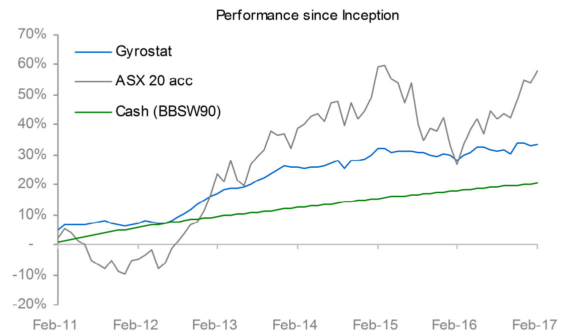
GYRATIONS

Insights into risk management of an equity portfolio for conservative investors

Gyrostat Capital Management Pty Ltd

March 2017

THIS MONTH



Gyrostat Capital Stability Fund compounded returns are net of fees and include franking credits, cash (BBSW90) includes re-investment of interest.

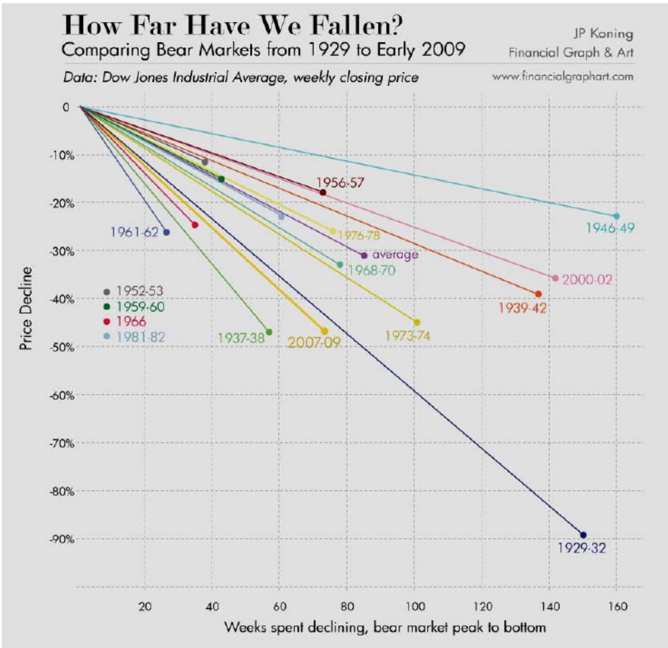
* ASX 20 accumulation index is shown to illustrate the fund's protection with ASX falls, and participation in ASX gains

The missing link in today's market is a long term dividend product where there are some underlying protections against market risk. This would address the natural aversion to share market volatility and its impact on investment capital. Gyrostat Capital Stability Fund is a risk managed equity fund ("protected equity") and addresses sequencing risk – the impact of investment losses – in retirement. We buy and hold ASX20 blue chip high yielding shares and insure downside at the stock specific level with lowest cost alternatives on the ASX. We have a six year track record of **delivering stable and rising investment returns with regular income**. Our innovative risk management approach has at all times a risk-return profile to participate in share price upside with minimal capital at risk ("hockey stick" payoff). Our strategy **benefits** from increasing stock market **volatility.**

SEQUENCING RISK PROTECTION

Investment returns have more impact at some points in your superannuation lifecycle than at others. *Sequencing risk is the risk that markets fall near or early in retirement.* The wrong sequence of returns can have a big impact on your retirement portfolio. Negative investment returns early in retirement can be particularly damaging.

Stock market corrections historically occur every 4 ½ to 5 ½ years. From 1929 to current, the range of falls and duration has been 25% to 90%, and duration of decline 22 to 160 weeks. The last correction occurred over 7 1/2 years ago.



A brief summary of existing risk management techniques, and acknowledge deficiencies are:

- **Diversification of stocks**: exposed to the risk associated with investing in the markets generally (as distinct from stock specific) risks. Capital investment rises and falls with market cycles.
- **Non-correlated asset allocation** with both 'growth' and 'income' assets: produces portfolios with lower income (historical low interest rates) and substantial fluctuations in capital value (highly indebted world). Reduced effectiveness with higher correlation in times of market stress.
- **"Stop loss"** approach may not be effective in large market downside gaps, and requires prediction and the identification of 'exit' and 'entry' levels. Exposure to losses when predictions are wrong.
- **"Predictive" techniques:** protection sometimes, but not always in place using derivatives such as 'futures' and 'options' to adjust risk-return profiles. Exposes investors to large potential losses if protection not in place.

