ERIKSEN & ASSOCIATES LTD

Actuaries & Investment Strategists

20 December 2017

Mr Simon Crabb
Finance Manager
Northland Regional Council
36 Water Street
Whangarei 0110

Dear Simon

MONTHLY INVESTMENT REVIEW NOVEMBER 2017

As requested we comment on your email of 18 December 2017.

Interesting questions which would warrant a two hour strategy session with the Investment Subcommittee early next year. Andy and I would be pleased to come up for the late February 2018 meeting if appropriate. Or perhaps we can do something in late January?

CONTEXT

Before giving our detailed answers to the questions it is important to consider the context or framework of our advice.

There are three main considerations:

- Nature of the individual funds and their objectives or liabilities
- Eriksens approach to portfolio construction
- State of financial markets/ global economy

OBJECTIVES

The Community Investment Fund (CIF) is intergenerational. It thus has a long time horizon and relatively high objective of rolling three year CPI+ 4% per annum. Being long term it can capture illiquidity premiums by investing in private equity for example. Long term inflation is around 2%

Auckland
Eriksen & Associates Ltd
443 Lake Rd, Takapuna
Box 33 1318, Auckland, New Zealand
Ph +64 9 486 3144 Fax +64 9 486 4413
auckland@eriksensglobal.com

Wellington
Eriksen & Associates Ltd
Level 9, 111 The Terrace
Box 10 105, Wellington, New Zealand
Ph +64 4 470 6144 Fax +64 4 470 6145
wellington@eriksensglobal.com

per annum so the expected nominal return is 6% p.a. after fees. A 50:50 asset allocation of growth and defensive assets matches that objective.

The Property Reinvestment Fund (PRF) at over $20 million has a medium to long term investment horizon depending on Council's property management strategy. It needs more liquidity than CIF because funds may be required to purchase or develop properties. It also has a relatively high target return of the Morningstar Property Unlisted and Direct Property Index plus 1% p.a. (7% - 9% p.a. nominal). Because property tends to be like equities as a hedge against inflation the PRF also has a 50: 50 allocation of growth and defensive assets. However its benchmark allocation to private equity is 10% rather than the CIF's 5% to target a higher nominal return. It commenced in September 2014.

The Infrastructure Investment Fund (IIF) is smaller at $9 million and began later (July 2015) with a more defensive mandate. It is a medium term fund to help spread the cost of infrastructure projects. Its objective is OCR plus 4% (currently 5.75%). Again liquidity is important so private equity would not be appropriate. A 50:50 growth/defensive allocation also suits that objective whilst interest rates remain low.

The Working Capital Fund (WCF) as its name implies is a short term fund to invest the Council's surplus cash reserves. It needs to be highly liquid and retain a more defensive approach than the other funds. It is small (around $7 million) but can vary significantly depending on cash flow requirements. It has a 20% growth 80% income asset spilt to achieve its OCR+ 2% objective (currently 3.75% p.a.). It began in March 2016 as a more defensive fund. To ensure liquidity neither Aspiring (30 days liquidity) nor private equity are suitable investments for the WCF.

PORTFOLIO CONSTRUCTION

Our investment advice has always been conservative and aimed at long term investors. We developed a fresh approach after the beginning of the global financial crisis (GFC) in late 2007, 2008. You may recall that in 2007 monetary conditions were loose and the private sector had borrowed substantially. Stock markets had risen, as had the number of sophisticated mortgage backed securities known as collateralized debt obligations (CDOs) which were bond structures of collections of mortgages (often sub-prime) rated as AAA bonds and sold to institutions by investment banks. In late 2007 liquidity dried up, several investment banks went bust or got taken over, including Lehmans. Central banks dropped interest rates to record lows to try and compensate, more latterly in an attempt to promote growth. World trade almost ceased because traders were unsure their letters of credit would be honoured and some stock markets fell 40%. Bond yields blew out, so investors lost money on equities, property and bonds. The only safe asset was cash.

The key point is that all assets, except cash, were correlated. Traditional diversification between asset classes didn't work in such times of extreme market dislocation.

Fast forward 10 years. Interest rates have been kept low too long by central banks. In Europe and Japan short term rates are negative. With cheap loans, the value of real assets, equities and property have risen sharply to record highs. Social unrest has also grown because of the rise in wealthy peoples' assets increasing the gap between rich and poor. This creates political unrest, wars, refugees and geopolitical tensions e.g. US, North Korea, Middle East, Turkey etc. Leadership is either changing (in many democracies), or power is being consolidated (China, North Korea, Russia, Turkey).

