Cuffelinks
Connecting investors with ideas

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A better approach to post-retirement planning

Andrew Gale

The post-retirement sector is large and growing rapidly, and financial advice processes need to be more sophisticated to deal with potential problems such as sequencing risk and longevity risk. What I call 'Post-Retirement Optimised Portfolios (PROPs), based on stochastic modelling, should be part of the solution.

In the March 8, 2013 issue of Cuffelinks, I wrote, "Growth in the post-retirement population over the next 20 years is mind-boggling, with different five year age groups (e.g. 65-70, 70-75, etc.) growing between 60% and 100% between 2010 and 2030. There will be major growth in the age 65-70 segment over the next five years as the first wave of 'boomers' reaches retirement. We need much greater sophistication in post-retirement advice and investment solutions, including the use of investment scenarios or stochastic modelling in building optimised portfolios. This poses particular challenges for product and advice providers."

Based on the latest Deloitte Superannuation Report, Australia's post-retirement sector is forecast to grow from $333 billion as at 30 June 2013 to $1.4 trillion in 2033. Over $800 billion of the 2033 assets is forecast to be in SMSFs as the baby boom bulge transition into post-retirement.

Changing the post-retirement emphasis

Let's start by recognising the post-retirement issues we want to address:

- sequencing and longevity risks are acknowledged, but without solutions
- debate is too product-orientated
- deterministic rather than stochastic planning.

There is much debate about conservative versus growth-oriented asset allocations for retirees in the post-retirement phase. This often rests on assumptions regarding the equity risk premium, and the arguments put forward tend to be too simplistic.

There is now much greater discussion regarding sequencing risk and longevity risk, which is encouraging. However, we still lack sufficient advice solutions and portfolio construction tools to deal with these risks.

Too often the debate about post-retirement solutions revolves around product – for example, the relative merits and demerits of annuities and deferred annuities – rather than a focus on advice solutions and portfolio construction, with products only being considered following that process.

Retirees with less than say $250,000 in financial assets (including super) at retirement will have a significant reliance on the age pension. This largely addresses sequencing and longevity risks for this group. Some retirees will also rely on scoped advice or simple retirement calculators, with all their shortcomings.

People with over $3 million in financial assets, including super, at retirement should also be relatively well-placed to weather sequencing and longevity risks, providing of course they do not practice an overly lavish lifestyle.

This article is primarily directed at those with financial assets at retirement in the $250,00 to $3 million range, and those receiving comprehensive financial advice. A common approach to post-retirement financial advice for these people is risk profiling, cash flow modelling, high level asset allocation, portfolio construction, and product selection.

My concern is that existing processes for cash flow modelling tend to be based on deterministic approaches. That is, determining a fixed expectation of investment returns corresponding to the asset allocation, and conducting future cash flow modelling based on this expected return.

Volatility of returns and the impact of the order of returns (sequencing risk) tend not to be well incorporated. Longevity risk tends to be dealt with in a rudimentary way by assuming living to average life expectancy, sometimes complemented by basic scenario analysis where we assess 'how long the money will last' at various ages of death.

The problem is that deterministic models only consider an expected outcome and do not consider the range of possible outcomes that retirees may experience. This is valuable information for the planner to consider, to communicate with their client and to be used as a basis for plan design.

On average, deterministic predictions will have approximately a 50% success rate, meaning that there is a 50% likelihood that a retiree would have experienced their expected planned retirement outcome, with some left over as an estate, and a 50% likelihood that the retiree would exhaust their retirement accumulation and have to accept a lower level of consumption in retirement. Is a '50% right' plan good enough? Even with cash or contingency reserves of up to twice the targeted annual income draw to deal with sequencing risks, the percentage likelihood of a deterministic based plan being 'right' will only be marginally improved.

A proposed approach

We need a stochastic approach rather than a deterministic approach.