Risk managed equity funds protect against the effects of sequencing risk by at all times protecting the downside at the stock specific level with lowest cost alternatives on the ASX.

RISK FRAMEWORK

The Gyrations risk model, depicted above, considers the implications of geopolitical, macro-economic, and company valuations on investor risk. The value of an investor's portfolio is impacted by political events, prevailing and forecast economic conditions and earnings expectations relative to current share values.

Geopolitical

- Election results change economic priorities and corporate earnings.
- Trade wars reduce economic growth and corporate earnings.
- Exchange rate devaluations lead to defaults of US denominated debts and capital flight thus impacting on corporate earnings.

Macro-economic

- Economic growth or decline determines corporate earnings.
- Debt defaults and resulting contagion effects reduce corporate earnings.
- Banking defaults can lead to liquidity issues for corporations.
- Inflation rate expectations impact on interest rates, with rising interest rates historically leading to lower market P/E levels.
- Central Bank changes to interest rate and quantitative easing policies impact on corporate earnings and P/E levels.

Company valuations

- Valuations driven from earnings and changes in overall P/E level.
- Human psychology tendency for herd or momentum behaviour.

Gyration will provide investors with a snapshot of these risks regularly. We are of the view that in today's environment traditional approaches have significant deficiencies. To address the deficiencies in risk management for retirement investors, there is a need to **expand the range of 'income' and 'growth' assets to include risk managed equity funds.** Such funds trade off some of the upside to insure against downside risk. It is possible to manage the risk profile of such funds by varying the underlying assets and the risk-return parameters.

OUTLOOK

Our investment view is that stock market volatility will increase. During 2012-2016 the level of volatility was low. Historically volatility has remained low for periods of 4 years - 1992-1996, 2002-2006, and 2012-2016. Volatility briefly spiked post US elections and Brexit but has again returned to near historic lows.

These are dangerous times for traditional investment approaches, with global total debt outstanding as a percentage of GDP at historical highs. GDP growth remains below trend, interest rates are at historical lows, and central banks are implementing unconventional monetary policies.

Our expectation is that volatility will increase, with "risk-on", "risk-off" investing occurring only distantly related to fundamentals. Relying on market predictions, as is the traditional approach, with a 'straight line' pay-off leaves investors exposed to large capital losses.

The decision to 'solve' a debt crisis by printing tens of trillions of dollars more debt may have adverse longer term financial stability threats from excessive debt, with adverse impacts for stock market valuations.

There are many potential triggers revealing the system fragilities. Global debt as a percentage of GDP is at all time highs and the stock market has been rising for over 7 ½ years without a significant correction. Geopolitical developments are resulting in changes to macro-economic policies. Valuations are considered 'high' by historical standards.

Increased volatility is often experienced around key data releases relating to interest rates, growth, inflation rates, and key political events. These dates are detailed in this report, along with market pricing of likely outcomes where available.

An effective strategy for addressing sequencing risk ensures the consequences of such an event do not materially adversely impact retirement lifestyle.

Gyrostat Capital Stability Fund has a 'hockey stick pay off' investment profile, set to always participate in the upside with minimal capital at risk. With this investment profile investors can approach these markets with confidence.

GEOPOLITICAL

Key Political Events

Political instability is increasing with anti-establishment parties gaining traction. This is particularly evident in Europe with recent polls indicating one in four supports these parties.

Key dates are:

