GYRATIONS

Insights into risk management of an equity portfolio for conservative investors

Gyrostat Capital Management Pty Ltd May 2017

THIS MONTH

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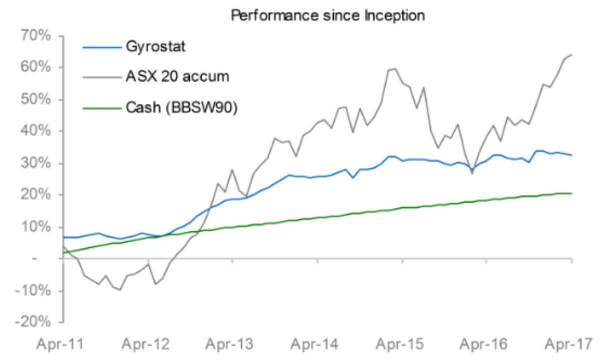


Gyrostat Capital Stability Fund compounded returns are net of fees and include franking credits, cash (BBSW90) includes re-investment of interest.

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

The gap in today's market for **conservative investors** is a fund offering **protection <u>always</u> in place** with **<u>absolute returns</u> through the investment cycle** (capital growth in trending and more volatile markets including large market falls). We buy and hold ASX20 blue chip high yielding shares and <u>at all times</u> protect downside at the stock specific level with lowest cost alternatives on the ASX. Our clients are conservative investors including pre or post retirees (sequencing risk), industry associations and individual/family offices (intergenerational wealth transfer.) We are used in place of short term bonds as our distinctive risk management approach re-sets the protection level with market moves to always have minimal capital at risk at the stock specific level and **upside return potential**.

SEQUENCING RISK PROTECTION

The challenge – the evolution of risk management approaches for conservative investors

Blending traditional 'income' and 'growth' assets has produced a painful dilemma for conservative investors - "income" assets such as cash, term deposits and short term bonds provide insufficient income with no prospect for any capital growth. "Growth" assets, investing directly in blue chip shares, or equity funds, leave investors exposed to fluctuations in the value of invested capital.

To address this dilemma, there are now a **variety of risk management approaches** used by asset managers and investors. These include diversification of stocks, asset allocation, 'stop loss', and 'predictive techniques' with protection <u>sometimes in place</u> through the use of derivatives such as 'futures' and 'options'. These approaches typically benchmark performance against an equity index such as the ASX accumulation index as they are subject to <u>downside 'tail risk' and prediction risk</u>. These are considered an alternative 'growth' asset with fluctuations experienced in the value of investment capital (both up and down).

Our solution – stable and rising <u>absolute</u> returns with regular income

In contrast, our risk management approach has **protection <u>always in place</u>** with **<u>absolute returns</u> through the investment cycle.** With protection <u>always</u> in place we are considered an alternative to short term bonds and benchmarked against the BBSW90. Our expected returns vary with the stage of the investment cycle and benefit from trending and volatile markets, as this provides the opportunity to re-set protection levels and lowers the cost.

Our investment objectives are:

- **Returns**: 6% - 8% pa in trending markets, greater than 8% pa in volatile markets, short term bond returns in stable markets
- **Income**: Minimum **cash rate + 3%** paid semi-annually (currently 4.7% p.a.) from dividends and franking credits
- **Protection:** No quarterly NAV draw-downs exceeding 2%

Traditionally protecting your portfolio was expensive. Gyrostat has overcome this issue by actively managing ASX options, utilising proprietary software and taking advantage of reduced broker costs due to deregulation. We are always fully invested in blue chip high yielding shares and insure downside with lowest cost alternatives on the ASX.

Returns have more impact at some points in your investment 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. Our investment objective is capital growth in trending and more volatile markets, including large market falls.

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. Traditional risk management approaches are exposed to capital losses with downside 'tail' risk and prediction risk with protection sometimes in place. Our risk management approach complements existing approaches by having protection always in place, and to benefit from trending and more volatile markets include large market falls. Such funds trade off some of the upside to insure against downside risk.

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 historic highs. GDP growth remains below trend, interest rates are at historic 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 impact on financial stability, with adverse impacts for stock market valuations.