A stochastic approach simply considers variability in outcomes by allowing for variation in the inputs which go into the forecasting model. This can be done using mathematical techniques where one derives a distribution of outcomes. The other, more common approach, uses simulation

techniques, producing many simulations which are aggregated into a picture of the range of outcomes.

A stochastic approach uses many different sources of variability which affect outcomes. Examples include returns, risks and correlations between asset classes, and factors which affect mortality outcomes (systemic piece (longevity risk) and the idiosyncratic piece (that individuals may experience a different outcome to the population expectation). The amount of detail can be significant when one incorporates products (allocated pensions, life annuities, variable annuities, reverse mortgages), direct investments in the various key asset categories, and the age pension (with means testing and indexation) and various taxes.

The broad approach to the construction of a Post-Retirement Optimised Portfolio (PROP) would be as follows:

1. Retiree client to force rank their retirement objectives (see below).

2. Input key information into the modelling engine, including current assets and allocation, targeted income and capital cash flow requirements, risk profile, age, force rankings, etc.

3. Perform stochastic runs to produce the many simulations (typically thousands), using random number generators to model many different outcomes, and difference sequences of returns.

4. Review the results of the stochastic model, including the likelihood of meeting the various force ranked post retirement objectives.

5. Adjust inputs to better match achievement of the highest ranked post retirement objectives.

Post-retirement objectives

The three key post-retirement objectives are:

- a capital or estate goal - i.e. to have a certain amount of capital preserved at various future ages, either to cover aged care costs, health costs, or targeted estates for beneficiaries

- income goals

- goals regarding tolerance for variability in income.

Clients will need to rank what is most important to them.

A key output from the simulations is the construction of an optimised portfolio with asset allocations (including direct investments) which seek to fulfil the ranked objectives. A simpler version is the consideration of say 4-10 alternative portfolio constructions, and using the simulations to assess which constitutes a 'best fit' with the ranked objectives.

The outputs from the stochastic modelling will show the full range and extremities of future financial asset holdings and income levels, allowing for different sequences of returns and the risk of outliving the assets.

An optimised portfolio would show the probability of fulfilling the various objectives. For example, it may show that a retiree has an 85% chance of achieving the capital or estate goal at the age of 87 based on an income of $55,000 per annum, indexed to inflation from retirement.

If this client has chosen the capital goal as their most important objective, they may find this outcome unacceptable. They can then recalibrate the inputs to produce a result which more closely fits their force ranked objectives. For example, this may require some increase in their appetite for variability of income. Or a small reduction in targeted income requirements, from $55,000 to $50,000, can significantly increase the likelihood of achieving the capital goal.

This approach enables well informed trade-off decisions. Typically this would be presented in a visual format to increase client understanding.

It is not unusual for such optimised portfolios to have a 'bedrock' source of income, which may generate 20-40% of post-retirement income. This could include social security, annuities or an equity release product. Such sources of income also have a low degree of correlation with returns from other financial investments. This PROP approach would also be able to demonstrate where deferred annuities may be appropriate.

Current developments and an appeal for action

Some entities are developing this capability, including Deloitte US, Mercer and Count Financial, and investment research house Lonsec and global actuarial firm Milliman. This paper is a high-level overview and I would love to hear from you if you have been pursuing similar endeavours. It can be refined for factors such as the different phases of post-retirement (active, passive and impaired) and funding future health and aged care costs.

The wealth industry needs to deliver superior post-retirement solutions, including:

- more research on this topic, such as the work by the Actuaries Institute's Retirement Incomes Research Group
- greater innovation and commercial initiative, as mentioned above
- large wealth management institutions and advice firms embracing these more sophisticated post-retirement approaches
- advisers encouraging their licensee to pursue this more sophisticated approach.

Hopefully, as these approaches are adopted, it will be possible to integrate such modelling with mainstream financial planning software platforms.

Andrew Gale is co-owner and Executive Director at Chase Corporate Advisory and a board director for the SMSF Professionals Association of Australia (SPAA). The views expressed in this article are personal views and are not made on behalf of either Chase Corporate Advisory or SPAA.