15 March: Netherlands election

23 April (round 1), 7 May (round 2): French Presidential election

24 September 2017: German elections

May 2018: Italian elections, potentially early elections

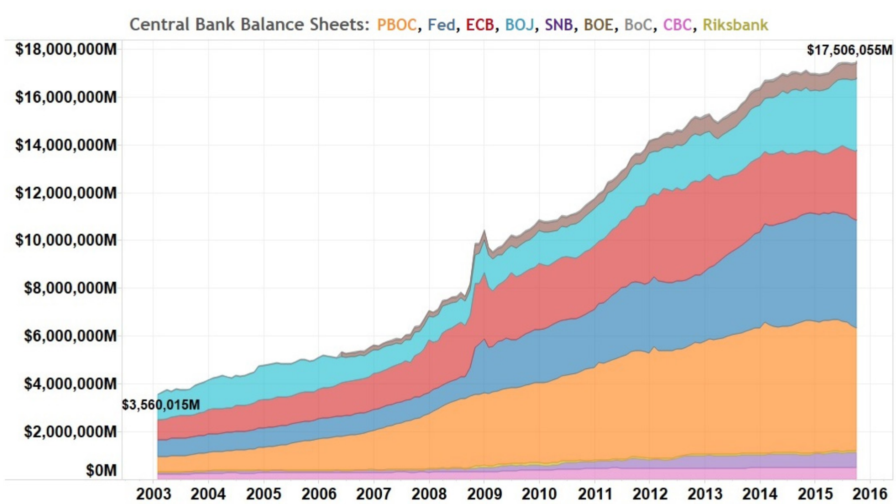
Trade

Trade wars can result from either currency devaluations or the introduction of trade barriers. This typically reduces overall economic growth, and subsequently company earnings. It can also cause capital flight, often the precursor to a debt crisis. There is increasing evidence of anti-globalisation activities.

The Trans-Pacific Partnership (TPP) trade agreement among twelve of the Pacific Rim countries will not be ratified. There remains uncertainty on the implications of any USA trade and foreign policy changes as a result of the Presidential elections.

Central Banks

Central Banks decide monetary policy by determining the price of money (short term interest rates). With interest rates globally in many jurisdictions at or below zero an additional policy is used to vary the quantity of money (quantitative easing or 'printing' money). Central Banks have been buying longer term bonds and stocks with the QE proceeds. There are increasing concerns this has inflated 'asset prices' and not sufficiently stimulated economic growth. Liquidity of commercial banks can be addressed by a Central Bank, solvency can not.

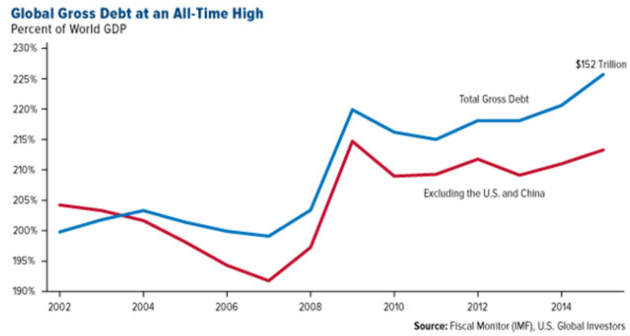


http://inflation.us/central-bank-balance-sheets/

MACRO ECONOMIC

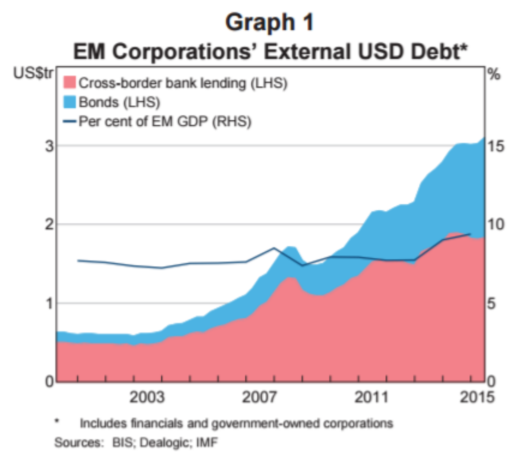
<u>Debt</u>

Global debt levels are at a record 225% of world GDP (IMF semi-annual fiscal monitor report October 2016)



