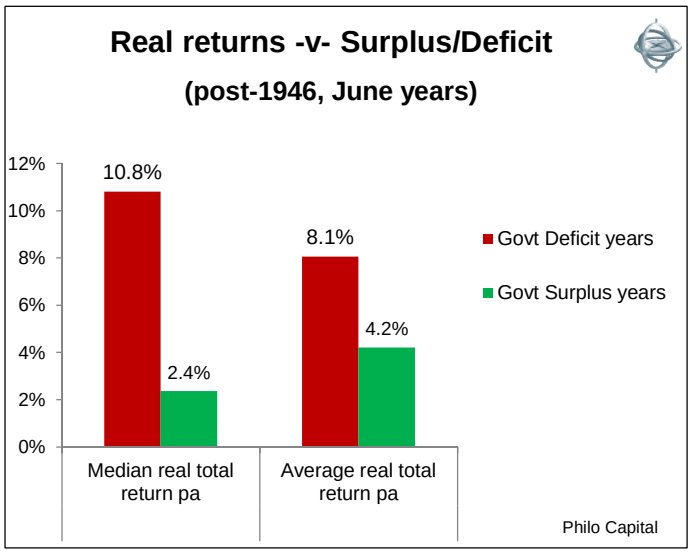


Deficits are good for stock markets

There has been a mildly *negative* correlation or inverse relationship between government balances and stock market returns. Most of the high return years from shares were government deficit years (top left section). This includes 2011 and 2013 and the likely result in 2014 (remember all years are June years in this paper).

Deficits are generally good for shareholders and surpluses are generally bad for shareholders. In the post-war era the median real total return from shares was 10.8% pa in the deficit years but only 2.4% pa in the surplus years, which is a very significant difference. This is shown in Chart 3.

Chart 3: Real returns from shares -v- Government surplus/deficit - post-1946



There are two main reasons for this. The first is that deficits come about by governments spending more money (and/or taxing less), and much of the additional cash ends up in company coffers, either directly via contracting to the government, or indirectly via household spending.

The second reason is one of timing. Deficits tend to be high in mid-late recessions (when tax revenues are down and welfare spending is up), and this is when shares generally do best, rebounding out of the middle of recessions. This was the case in 1954, 1972, 1983, 1992 and 2010 (and in the pre-war years: 1922, 1923 and 1932).

Tax revenues and welfare payments tend to lag economic activity, both on the way into recessions and in the recoveries on the way out. On the other hand, stock markets tend to lead economic activity. As a result of these leads and lags, stock markets tend to do well in government deficit years, and tend to do poorly in government surplus years.

There have been very few years when government surpluses accompanied negative returns from shares (bottom right section). The most obvious instance was 2008, when tax revenues from the boom were still rolling in but shares were already falling in the GFC.

Some conclusions

History provides useful lessons, and some conclusions are:

- Government deficit years have generally been good years for stock market returns. 2013-2014 will be a big deficit year and shares are heading for another good year to June 2014.
- Government surpluses have generally been bad for shareholders, with significantly lower returns from shares compared to returns in deficit years.
- The differences in returns between surplus and deficit years have been large and significant, regardless of which side of politics was in power at the time.

Ashley Owen is Joint CEO of Philo Capital Advisers and a director and adviser to the Third Link Growth Fund.

Superannuation is one part of a complex tax picture

Andrew Bloore

A clear message from the budget is the ongoing and important role superannuation plays in minimising the fiscal cost to the taxpayer of the age pension system. Care needs to be taken when removing super incentives as there may be unexpected consequences when the entire system is considered.

Let's have an informed debate

Whilst there is a lot of discussion about the age pension system moving to age 70, commentators overlook the fact that by the time this occurs, most people affected will have had compulsory super for about 40 years. Roughly half the people on age pension today had no compulsory super at all.

The superannuation system is offsetting the direct tax payer cost of the age pension. We cannot as a nation continue to tax higher income earners on the basis that they can afford it. When almost 60% of income tax (excluding GST, transfer taxes, etc) comes from high income earners, who make up 3% of income tax payers, we must ask where do we find more of those people. We need to watch incentives are appropriate when the effective top rate is 50.5% and you need to work till 2:30 pm Wednesday before you earn $1 for yourself.

I hear the calls for change in the super tax system and the access to super rules. It's worth remembering that unless you have ceased gainful employment, or met a condition of release, technically the age of access to super is 65 already.

Transition to retirement pensions (TTR) were introduced to allow people to access their own capital rather than going on a Newstart Allowance. At age 55 if you lose your job and can't find a new one, then before TTR's your only option was to go on Newstart if you did not have other resources outside super. You may have had $500,000 in super but the rules said you couldn't use it because you were looking for work. TTR's had a direct result of reducing Newstart applicants.

What about the tax free super rules for people over 60? The actual tax paid went up under the current model compared with the old rules. The taxable part of the pension was taxed at marginal rates less 15% and the untaxed element was a return of Non Concessional Contributions (the old 'Undeducted'). The net result based on average incomes including the pension less the offset was an effective tax rate of nil. In many cases, super funds were retaining PAYG, then the Australian Taxation Office was returning it to the members. Under the current rules, by retaining the money in the fund and allowing it to grow, there is more available for members who then spend more with less paperwork and cost. Furthermore, the tax free lump sum rules have not changed and are still significantly higher than the vast majority of superannuation balances.

Some super changes make sense

There are logical changes to superannuation as we move to a more mature system. For example, there is inequity in contribution tax and income tax rules. Some people pay more contribution tax than income tax and others receive a significant reduction in income tax whilst only paying 15% or at worst 30% contributions tax. We need to question if contribution tax should be scrapped and all contributions go into the fund from net pay.

The question is what incentive, if any, should be provided for people to do more and stay off the age pension system? By 2024 there will be only 3.5 people employed for every person on the age pension. The tax burden can't be borne by those people alone.

It is time for us to get serious about the tax debate and work out what the country can afford to do and what individuals need. Superannuation, whilst being a cash cow and an 'easy target', is a big saviour for future pension expenditures that is understood by Treasury and the government alike. Despite the political difficulties, change will happen and superannuation must be considered as part of the overall position, not in isolation.

The best outcome for our superannuation system and individuals is being allowed and encouraged to take responsibility for our own futures, with the education and skills necessary to do so. Our compulsory system gives every working person that opportunity regardless of the type of fund they are in.

Andrew Bloore is Chief Executive of SuperIQ.