Beware the headache when the QE party ends

Roger Montgomery

Studying financial markets over time can reveal interesting insights into the way investors think and behave. Renowned academics, Elroy Dimson, Paul Marsh and Mike Staunton from the London Business School, in their article, 'The Real Value Of Money', produced a longitudinal study, examining how equities and bonds have performed under different inflation regimes over 112 years and in 19 different countries. It's fascinating. In 2012 (and arguably today), investors were willing to buy sovereign bonds that were expected to produce negative real yields, regarding them as 'safe'.

Inflationary expectations play a major role in long bond yields, and the above study argues that prevailing wage growth is the key determinant in these expectations. I believe the globalisation of manufacturing, technological advances leading to productivity gains, and reduced unionisation in workforce percentage terms have led to weakened bargaining power of labour in western economies.

In my previous Cuffelinks article, '[Premature talk of bubble trouble]', I described the germinating seeds of a bubble forming in both equities and property. I also referred to some individuals in the US, such as those gunning for Federal Reserve Bank senior posts who believe fears of bubbles are misplaced in a climate of high unemployment.

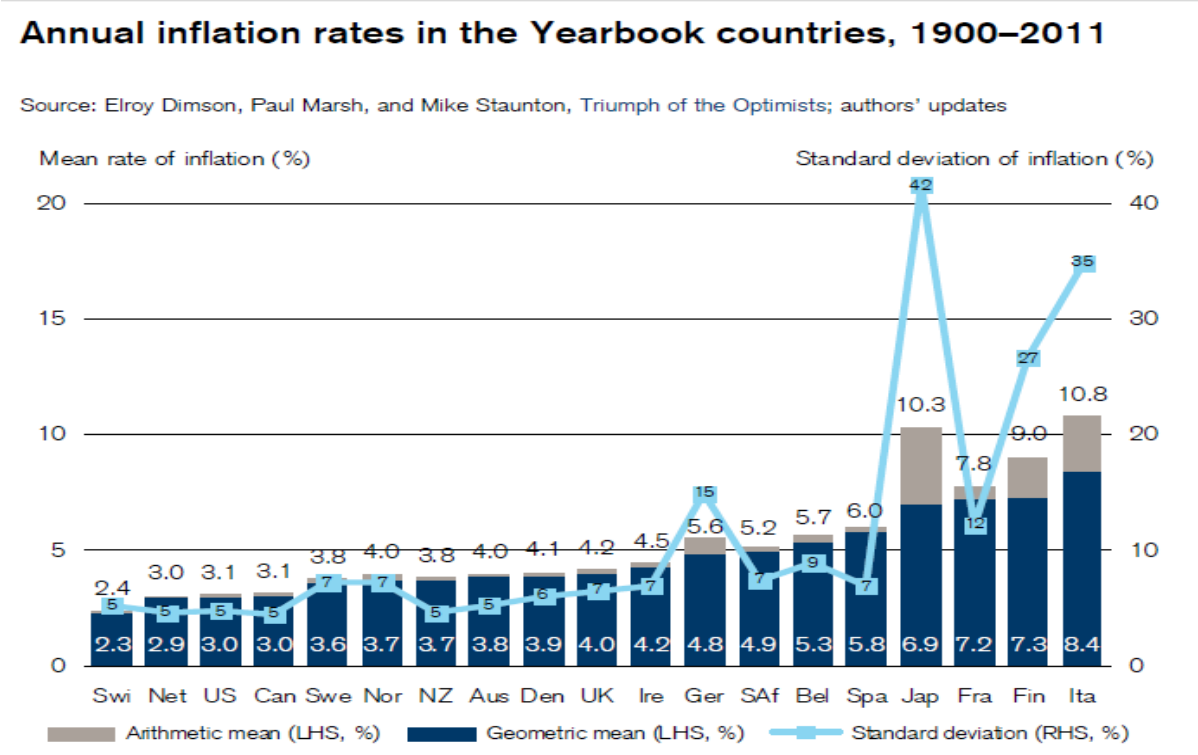
Headline inflation has been falling, but the sell-off in many countries' bonds since mid-2012 indicates that inflationary expectations are now rising. That is, the market is arriving at the conclusion that if there is too much quantitative easing (QE) in the near term, and inflation could trend upwards in the medium term. Central banks may end up 'behind the curve', and they will be tightening monetary policy too late.