There are many potential triggers which may reveal 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 historic 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 events 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:

7 May (round 2): French Presidential election

8 June 2017: United Kingdom elections

24 September 2017: German elections

May 2018: Italian elections, potentially early elections

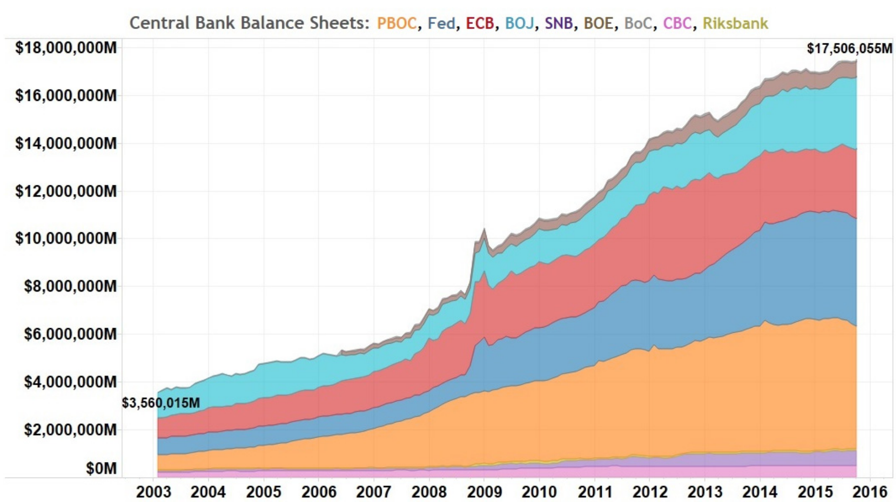
Trade

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. The North America Free Trade Agreement (NATFA) is subject to re-negotiation.

Central Banks

Central Banks decide monetary policy by determining the price of money (short term interest rates). With interest rates in many global 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.