China has managed to grow enormously through the period. It exports deflation to the world and is growing in economic and political power. It also has territorial ambitions in the South China seas, Africa, South America, Eastern Europe etc.

Global growth appears synchronised, stock markets at record highs, interest rates still low but just starting to rise in the US, Canada, Norway and UK. The debt mountain of 2007 is even bigger now but has transferred to the public sector. Central bank balance sheets have grown by USD13 trillion. Markets appear stable, but the money flows rapidly to where smart investors think they can achieve higher returns. In our view equities in sound businesses are safer than most bonds. When interest rates rise investment theory says that the capital value of bonds and equities fall because their respective income streams are discounted at higher rates.

A rule of thumb is that a 0.1% increase in the 10 year US treasury yield will result in a 1% fall in the US stock market. Volatility has been remarkably low because of this decade long trend of interest rates going down and stock markets rising.

What happens when this pattern changes?

All markets are correlated because of computerised trading, instantaneous transfer of information and the large increase in passive and factor investing. Liquidity is likely to reduce dramatically again at some point. To help manage that risk we recommend institutional investors delegate the asset allocation decisions to astute investment managers who understand these risks. These managers have developed multi-asset funds in response to the beginning of the GFC to provide higher more stable returns with less risk of capital loss. In particular, such funds tend to manage their downside protection and level of volatility, as well as seek targeted returns.

The managers have constructed higher growth funds holding more shares, and other products focusing more on income, to meet the needs of growth and income investors. Asset allocation still determines investment performance, but the relative value of assets and the correlations between

them change continuously as the markets change. Hence the need to delegate the asset allocation decisions for each product back to the individual investment manager. We believe this strengthens the governance process because it shortens the decision-making time frame. However it requires that the managers get monitored for performance, style drift etc.

These investment managers have also developed sophisticated techniques to reduce the downside risk through the use of options and long/short equity products which can add value in down markets; and value/growth stock selection, including equities in dividend paying shares, which should be more stable in a downturn.

Another side of the GFC has been the increased regulatory oversight and focus on fees which has compressed margins and forced many fund managers to merge or leave large institutions to form boutiques. Hence manager risk is now higher especially when investors are seeking higher returns.

Due to KiwiSaver in New Zealand we have a particularly helpful investment vehicle called the Portfolio Investment Entity (PIE), which is tax and fee efficient for a wide range of different levels of tax paying investors (from charities to individuals) on the top marginal tax rate. This is priced daily and generally has daily or weekly liquidity.

A corollary of the high priced listed markets, both bonds and equities, is the growth in private equity products, especially in the Australian and New Zealand markets which have large proportions of privately owned businesses. Private equity tends to value businesses conservatively on the basis of real earnings and cash flows at realistic multiples. Hence they avoid the potential volatility of listed markets. There is an illiquidity premium which we price at 4% per annum over the listed equity market. This type of product is not suitable for investors needing significant liquidity.

Eriksens' manager research seeks out sound investment managers who have developed such multi-asset products which we assess should deliver above average risk-adjusted performance across market cycles.

We seek to blend different growth and income products to further diversify manager, style and asset class risk across various geographies and markets.

In particular, we favour Australasian assets over global assets in general because Australia and New Zealand both have:

- Independent central banks
- Stable political infrastructure
- Markets under-pinned by compulsory superannuation or KiwiSaver

- Floating currencies
- Commodity exports

In summary the key outcomes of the process are:

- Currently equities are less volatile than bonds.
- Multi-asset funds that are managed to preserve capital yet achieve their stated objectives (either growth or income) can be used to build a more robust portfolio.
- There is less need in seeking to time markets or make tweaks to portfolios because the underlying investment managers are monitoring their relevant markets and doing the heavy lifting on an almost continuous basis.
- Where appropriate higher returns can be generated from private equity but at the expense of liquidity.
- All these strategies take time to add value and generate returns. The minimum period over which to realistically measure a manager product performance is three years.

STATE OF MARKETS

Stock markets are at or near record highs, interest rates near record lows. However the US Federal Reserve increased their cash rate by another 25bps last week bringing it up to 1.5%, the same as Australia's. Europe and Japan still have negative cash rates, but the spread between German 10-year bonds and 10-year US Treasuries has widened to over 2%. At the same time the spreads between US and Australia/New Zealand 10-year government stock yields are tighter than they have ever been. Although inflation is still low, it is starting to rise in the US and deflation is no longer perceived as a risk. Traditionally September and October are times of market volatility, but this year the VIX (volatility index) was below 10 at 30 September for the first year ever. The risk of a market correction is far higher than the recent trends suggest.

