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Lookingglass event series

the shape of things to come

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Introduction

We spend an awful lot of our time in the present, sometimes looking back at the past, sometimes contemplating the future. The future we contemplate can extend from tomorrow, to next week, to the second half of the year, but rarely do people focus much beyond that. Why bother?

When contemplating investment returns, our horizons are often longer than the next six months, not because we want them to be, but rather because they have to be.

Investors in commercial property will generally have very long time horizons, sometimes decades. Whilst the 'small waves' that wash up on our shore – vacancy, capital expenditure, regulatory changes and other issues – grab our attention and consume a large amount of our time, it is the 'tidal waves' that tend to knock us off our feet. We are so busy dealing with the 'small waves' that we don't lift our heads to look for the 'tidal waves'.

This paper is the first in a series of papers looking at the 'tidal waves'. Most investment, economic and commercial property research focuses on the immediate changes occurring in markets – inflation, interest rates, the stock market, vacancy rates, retail sales, GDP, unemployment and a host of other indicators. Whilst they may seem important, they become the main focus of research because they change, not generally because they are critically important to the long term investor. However, the 'tidal waves' get relatively little attention because they are very slow moving and do not change very often.

This paper, 'The Shape of Things to Come', looks at two such 'tidal waves' – global debt and the ageing population. Whilst each of these is worthy of a paper in its own right, it is the combination of the two that actually brings about quite a stark picture with very serious implications for long term investors.

If we want to look into this future there are just three numbers we need to remember to help us understand it:

1) $221 trillion

2) 35%; and

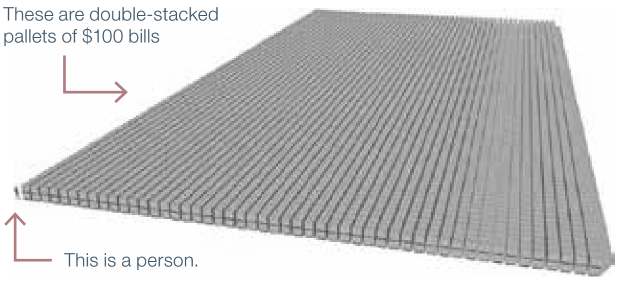
3) 3.7 billion.

Part One: $221 trillion

A trillion is a large number, it has twelve zero's.

When I was a young lad, there were a handful of millionaires, now there are more than a handful of billionaires. We use these numbers rather flippantly. If we were to stack $1 notes on top of each other they would circle the world two and half times to add up to $1 trillion. You would need a warehouse the size of a football pitch to fit $1 trillion inside. If we were to count a trillion seconds it would take us back 31,700 years – all the way to the Stone Age. By any measure, a trillion is a large number.

How much is a trillion?



$221 trillion is the current size of world debt, as has been estimated by many organisations. A recent publication by McKinsey and Company (February 2015) is very thorough. Global debt has increased 20 percent since the onset of the GFC in 2007 where it was estimated to be $180 trillion. The $41 trillion increase over the ensuing eight years has been a combination of sovereign debt and private debt. With the onset of the GFC, interest rates globally fell to historically low levels. Private investors and corporations that had little or no debt were undoubtedly enticed to borrow money. Sovereign debt has doubled since the onset of the GFC from some $30 trillion to approximately $60 trillion. This has come about because financial organisations have been brought onto government balance sheets – Northern Rock, Bank of Ireland, Allied Irish Bank, Anglo Irish Bank, Kaupthing, Glitnir, Landsbanki, Fannie Mae and Freddie Mac, etc. It has also come about due to large amounts of Quantitative Easing – a government policy of buying financial assets from banks and other corporations, effectively keeping yields (artificially) low. The banking system is effectively flooded with liquidity, keen to lend money, which leads to inflation. That is the theory at least.

There are two issues with sovereign debt:

1) The interest payments are not tax deductible; and
2) What happens if all the taxpayers leave?

Regarding point one, Pakistan is a case in point where government debt to GDP stands at approximately 60 percent. This has grown from 3 trillion rupees in 1999 to a little over 14 trillion rupees in 2013. The interest payments and debt repayment schedules alone constitute an excessive burden on government revenue.