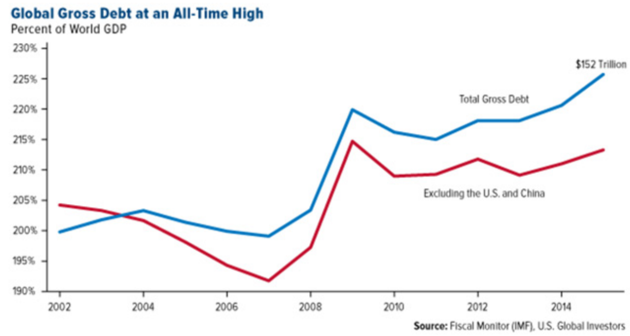


http://inflation.us/central-bank-balance-sheets/

MACRO ECONOMIC

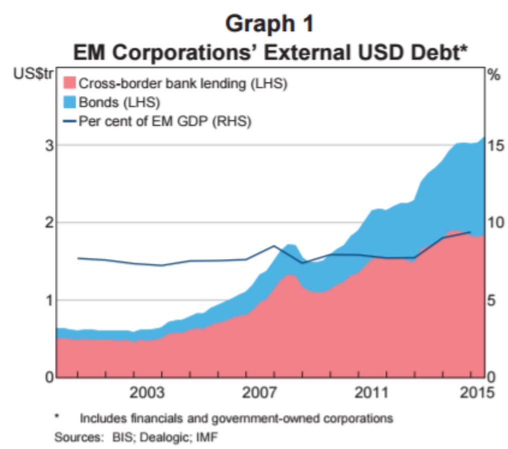
<u>Debt</u>

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



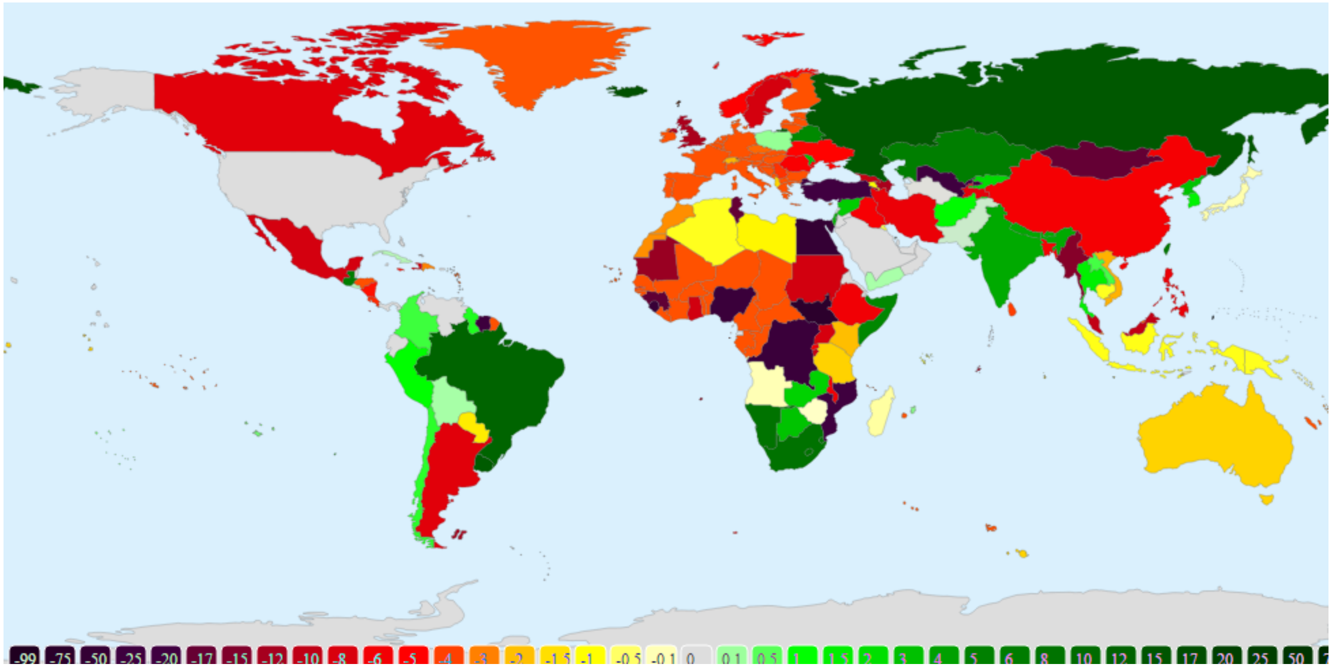
Gigantic Debt

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



GDP Growth- World

Despite historic low interest rates, global GDP has continued below trend levels, IMF January 2017 "A Shifting Global Economic Landscape". In April 2017 the IMF raised growth forecasts slightly.

Key dates are:

May 3: Euro zone GDP growth. Previous annualised 1.7% at consensus.

May 5: US unemployment. Previous 4.5% below consensus.

May 9: Australia unemployment. Previous 5.9% at consensus.

May 26: USA GDP growth. Previous annualised 0.7%, below consensus.

June 1: Australia GDP growth. Previous annualised 2.4% above consensus.

July 18 China GDP growth. Previous 6.9% slightly above consensus.

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

Inflation

Low inflation prolongs the elevated global debt levels by not growing nominal GDP. Inflation has recently increased in USA with most recent data below consensus, has been stabilizing in Euro area, with the risk of deflation remaining in Japan. The inflation rate has recently been falling in China.

Key dates are:

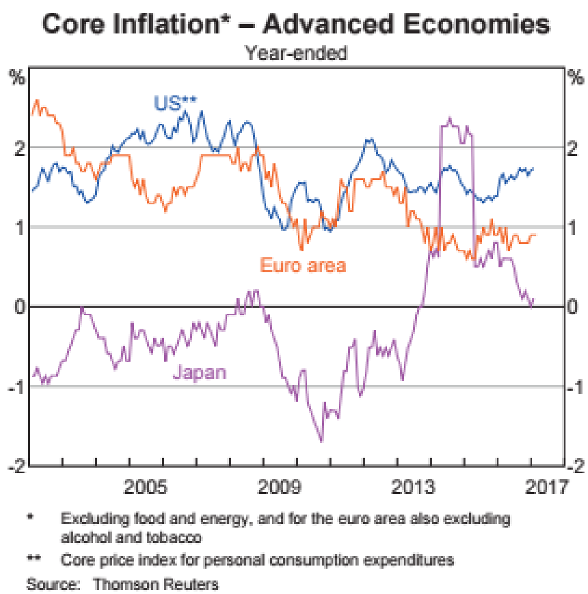
May 17: EU inflation rate. Previous 1.5% at consensus.

May 26: Japan inflation rate. Previous 0.2% below consensus.

June 9 China inflation. Previous 0.8% YoY below consensus.

May 12: USA inflation rate. Previous 2.4% below consensus.