Ten year bond yields in a number of western economies have increased by an average 1.1% since mid-2012, as illustrated in the table below:

Recent increases in global bond rates

Country	Historic Low	When	Yield at 12/11/13	Change
US 10 Year Bonds	1.39%	July 2012	2.77%	+1.38%
Australian 10 Year Bonds	2.69%	July 2012	4.23%	+1.54%
UK 10 Year Gilts	1.43%	August 2012	2.64%	+1.21%
German 10 Year Bunds	1.16%	July 2012	1.79%	+0.63%
French 10 Year Bonds	1.83%	December 2012	2.56%	+0.73%
Japanese 10 Year Bonds	0.61%	March 2013	0.60%	-0.01%
AVERAGE				**+1.10%**

These historical low bond yields should be looked at in the context of long term rates of inflation. The following chart shows both the arithmetic mean and the geometric mean rate of inflation from 1900 to 2011. In the US, Australia and the UK, these figures have averaged 3.0%, 3.9% and 4.1% respectively (averaging the two means).



Buying a 10 year bond on a yield at somewhere near half the long-term average rate of inflation is dangerous and yet such a strategy appears to have never been more popular.

Typically, buyers demand a premium of at least 2% above inflationary expectations. Even adjusting for the weak buying power of labour in these economies and associated lower wage growth, it seems reasonable to expect in normal circumstances for US 10 year bonds to trend up to 4.5% and for 10 year bonds in Australia and the UK to trend above 5.0%.

This not only has implications for bond buyers. All assets are ultimately valued on the basis of a discount rate that is in turn influenced by interest rates. The boom in bank share and property prices can be attributed to a fad - the chase for relatively higher yields. The above analysis suggests the fad, like all passing fashions, will come to an end.

QE wisdom questioned

The former Federal Reserve official Andrew Huszar managed the first round of the Fed's QE programme, purchasing $US1.25 trillion of mortgage-backed securities in 2009 and 2010. Huszar, who is also a former Morgan Stanley Managing Director, has penned an opinion piece in *The Wall Street Journal* that questions the efficacy of the program that can be found here.

The executive summary to Huszar's column reads like a warning to complacent investors who believe that they can do nothing but be forced into chasing stocks and property for their relatively attractive income returns. Huszar concludes that:

- the first round of QE provided only trivial relief for Main Street, but considerable relief for Wall Street. The banks have enjoyed lower wholesale credit costs, rising values on their security holdings, and large commissions from brokering most of the Fed's QE transactions

- the first round of easing didn't make credit any more accessible for the average American, as banks were issuing fewer and fewer loans

- the massive $US4 trillion of purchases may have only generated a return of as little as a quarter of a percentage point in US GDP growth

- pumping money into financial markets has merely killed the need for urgency on Washington's part in confronting the structurally unsound nature of the US economy

- it is expected that the programme will continue next year (see my article last week), as Ben Bernanke's likely successor, Fed Vice Chairwoman, Janet Yellen, is supportive of QE

- QE has become Wall Street's 'too big to fail' policy.

Andrew Huszar became disillusioned with the (lack of) independence of the Federal Reserve and returned to the private sector after the first round of QE was completed. The apology for his role in the programme serves as a timely warning that the US economy is likely to wake up with a headache when the party inevitably ends.