As to point two, look at Greece. Although that is not really the worst of it. Stockton and Detroit in the United States are better cases in point.

Stockton is a town in California with a population of around 300,000. At the peak of the GFC in 2008, one in thirty houses in the entire city was in foreclosure. The value of houses fell by 44 percent. In July 2012, the City of Stockton filed for bankruptcy protection – the largest municipal filing in US history until it was surpassed in 2013 by Detroit.

Detroit filed for bankruptcy protection with debts of between $18 and $20 billion in July 2013. From a peak population of 1.8 million in the 1950's, the population of Detroit is currently estimated to be 700,000. One third of the City's budget goes to pay retirement benefits. More than half of the owners of Detroit's 305,000 buildings did not pay their taxes in 2011 resulting in a revenue shortfall of over $245 million.

In any case, world debt is at unprecedented levels. Never before has the world had so much debt. If global interest rates were to rise, the amount of money paying interest would divert so much money from elsewhere in the economy that it is quite possible a severe recession would ensue. In time, a combination of inflation and growing GDP are expected to alleviate the worst of the problems – if there is inflation and if there is a resumption in GDP growth. This is a big bet in a world where debt levels are continuing to rise. Let’s remember, debt is rising, not going down. There are currently no plans, anywhere, to pay off debt.

So, in a highly leveraged world, the prospect of higher interest rates seems unlikely. The ‘lower for longer’ scenario appears to have greater credibility than the ‘resumption of normal transmission’ scenario.

A question I get asked often about world debt is: Who has lent all the money? The answer is a little counterintuitive and has to do with FIAT money. Investopedia defines FIAT money as:

> Currency that a government has declared to be legal tender, but is not backed by a physical commodity. The value of fiat money is derived from the relationship between supply and demand rather than the value of the material that the money is made of. Historically, most currencies were based on physical commodities such as gold or silver, but fiat money is based solely on faith. Fiat is the Latin word for ‘it shall be’.

Essentially, the governments of the world through the ‘printing’ of money have ‘lent’ to all the borrowers.

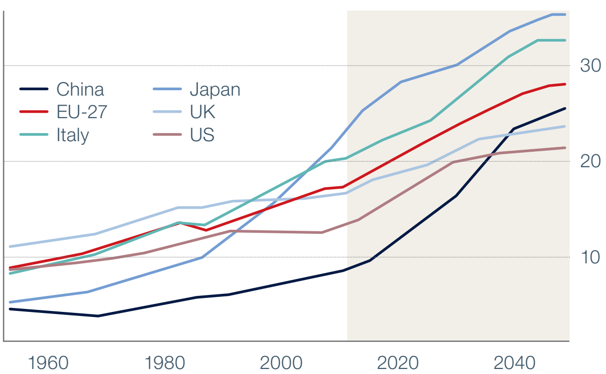
Part Two: 35%

In the not too distant future, approximately 35 percent of the world's population will be over 65 years of age. This is extraordinary for a number of reasons.

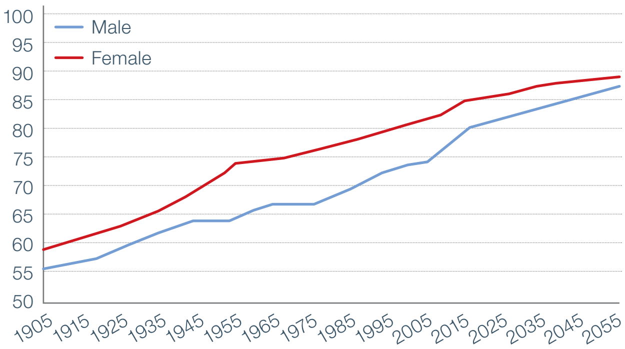
Throughout human history, only about 10% of the world's population was ever 'aged'. This was generally regarded as older than 40. This is because, in hunter-gatherer communities, the tribe could only support so many old people and also, folks were carried off by disease, war and animals. In many societies, old people carried themselves off in deference to the survival of the tribe. Today, thankfully, we look after the older generation. However, this is the first time in human history that the 'tribe' has had to support so many old people. This will be some experiment.