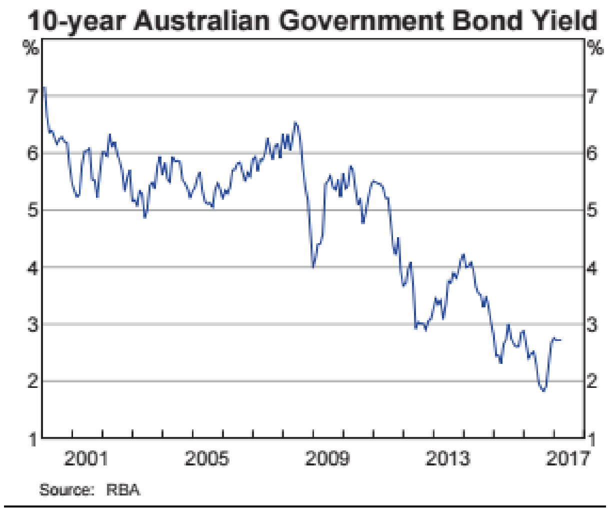
July 27: Australia inflation rate. Previous 2.1% at consensus.



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.

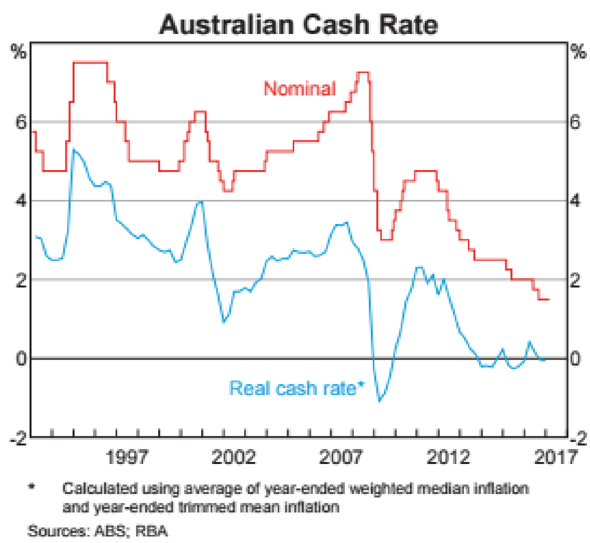
The RBA cut cash rates to 1.50% on 2 August 2016

RBA meetings:

- May 2
- June 6

Market pricing of interest rate cut to 1.25% at May meeting based on inter-bank cash rate futures: no cut: 98%; cut 2%

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



Interest Rates - International

Key dates are:

US Federal Reserve decisions (now 0.75%-1.0%):

- May 4
- June 15

Bank of Japan decisions (now -0.1%):

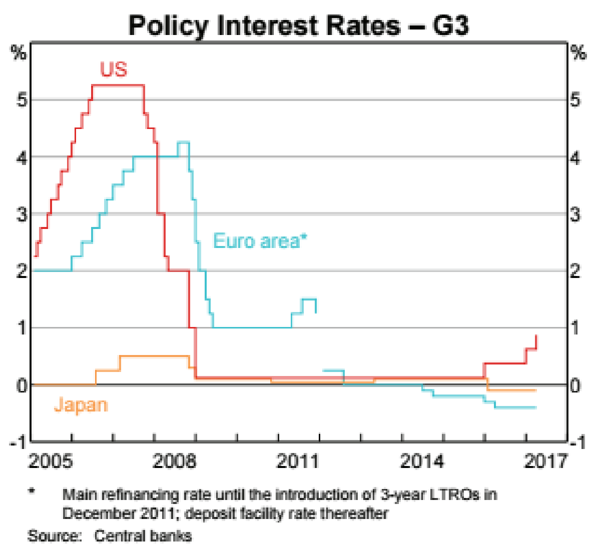
- June 16
- July 20

European Union decisions (now 0.0%):

- June 8
- July 20

Bank of England decisions (now 0.25%)

- May 11
- June 15



COMPANY VALUATIONS

Company Earnings

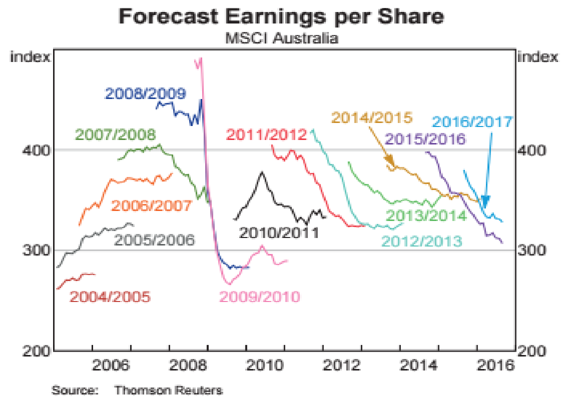
Corporate earnings expectations are influenced by macro economic and company specific factors. Substantial changes in market valuations often occur as investors adjust for new data, particularly where it differs from the 'consensus' view.