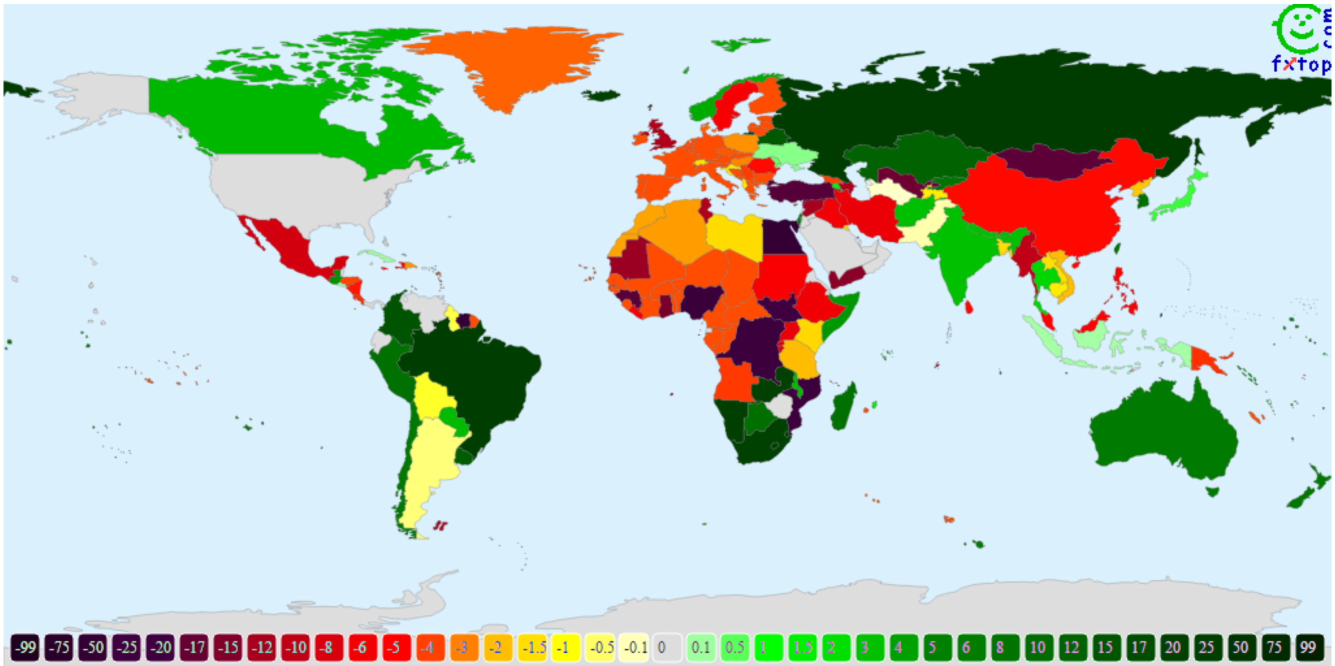
Gigantic Debt

US dollar-denominated borrowings by emerging market (EM) corporations have increased rapidly in recent years (currently in excess of $ 15 trillion), raising concerns about possible currency mismatch risk, debt defaults, and capital flight from those countries subject to currency devaluations.



http://www.rba.gov.au/publications/bulletin/2015/dec/pdf/bu-1215-6.pdf

Over the past 12 months, movements of currencies relative to the US dollar are shown below. In green is shown those countries with increases, in purple and red those with devaluations. A rising US dollar increases the risk of debt defaults and capital flight in those countries with unhedged borrowings and domestically generated revenues. http://fxtop.com/en/forex-map.php



<u>GDP Growth- World</u>

Despite historic low interest rates, global GDP has continued below trend levels, IMF January 2017 "A Shifting Global Economic Landscape"

Key dates are:

March 1: Australia GDP growth. Previous annualised 1.8% below consensus.

March 7: Euro zone GDP growth. Previous annualised 1.7% slightly below consensus.

March 10: US unemployment. Previous 4.8% slightly above consensus.

March 16: Australia unemployment. Previous 5.7% slightly below consensus.

March 30: USA GDP growth. Previous annualised 1.9%, below consensus.

April 18 China GDP growth. Previous 6.7% in line with consensus.

http://www.tradingeconomics.com/calendar?g=world

Inflation

Low inflation prolongs the elevated global debt levels by not growing nominal GDP. There remains the risk of deflation.

Key dates are:

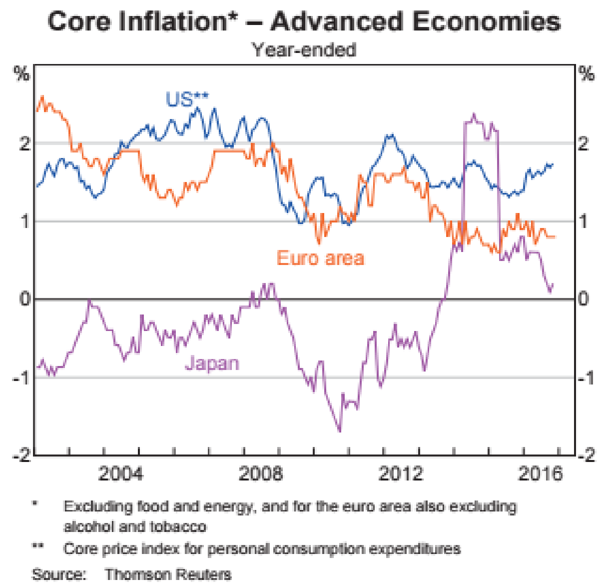
March 2: EU inflation rate. Previous 1.8% to December, at consensus.

March 3: Japan inflation rate. Previous 0.3% to December, above consensus.