We come to find ourselves in this position primarily due to the combined effects of the Great Depression and the Second World War which resulted in a period of low fertility, deferred family formation and a reduction in the number of young men and women of child bearing age due primarily to the war. Following the end of the war, there was an 'explosion' in the number of births in most of the western world. This period, from 1946 to 1964, is widely known as 'The Baby Boom'. This coincided with the 'One Child Policy' in China which also skewed the population of that country. Suffice to say, there is a global population bubble that is running its course.

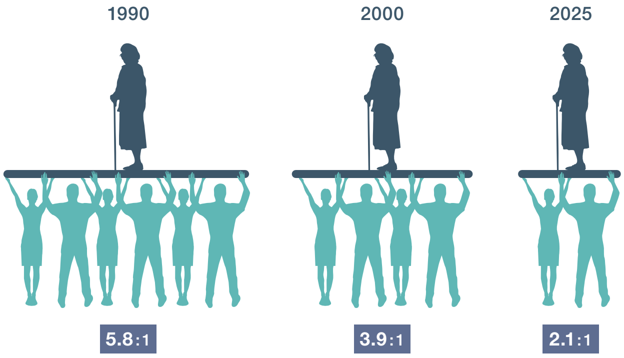
Another extraordinary aspect to this ageing of the population is life expectancy. We are expected to live longer. This is not entirely true. We have always lived to old age so long as nothing went wrong – disease, war, misfortune. What we have collectively managed in recent times is to minimise the impact of disease, war and misfortune such that the average life expectancy has been increasing. Less deaths in childbirth by mothers and babies has increased life expectancy for all of us. Less deaths in motor vehicles has had a similar effect. No substantial war in 50 years has added to this. It's not that we are living longer, it is that there are more of us living well into old age. According to the Australian Institute of Health and Welfare Australians born in 2012 can

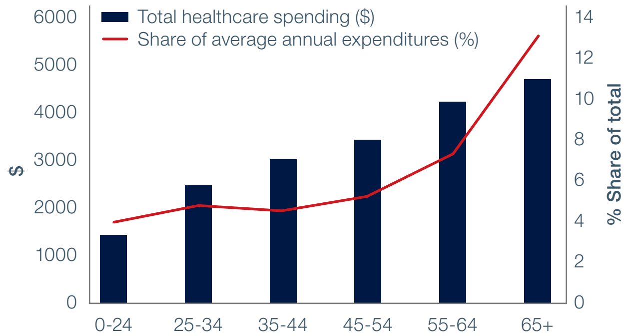


Australian Economics
Male and Female Life Expectancy (years)
1905-2055



Source: ABC 3105.0/Australian Treasury/Savills Research





expect to live to around 82 years, 62 years without disability. Of the final 20 years, 12 of them without severe disability and the final eight years (10 percent of your life) with increasing levels of disability requiring ever greater amounts of care and assistance. According to the World Health Organisation, in 2012, Australians had the equal fourth highest healthy life expectancy at birth in the world.

Many government policies surrounding ageing were developed earlier last century in a world where life expectancy and retirement assets were very different. Life expectancy in the United States in 1915 (just 100 years ago) was 47 years of age. Very few people made it to retirement. In 1947, life expectancy in Australia was 68 to 70 years. In thinking of providing a pension to retirees, society was expecting to pay it for a few years after retirement, not a few decades.

In Australia, the population of people aged over 65 is projected to increase from 3.6 million currently to 8.9 million by 2054. From 15 percent of our population to 35 percent of our population, all things being equal. This means the old age dependency ratio (the number of old folk to tax payers) increases dramatically. It goes from around six taxpayers per old person to around two taxpayers per old person. Now, the maths on this is fairly simple. If we had six taxpayers to an old person and we are going to two taxpayers then it stands to reason that the old person is either going to get one third the services or taxpayers will have to pay more tax or a combination of both.

According to Australian Treasury projections, health spending on the average person aged 85 years and older is four times the spending on the average person across all ages. Given we are about to have a boom in the number of people entering this phase of expenditure, demands on the government balance sheet will be increasing.

This brings us naturally to the other side of the government ledger, income. The number of taxpayers is expected to remain constant under an 'all things being equal' scenario. Government income remains constant. If global interest rates rise, there is less revenue for expenditure because interest payments deteriorate the revenue side of the ledger. If, at the same time, the demands for health expenditure and pension payments increase dramatically then there is not enough money to spend on other services such as defence, education, infrastructure and social welfare.