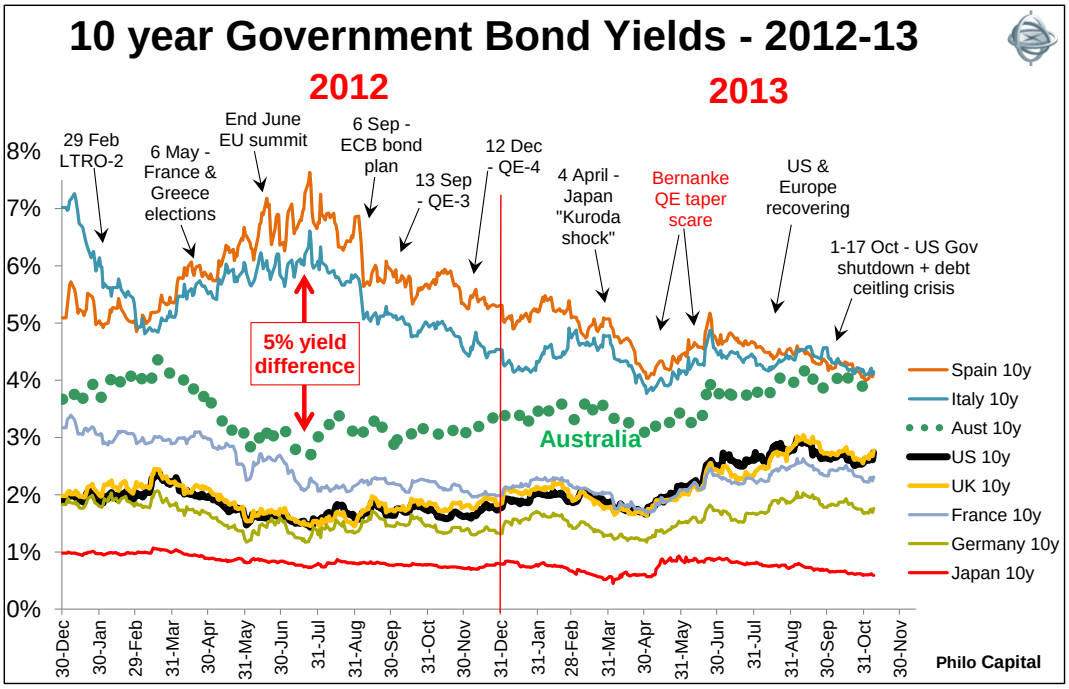
Roger Montgomery is the Chief Investment Officer at The Montgomery Fund, and author of the bestseller, 'Value.able'.

Australia joins the PIIGS

Ashley Owen

Yields on Australian 10 year government bonds are now higher than yields on 10 year government bonds of Italy and Spain, the largest of the European 'PIIGS' (Portugal, Italy, Ireland, Greece, Spain), with their crippling debts, lower credit ratings and real possibility of Greek-style default/restructure. How can this be?

The chart shows yields on 10 year government bonds for Australia and the major markets since the start of 2012. The 5% yield spread between Australia and Spain in the middle of 2012 has now been reduced to nil.



Yields required by bond investors reflect a number of things, including:

- credit risk (expected loss through default or restructure of principal and/or interest)
- inflation risk (expected loss of real value through inflation during the term of the bond) or
- expectations of future interest rates (which largely reflect expectations of future inflation and future monetary policy shifts that may be made to counter inflation).

Yields are also being depressed by the flood of cheap central bank money sloshing around the world, but that is a common factor affecting all assets globally, including Australian bonds.

Aside from credit risk, bond yields should rise as economic growth and inflation rates rise, and yields should fall as economic growth and inflation rates fall. But Australian yields have been rising over the past year while the local economy slows, and PIIGS yields have been falling while Europe slowly recovers.

PIIGS yields are declining mainly because the perceived risk of default has declined due to progress on bank bailout and support mechanisms since the 2012 Greek crisis. In the absence of inflationary pressures, yields have little or no inflation premium built into them.