March 9 China inflation. Previous 2.5% YoY to January, above consensus.

March 15: USA inflation rate. Previous 2.5% to January, above consensus.

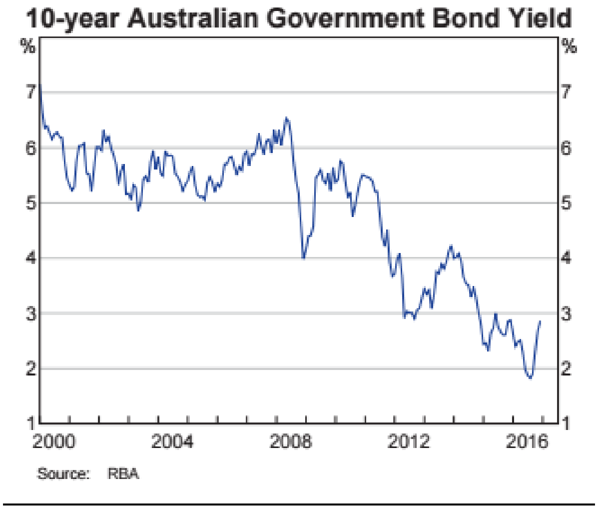
April 26: Australia inflation rate. Previous 1.5% slightly below consensus.



Bond yields

10 year bond rates are also typically used as an indicator of inflation expectations. Rates have risen over the past quarter, but remain near historical lows. These rates can move rapidly, and cause rapid changes in bond prices.

http://www.bloomberg.com/markets/rates-bonds



Cash Rate - Australia

Interest rates are at historical lows and anticipated to stay low for an extended period.

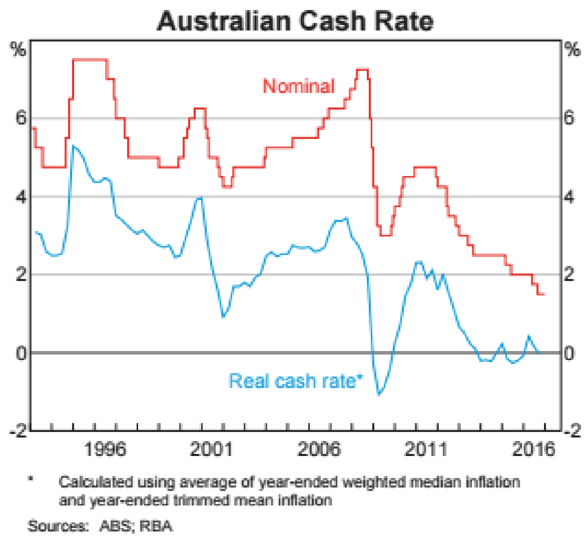
The RBA cut cash rates to 1.50% on 2 August 2016

RBA meetings:

- March 7
- April 4

Market pricing of interest rate cut to 1.25% at March meeting based on inter-bank cash rate futures: no cut: 95%; cut 5%

http://www.asx.com.au/prices/targetratetracker.htm



Interest Rates - International

Key dates are:

US Federal Reserve decisions (now 0.25%-0.5%):

- March 16
- May 4

Bank of Japan decisions (now -0.1%):

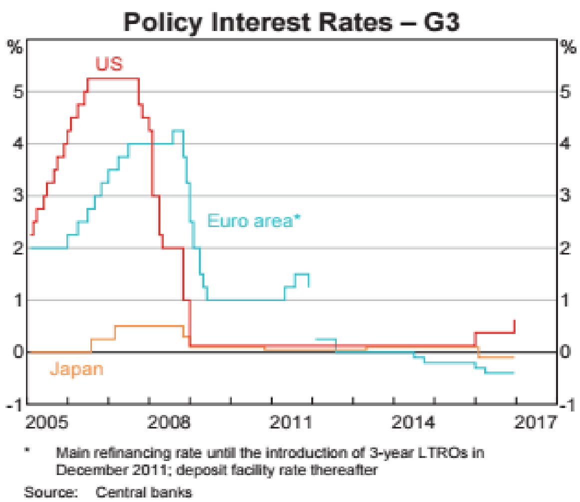
- March 16
- April 27

European Union decisions (now 0.0%):

- March 9
- April 27

Bank of England decisions (now 0.25%)