This is why tax reform has become such a topic in the media over the past twelve months and can be expected to be continually debated for the next decade. Because the ageing of the population is a global phenomenon, as is indebtedness, these issues impact almost every country on the planet.

There are several ways out of this predicament – one of the obvious ways out is to get more taxpayers. The problem is, there are not really enough taxpayers to go around. Nevertheless, the global war for taxpayers has begun and taxation reform is at the heart of attracting taxpayers to your country. Those countries best able to reform their tax systems are likely to be the most successful at attracting taxpayers.

Finally, another important aspect of the population over 65 is their retirement savings. Australia has one of the largest pools of superannuation money in the world which currently sits at around $2 trillion. This pool of capital is expected to grow to over $10 trillion in the future. Retirees are generally risk-averse with their investments and generally want to have their money in income generating investments. In other words, they hunt for yield. If we want to take this to a global level, there is a large pool of retirement capital looking for higher yielding investments in a low yield world.

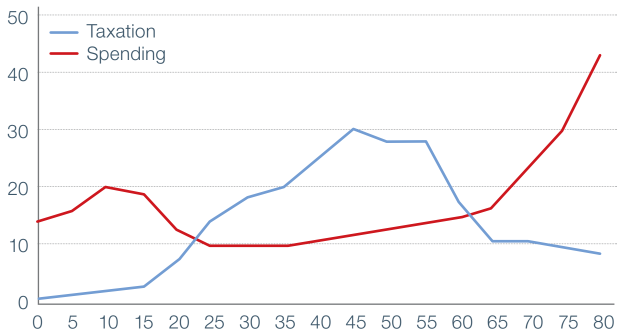
The upshot of this is indebted governments keeping yields low at a time when an ever growing pool of retirement capital is chasing income. It is not hard to make the leap of logic that emphasises lower yields for longer.

The more sobering aside to this problem of low yields for retirees is the fear of not having enough money to fund a 'comfortable' retirement. Without going into what constitutes a 'comfortable' retirement, it is not hard to work out that $1 million at 7 percent (remember when 10 year bonds were there?) used to generate $70,000 a year risk free. The 10 year bond rate today is around 3 percent and generates a paltry $30,000 risk free. Baby Boomers and Generation X are suitably worried that they will not have enough saved to generate enough income to live comfortably in this low interest rate world. This means working for longer and/or saving more.

Here we run into some serious problems. If both Baby Boomers and Generation X start saving more, then consumption falls and the economy continues to sputter along at lower levels of growth which results in ongoing low interest rates. The other serious problem is, at least 40 percent of those generations will not be able to work until they are 65. The current average retirement age in Australia is 58 years which means for every person retiring at age 65 there is a person retiring at 51. As much as people have a retirement plan (which usually involves a beach and cocktails somewhere warm) they also have in mind a retirement age. Let's assume for a moment that everyone is forced to work to 65 because they cannot afford to retire. Currently, 20 percent of the workforce is 'retired' early (in their 50s) due to technological redundancy. A further 20 percent of the workforce is currently forced to retire early (in their 50s) due to poor health. Given the rate of technological change and the general poor health outcomes of the Baby Boomers, both these percentages could be expected to increase. This means more pressure to save, more people retiring 'poor' and reliant on health and social services for longer. This puts even more pressure on the expenditure side of the budget. If these people are forced out of the workforce early then it also puts pressure on the income side of the budget as they are no longer paying income tax.

As I said in the introduction, it is the combination of the two factors (Debt and Ageing) that actually brings about quite a stark picture with very serious implications for long term investors.

Australian Economics
Total Government Spending by Taxes and Age ($'000) 2009-2010



Source: Rice, Temple and McDonald/Savills Research

Part Three: 3.7 billion

I played Monopoly when I was young like most kids of the time. There are two decks of cards on a Monopoly board – Chance and Community Chest – and in these decks are two cards of some passing value. They are the 'Get Out of Jail Free' cards.