At some stage within the next year and a bit we expect bond yields to rise somewhat. If this happens suddenly it will trigger a stock market correction which will affect most markets because they are highly correlated.

Whilst stock markets are buoyed by President Trump's proposed tax cuts, the increased budget deficit may further weaken the US dollar, increasing inflation and potentially interest rates.

There are also a long list of geopolitical risks which could unexpectedly deflate investors' confidence in the status quo and central banks' ability to manage the return to "normality".

In recent years any stock market correction has been short lived and followed by a bounce back as seen after Brexit etc.

This could be true of the next correction but, unlike 2008, central banks cannot respond by dropping interest rates significantly. They are abnormally low already.

So looking ahead there are three scenarios:

- Interest rates stay lowish or gently trend higher and stock markets remain stable
- Interest rates rise sharply but then fall back triggering a modest stock market correction and bounce back
- Interest rates rise sharply or a major geopolitical event occurs causing a freeze to liquidity and a major market correction.

Under the first two scenarios there is no need for concern. Just because the risks have not yet manifested does not mean they have disappeared. On the contrary! In our view market timing is difficult and dangerous to rely on. Don't forget that in a risk mitigation sense some equities are safer than bonds.

MANAGEMENT QUESTIONS

Taking these in order:

1. **Should we protect year-to-date gains?**

   If the markets remain stable into the New Year they should hold till the end of March 2018. After that it depends on whether we are in for a mild correction and bounce, or worse.

   Given we are less than half way through the financial year and growth assets are more defensive we recommend holding the current asset allocations. Note in particular that the PRF growth asset exposure of 50% is low considering the high target objective due to property prices rising faster than normal. To achieve 7% nominal we would usually recommend 60% in growth assets.

2. **Should we look to increase the overall investment to Aspiring to 20% of our overall portfolio?**

   Apart from the Milford Active Growth Fund, Aspiring is the most aggressive of our recommended multi-asset growth funds. However it has monthly liquidity and relatively high fees. We do not recommend increasing your overall exposure to Aspiring at this point.

Castle Point 5 Oceans is the most defensive of the multi-asset growth funds and is therefore suitable for the IIF and WCF in particular. We recommend holding its allocation at current levels unless the assets of either fund reduce. A weighting of around 25% would be ideal for both.

A concern we have already raised is within the PRF where both the Mint Trans-Tasman Equities Fund and the Quaystreet Altum Fund are predominantly Australasian equities, with the ability to go to cash. Whilst technically multi-asset they have a high exposure to both the Australian and New Zealand stock markets. That was why we recommended having $1.5 million in the Salt Long Short equity fund to specifically balance the risk of these domestic markets selling off. We recommend the $1.4 million that was redeemed from Salt be reinvested as soon as practicable for this reason.

3. Should we introduce another Diversified Income Fund into the WCF?

Yes. The Quaystreet Income Fund is more defensive than Milford and hence complements both Milford and Mint well. The Harbour Income Fund is being tweaked to become more aggressive which will be fine long term but makes it less appropriate than Quaystreet under current market conditions in our view.

4. Milford Exposure

We specifically recommend retaining the Milford Active Growth Fund exposure because it is a well-managed growth fund, but suggest selling down the Milford Diversified Income Fund whenever there is a need for liquidity or rebalancing e.g. for WCF introducing Quaystreet Income Fund. As the most aggressively managed of the income funds it may suffer from some aspects of market downturns more than the others.

5. Continuity Capital

Continuity Capital is arguably the best performing private equity product available in New Zealand. The fund has only been going for a little over two years but is already generating positive returns. In fact the secondary positions they have bought in existing funds were generating an IRR of 17% to 30 September 2017.

If surplus funds become available in the PRF we recommend a further investment in Continuity's Fund 4 which has just made its first close and will be open until at least the end of April 2018.

The reason for the apparent under performance to date has been the exceptional returns from the NZX 50 this year plus the 4% illiquidity premium. We expect the NZX 50 to achieve around 7% next year but Continuity to achieve an IRR of 20% over the life of the product.

Don't forget performance has to be measured over three years or longer.

Yours sincerely

Jonathan Eriksen

Eriksen & Associates Ltd
443 Lake Road
PO Box 331318
Takapuna 0740

Cc: Malcolm Nicolson
Cc: Dave Tams