- March 16
- May 11



COMPANY VALUATIONS

Company Earnings

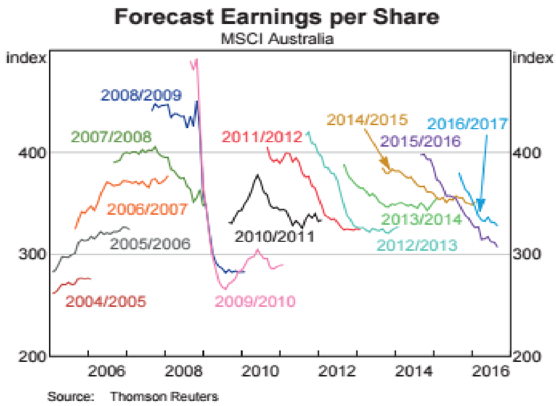
Corporate earnings expectations are influenced by macro economic and company specific factors. Substantial changes in market valuations often occur as investors adjust for new data, particularly where it differs from the 'consensus' view.

Details of upcoming Australian company earnings announcements are available at:

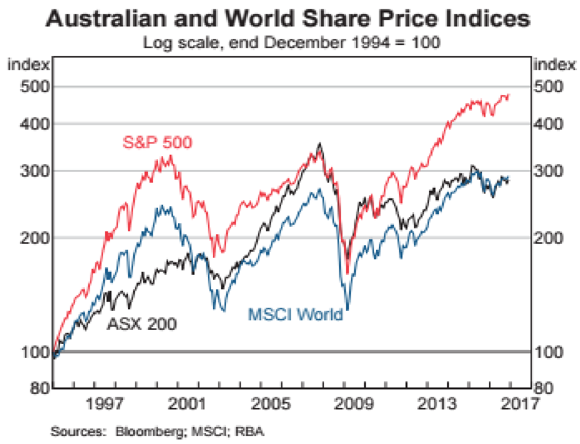
http://www.morningstar.com.au/Stocks/CorpCalendar

Listed companies also have continuous disclosure requirements to advise the market of any material changes in the companies projected earnings, particularly where they vary from the market consensus.

The graph opposite shows the changes in forecast earnings for the shown years. Over recent years, earnings estimates have been downgraded as time has progressed.



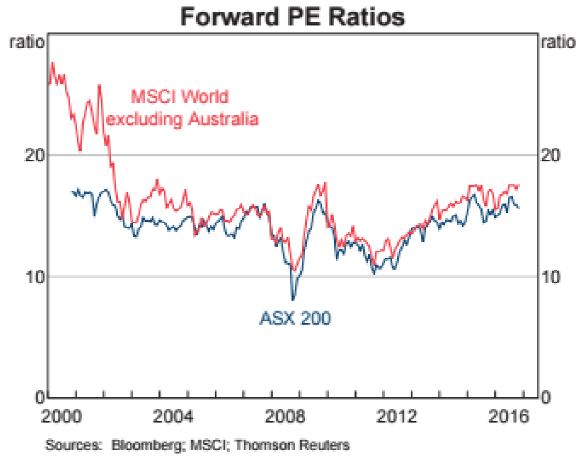
Share prices



Globally share prices have rallied strongly since 2009 market lows with the US market rising nearly 200%.

Price Earnings Ratios

The price/earnings ratio is often used as a metric for stock market valuations.



A historical context of market levels using normalized earnings since 1900 as calculated by Crestmont Research.

http://www.crestmontresearch.com/docs/Stock-PE-Report.pdf

Stock Market Corrections

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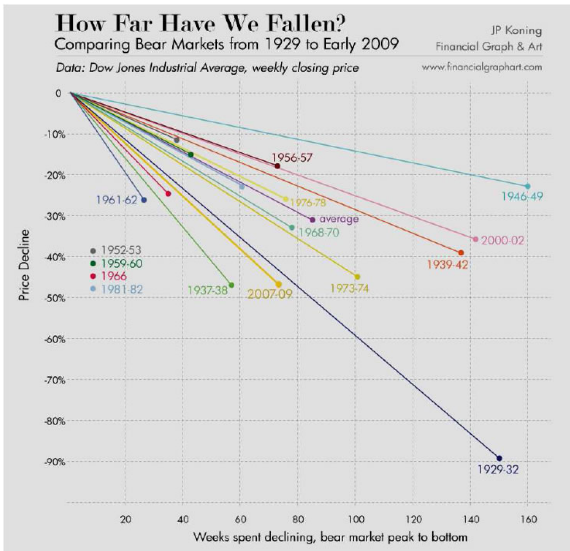

http://www.marketoracle.co.uk/images/2009/Mar/fallen.jpg

FEATURE: 'SHARES FOR INCOME' WITH CAPITAL STABILITY

The missing link in today's market

The missing link in today's market is a long term dividend product where there are some underlying protections against market risk. This would address the natural aversion to share market volatility and its impact on investment capital.