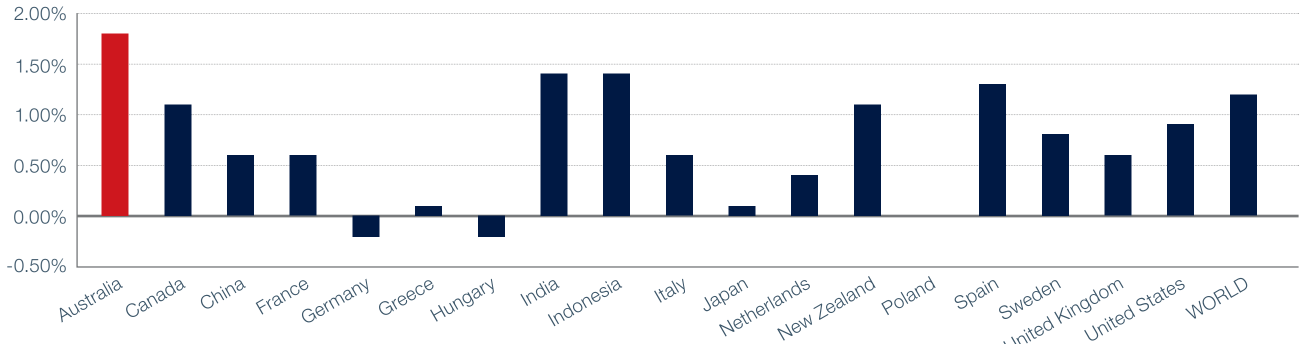
Australia is lucky (always has been) in that we have been dealt a 'Get Out of Jail Free' card. It takes the form of the 3.7 billion people living to our north. Australia needs just another eight million taxpayers in order to fund the retirement requirements of the Baby Boomers. That is just 0.2 percent of the population to our north. That is the crème-de-la-crème of that population.

Australia decided 13 years ago to grow the population as a means of dealing with the looming growth in retirees. For the last 13 years, Australia has been pursuing a policy of increased immigration. It is a policy that is ongoing and is forecast to remain in place for the next two decades. Australia's population growth is the strongest in the world and is the strongest in the history of the country.

So, who gets in to this lucky country? In 2013-14, 88 percent of migrants to Australia were aged under 40 years. Around 54 percent of migrants were aged between 15 and 29 years of age. The rich will certainly get in (they always do) and they will create communities for themselves. Just look around the world in places such as London, Paris, Rome and New York and you can see their enclaves. This may make up 5 percent of our total intake. By far and away the largest intake will be in the form of skilled workers – replacing the skills lost through retirees; supplementing the required skills in appropriate numbers in our economy because we cannot train enough people and doing the jobs we do not want to do anymore.

Of course, this means it is going to get a little crowded around here. Our population is expected to increase to around 36 million people. This means Melbourne and Sydney both become the size of London. It means Brisbane becomes the size of Sydney – all this in just 35 years.

Australian Economics
Average Annual Population Growth (%)
2005-2010



Source: United Nations/Savills Research

Conclusion

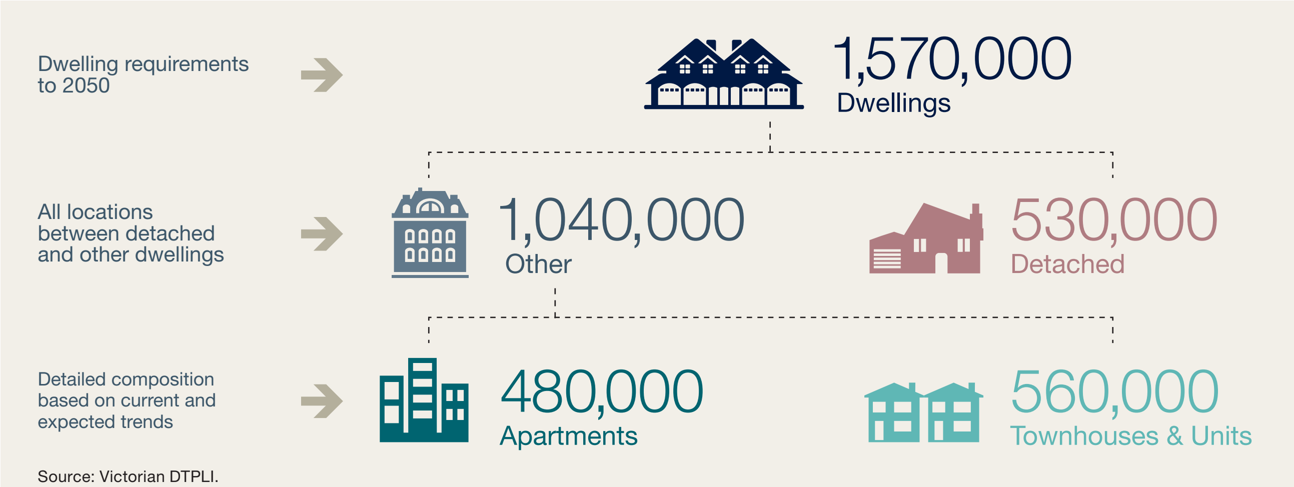
This global debt and ageing of the population is really a property story for Australia. Our response to these twin 'tidal waves' is to bring in more taxpayers through immigration. We need to house, clothe and feed these newly arrived immigrants. This means we have a housing boom – a housing construction boom, a housing investment boom and a land price boom – not just now, but for decades to come.