Australia is highly unlikely to default on its bonds any time soon (although it has in the past), but yields on Australian government bonds are still relatively high in order to compensate investors for potential losses:

- for local Australian bondholders, it is the loss of real value through domestic inflation
- for foreign holders of Australian bonds, it is compensation for future currency losses through likely declines in the Australian dollar over time due to our higher relative inflation.

Inflation may not be as dramatic or sudden as a headline-grabbing default, but it is just as damaging to real returns for investors.

Ashley Owen is Joint Chief Executive Officer of Philo Capital Advisers and a director and adviser to Third Link Growth Fund.

Companies that fear innovation risk stagnating

Melinda Howes

Some years ago, the *Harvard Business Review* ran a must-read article called, "Countering the Biggest Risk of All". It talks about seven major classes of strategic risk, that is, industry, technology, brand, competitor, customer, project and stagnation. The concept of stagnation risk is not often discussed.

The article defines market stagnation as 'the inability to find new sources of growth'. It says that the best countermeasure for dealing with this class of risk is 'demand innovation', which involves 'redefining your market by looking at it through the lens of the customers' economics and expanding the value you offer your customers …"

In my experience, I've seen two types of stagnation risk.

Stagnation risk I: fear of radical change

Take the scenario of a strategic discussion where a course of action that involves radical change is being considered. The actuaries and other risk professionals will thoroughly analyse the risks of proceeding with a course of action. However the risks of not proceeding are not often given as much emphasis. That is: what happens if we don't do this? What if we delay and don't do it now? And what do we lose by not acting?

As a result bold decisions may be deemed too risky, or pared back and dumbed down, without proper consideration of the costs of inaction. This is the stagnation associated with lack of innovation. It is particularly prevalent in large organisations with dominant market shares, which feel safe in their current operating mode. A perception can grow that 'everything is OK and we have a lot to lose by implementing a radical change'. However, when an organisation does not innovate, competitors step in and fill the gaps.

In product development, there is always the dilemma of whether and when to introduce a radically new product, especially if it is a lower cost, lower margin product that will cannibalise the organisation's existing (and profitable) book of business. Then once it is launched there is the moral dilemma of how the new product is marketed to the existing customers. Does the organisation proactively tell them that they would be better off switching to the new, lower cost product? Or leave them paying more and hope they don't notice?

If the organisation looks through the customer lens, there is an argument that it should definitely market the new product to the existing book, recognising that if it doesn't, then eventually a competitor will. However in superannuation, with a disengaged customer base, it's not always an easy call to cannibalise profits, as organisations know that a large part of the customer base in the old product may stay there for many years.

If customers are left consuming outdated products for years without being offered the more competitive alternatives, once they do find out (and they will, eventually), they are likely to become disgruntled and lost to a competitor. There is also the risk of reputational damage to the organisation from a large portion of existing customers becoming net detractors, possibly with a spill-over into consumer advocacy and negative publicity. This risk should be fully costed and be part of the decision-making process.

Stagnation risk II: taking your eye off the ball

Take the example of an organisation that is busy implementing responses to legislative changes, as pretty much every super fund in Australia has been for the last five or more years. Everyone has their heads down and bottoms up, and the whole organisation puts in long hours on tight deadline projects. Everyone takes the view that 'we're all exhausted but we really feel like we're achieving something'. This is a classic set-up with all the elements necessary for deep stagnation.

In such busy workplaces, the widely-held view is:

We are simply running to stand still. We're bogged down and spinning the wheels. All that action gives us the illusion of progress but we're stagnating. We can't remember the last time we innovated because all the leadership, strategists and product development teams are completely consumed in a reactive, fire-fighting mode facing new legislation and changes to our processes. We don't have the time and space to think.

It's difficult for busy people to innovate. Creativity requires being out of the madness of day to day activities. As someone who has been outside the super industry for the last few years looking in, the lack of innovation is clear, especially in the post-retirement space. That's easy for me to say, because I didn't have to implement the FOFA and Stronger Super changes!