The major beneficiaries of such a product are conservative investors including pre and post retirees (to address sequencing risk), industry associations, philanthropic and charities, individuals and family offices (for intergeneration wealth transfer).

These investors seek a solution for stable and rising returns with regular income. Blending traditional 'income' and 'growth' assets has produced a painful dilemma for conservative investment planning - invest in 'income' assets like cash and term deposits and you receive insufficient income; invest in blue chip high yielding shares and you are subject to market fluctuations in the value of your investment capital.

There are 4 strategic trends that make it difficult to achieve the aims of conservative investors:

- Low interest rates at historic lows with a quarter of the world in negative interest rates;
- Elevated stock market valuations by historical standards with global debt levels at historic highs with;
- Ageing population as post-war baby boomers approach retirement;
- Geopolitical developments from election outcomes and changing macro economic policies.

The limited investment menu available today

At present there are no investment solutions that provide both 'income' and 'growth' to deliver stable and rising returns with regular income. Most "income" alternatives don't invest in growth assets and offer no prospects for capital growth.

David Murray, the chairman of the Financial System Inquiry, concluded:

> " … the retirement phase of superannuation is underdeveloped and provides limited choice for managing risk"
>
> *David Murray, Chair of The Financial System Inquiry*

Similar conclusions can be drawn for all conservative investors.

The asset classes commonly used to generate conservative income are:

- Term deposits
- Annuities
- Endowment Bonds
- Bond funds
- Equities – income focused
- Hybrids

Most are 'income' assets with no prospect of capital growth. An investment in equities – income focused owns underlying growth assets. However, the traditional risk management techniques have acknowledged deficiencies.

A brief summary of existing risk management techniques, and acknowledge deficiencies are:

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- **Non-correlated asset allocation** with both 'growth' and 'income' assets: produces portfolios with lower income (historical low interest rates) and substantial fluctuations in capital value (highly indebted world). Reduced effectiveness with higher correlation in times of market stress.

- **"Stop loss"** approach may not be effective in large market downside gaps, and requires prediction and the identification of 'exit' and 'entry' levels. Exposure to losses when predictions are wrong.

- **"Predictive" techniques:** protection sometimes, but not always in place using derivatives such as 'futures' and 'options' to adjust risk-return profiles. Exposes investors to large potential losses if protection not in place, or foregoes upside unless a 'hockey stick risk-return profile' in place.

Funds that apply derivatives based strategies seek to manage the volatility of their funds via various options trades, with the aim of reducing downside risk, while at the same time dampening potential return upside. The ideal solution is to buy blue chip shares with insurance with a "hockey stick" payoff always in place – <u>always</u> participate in the upside with minimal capital at risk.

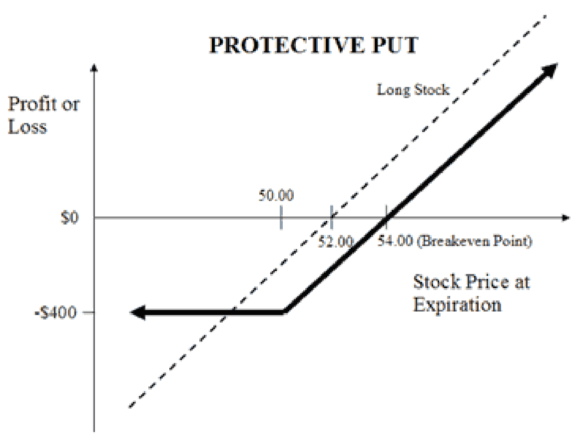
Technology enables the future

The perception has been historically that having protection always in place is 'expensive'. The ASX handbook "Guide to Equity Options for Investment Managers: Additional ways to achieve return and manage risk in equity portfolios" states:

> "Perpetually protecting a stock can be expensive. For example, 12 month at-the-money put options typically cost between 5% and 10% of the value of the shares. In most instances, this would be a large part of your expected return on the stock. Therefore, it is usually not cost-effective to have protection in place twelve months of the year – this strategy is generally more appropriate for shorter periods when you expect the share price may decline. On the other hand, long-term protection can be considered better value for money because time decay accelerates towards expiry. Just as in other real-world situations where protection is expensive but necessary, the same is true of equity portfolio management in certain instances."