Both Melbourne and Sydney need to build another 1.5 million dwellings over the next 35 years. This translates into roughly 500,000 house and land packages, 500,000 townhouses and units and 500,000 apartments. The 500,000 apartments (just to give you an idea) equates to over 14,000 apartments built every year for the next 35 years in each of Melbourne and Sydney. Now, what was that I heard about oversupply?

I may also add in passing, if you were to take your inner city Australian house (say within 5 kilometres of the CBD) and plant it in a similar spot in London, Paris, Rome, New York, Hong Kong, Singapore or Shanghai and then have a look at the price of that house and then compare it to Australia and then ask the question: Are we cheap or expensive?

The follow through effects into commercial property are just as profound. Demand for office space, industrial space and retail floor space continue to grow.

Because Australia is a Federation, the Houses of Parliament (and the Law Courts) play an important locational role. Their presence in the CBDs around the country underwrite demand for office space in the CBDs. Technological advances in the future can be expected to disrupt workplaces and demand for space. Pressure on infrastructure can be expected to be solved in part by moving office jobs to different locations.



Source: Victorian DTPLI.

The need to get goods to the population (a larger population) will continue to place demand on industrial floor space. Again, advances in technology can be expected to play a role in the amount of space required and the location of that space.

Retail property can expect to be a beneficiary of a growing population despite the disruptive nature of technology. Catchment areas with appropriate planning policy will see their populations grow dramatically which will see retail expenditure grow at above average levels. Those suburbs where the population cannot grow due to planning restrictions will deliver below average rates of turnover growth.

More immigrants from our north can be expected to cement ties with businesses throughout the region with greater two-way trade. More business formation, more jobs, more opportunities. This also means more visitors, which means we need more hotel rooms.

Are there risks ahead? Yes, a great many risks. There are the known unknowns – the policy choices governments make that change the course of this future outlined here. Changes to tax, immigration, defence, and interest rates all impact these predicted outcomes. A global pandemic that wipes out 20 percent of the world's population (the Bubonic Plague managed that) – the Spanish Flu just 100 years ago wreaked havoc. Governments could agree to write off large chunk of debt, they could default on their repayments, global inflation and interest rates could spiral out of control resulting in a collapse of asset values. There are any number of risks, however, what has been outlined here is what I regard as a 'most likely' scenario.

Just three numbers – $221 trillion, 35% and 3.7 billion – create the shape of things to come.

Resources

Further reading

- 2015 Intergenerational Report Australia in 2055
- OECD: Policy Challenges for the Next 50 years
- OECD: International Migration Trends
- Debt and (Not Much) Deleveraging – McKinsey and Company
- The World Until Yesterday – Jared Diamond
- 64 Things You Need to Know Now for Then – Ben Hammersley

Further watching

- A World Made of Glass Parts 1 and 2 – Corning
- 200 years in 4 minutes – Hans Rosling
- How Many People Can Live on Earth? – Attenborough – BBC
- Four Horsemen – Ross Ashcroft

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