How many organisations take their best people out of the busy yet distracted day-to-day workforce and give them space to be creative – for example, an innovation 'skunk works'? We're starting to see Chief Innovation Officers appointed now, so perhaps this is coming.

So can we change? Yes, we can. But to do so, we need to take the time and space to look for a vision of the future, where we can drive growth in our business by stimulating demand. We'll need to look at issues through our customers' eyes and expand the value proposition we offer them. This will involve radical change. We need to weigh the downside of not acting along with the risks and rewards of acting. And believe that if we build it, they will come (misquoted, with apologies, from 1989 movie *Field of Dreams*).

Melinda Howes is an actuary, a financial services executive and a non-executive director.

Happy 30th, $A float best policy change in post-war era

Don Stammer

Australians aged 50 or more would recall the surprise 30 years ago – late on the afternoon of 9 December 1983 – when our mollycoddled dollar was floated.

The float is, in my view, the most significant change affecting the Australian economy - and investor choice - of the past 70 years. And that claim stands tall, even though our exchange rate to the US dollar (94 US cents at time of writing) is close to where it finished (92 US cents) on the first day of the float three decades ago.

Prior to the float, four officials (from the Reserve Bank, Treasury Finance and Prime Minister's Department) set the daily value of our exchange rate in trade-weighted terms. Their all-too-predictable moves made a motza for speculators at the expense of taxpayers - and set up capital flows that largely stripped monetary policy of its effectiveness.

In the run up to December 1983, many people pointed to the need for the Australian dollar to more responsive to market forces. But no-one in the market or the media expected Treasurer Paul Keating to go all the way and allow a clean float of the exchange rate. He also announced the end of the tight web of exchange controls, including on Australians wanting to invest overseas, that were introduced as emergency measures in World War II.

The surprise added to the impact of the float. As Paul Kelly wrote in the early 1990s, "The float transformed the economics and politics of Australia. It harnessed the Australian economy to the international market place – its rigours and ruthlessness. It signaled the demise of the old Australia – regulated, protected, introspective."

In the first 20 years of the float, the Australian dollar largely moved up and down with commodity prices. These days, other influences are also at work, such as interest rate differentials, our sovereign ranking and the strength or weakness of the US dollar against the major currencies.

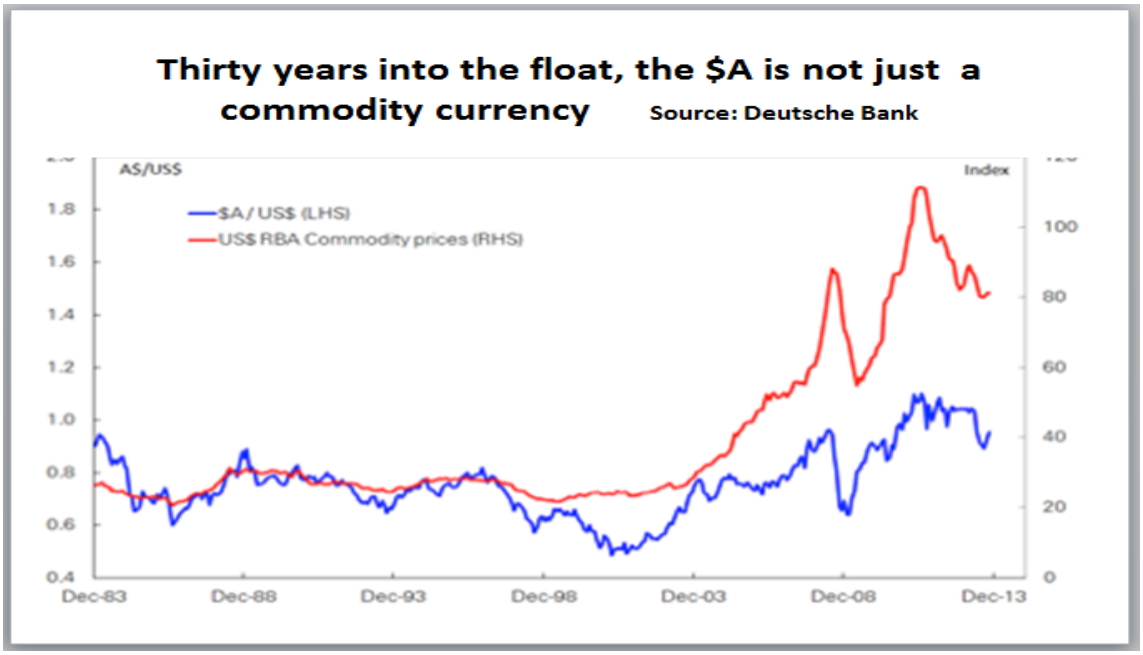
The floating dollar has significantly reduced the impact on Australia's economic pulse of swings in the global economy, just like good shock-absorbers on a car smooth a drive along a bumpy road. For example, the sharp fall in our exchange rate during the Asian crises of the late nineties and in the GFC softened the impacts on our economy of those massive disruptions in the economies of our trading partners. And the currency appreciations when world growth accelerated in 2004 and particularly during the recent resource booms helped avoid the over-heating of the economy.