The theoretical knowledge on how to "insure" your portfolio has been around since 1973 when Fisher Black and Myron Scholes published a paper, the basis for which a Nobel Prize in Economics was awarded fourteen years later. Their work created one of the most important concepts in modern financial theory, the mathematical model for pricing derivative investment instruments, including options.

A put option gives you the right to sell a stock at a pre-defined price for a pre-defined period of time. It is like an insurance policy, but like all insurance it comes at a price.



Protective Put Payoff Diagram

The ASX offers investor education at their web site, including a specific section "Equity Options from SMSFs". (http://www.asx.com.au/products/equity-options/eto-for-smsf.htm)

The historical issue that always protecting your portfolio is expensive is addressed through the management of ASX options, made possible through advances in technology and deregulation. Technology enables our software systems to identify the lowest cost insurance (ASX bought put) alternatives. On market moves we re-set the insurance level, made possible by lower fees from deregulation.

Management of the ASX options is the key to lowering its cost. In particular:

- There are differing levels of 'implied volatility' in the option market from differing maturities, or within the same maturity across a different range of strike prices. This has been observed by academics and market participants for many decades. Technology and software enables these to be identified in 'real time'.
- To further lower the cost of protection, you can receive premiums in return for limiting some of the upside. This is achieved by selling call options. Again, there are many series to choose from.
- With market movements, the "options" component can be actively managed. The trading reduces the cost. By actively managing, on market rises - locking in the gains with more protection; on market falls - sell some protection which is no longer required. Sophisticated software allows instant monitoring of a large number of price movements simultaneously.
- Transaction costs have fallen with deregulation. Deregulation allows funds managers and individuals to execute transactions at a low cost without the requirement to use a full service broker.

When evaluating risk managed products, look for the following:

- Straight forward business model, minimal capital at risk at all times
- Regular income, from dividends and franking credits
- Opportunity to protect and grow investment capital
- Financially strong counter party for protection – Australian Stock Exchange
- Transparent mark to market valuations of fund value
- No leverage within the fund

The Gyrostat risk managed equity funds approach

Given the apparent gap in the market, Gyrostat has developed a risk managed equity fund specifically designed to deliver stable and rising returns with regular income.

The **investment objectives are:**

- **Returns with protection**: 60-70% ASX20 accumulation index over a rolling 3 year period with no quarterly downside exceeding 2%,
- **Income**: Minimum BBSW90 + 3% (currently 4.7% pa) from dividends and franking credits, paid semi annually
- **Track record**: 6 year track record of delivering our investment objectives

Since our inception we have captured 64% of the ASX20 accumulation index upside with no quarterly downside ever exceeding 2%

We participate in share price upside, protect on market falls, and benefit from increasing levels of volatility.

Risk managed equity funds have both "cash plus" and "protected equity" characteristics.

We buy and hold ASX20 blue chip high yielding shares and insure downside at the stock specific level with lowest cost alternatives on the ASX. Our **innovative risk management approach has <u>at all times</u> a risk-return profile to participate in share price upside with minimal capital at risk** ("hockey stick" payoff). Our strategy **benefits** from increasing stock market **volatility.**

Gyrostat's key competitive advantage is the ability to always be fully invested with a risk-return profile at all times to participate in share price upside with minimal capital at risk, at the stock specific level.

WHAT WE ARE READING

William White: Ultra easy money: Digging the hole deeper?
http://www.williamwhite.ca/sites/default/files/11369_2016_12_OnlinePDF.pdf

SMSF Association innovative retirement income products
http://trustees.smsfassociation.com/wp-content/uploads/2016/07/Innovative-retirement-income-products.pdf

Steve Blumenthal: On My Radar: Bond market blood on the streets?
http://www.cmgwealth.com/ri/radar-blood-streets-indeed/

"Trillion Dollar Plan" Sends Stocks To Record Highs As 'Volatility' Hits Record Lows
http://www.zerohedge.com/news/2017-01-24/trillion-dollar-plan-sends-stocks-record-highs-volatility-hits-record-lows

Stock market valuations through the lenses of history
http://www.crestmontresearch.com/docs/Stock-PE-Report.pdf

Gyrostat innovative risk management technique risk-return payoffs explained
http://www.gyrostat.com.au/news/risk-return-profile-at-all-times-to-participate-in-share-price-upside-with-minimal-capital-at-risk-how-we-invest/

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