The float has made Australian monetary policy more effective. No longer does the Reserve Bank have to purchase or sell Australian dollars to keep the Australian dollar at the target level (or range) – transactions that would generally lessen the impact of its monetary action. The long run of low inflation, including during the recent mining booms, and the enviable record of also going more than 20 years without serious recession would not have been possible without the float.

Of course, it's not always been easy sailing. When the Aussie dollar fell to 48 US cents in 2001 and again when it peaked a little above 110 US cents in 2012, the exchange rate moved further than the fundamental influences on the currency would seem to have required. Those extreme levels of the currency caused serious pain in some sectors of the economy. Even now, the Australian dollar is a good deal higher than a lot of people would like it to be – and is defying efforts by the Governor of the Reserve Bank to talk it down.

But what would have happened had we maintained a managed exchange rate? The answer, in part, is that events such as the strong commodity prices and mining boom of recent years would

have likely have resulted in a burst of inflation that would also have hurt Australian competitiveness – and created all sorts of problems for most Australians, especially investors.



Don Stammer is an adviser to the Third Link Growth Fund, Altius Asset Management, Centric Wealth and Philo Capital. The views are his alone.

Keating's margin notes on start of national super

Graham Hand

If you missed the second episode of Kerry O'Brien's interviews with Paul Keating, it is still on ABC TV's iview, here. Well worth watching this insight into political power.

There's a fascinating moment shortly after the start. The camera pans through the back room of Keating's office, and shows him at work on a computer, reading a scanned newspaper. Kerry O'Brien says:

"Particularly revealing are his often candid notes handwritten in the margins at the time. He has a meticulous archive of more than 10,000 newspaper articles going back to the 1970s, collected personally week by week."

The camera then focusses on a particular newspaper, *The Australian Financial Review* of Thursday 5 September 1985. It is stamped, 'PJ Keating personal collection'. The headline on the lead story says, 'Accord ... but costly', written by Gerard Noonan. The opening paragraph is:

"Not without some significant short term pain, the Australian Council of Trade Unions has scored a major coup in gaining - almost overnight - superannuation coverage for all wage and salary earners."

And in the top right corner of the page, written in Paul Keating's elegant handwriting, it says:

"The beginning of national super"

So there's as good a record as anyone could want, from the father of modern superannuation. The historic date is 4 September 1985, not seven years later when the national superannuation guarantee started.

(Paul Keating wrote three articles on superannuation for Cuffelinks, listed here).

http://cuffelinks.com.au/where-did-smsfs-come-from-and-where-are-they-going/

http://cuffelinks.com.au/dividend-imputation-and-superannuation-are-worth-fighting-for/

http://cuffelinks.com.au/living-longer-and-superannuation/