Details of upcoming Australian company earnings announcements are available at:

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

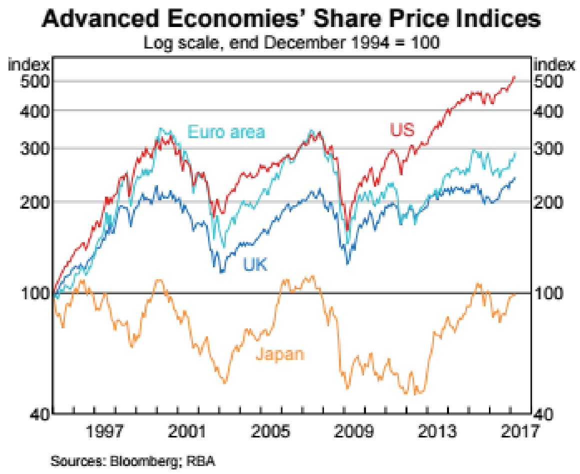
Listed companies also have continuous disclosure requirements to advise the market of any material changes in the companies projected earnings, particularly where they vary from the market consensus.

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.



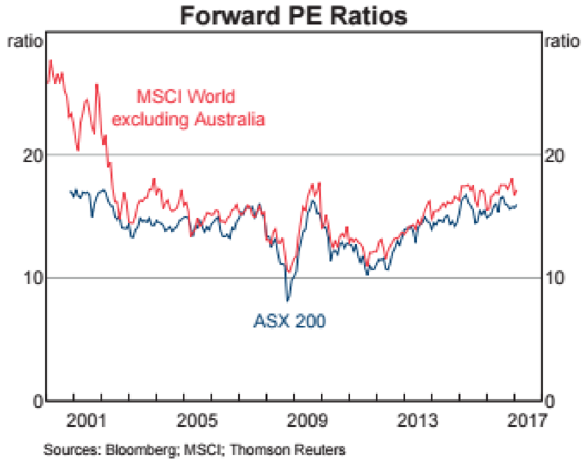
Share prices

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.

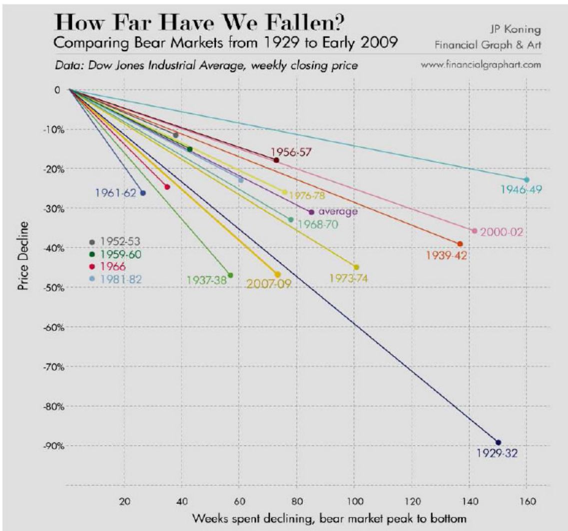


A historical context of market levels using normalized earnings since 1900 as calculated by Crestmont Research.

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

Stock Market Corrections

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



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

THE EVOLUTION OF RISK MANAGEMENT

Executive summary

- There have been significant advances in risk management approaches for conservative investors.
- The variety of risk management approaches have different risk and return characteristics through the complete investment cycle.
- “Phase 1” was the traditional risk management approach - varying the allocation of ‘income’ and ‘growth’ assets.
- “Phase 2” has seen additional ‘growth’ asset risk management approaches with protection sometimes in place through a predictive risk management overlay.
- “Phase 3”, the Gyrostat approach, is a complement to Phase 2 approaches with protection <u>always</u> in place. We are used in place of short term bonds as we deliver higher income and capital growth through the investment cycle (in trending and more volatile markets including large market falls.).

The challenge for conservative investors

Blending traditional ‘income’ and ‘growth’ assets has produced a painful dilemma for conservative investors - “income” assets such as cash, term deposits and short term bonds provide insufficient income with no prospect for any capital growth. “Growth” assets, investing directly in blue chip shares, or equity funds, leave investors exposed to fluctuations in the value of invested capital.

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

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

Evolution of risk management for an equity portfolio

Throughout the full investment cycle there are periods where investors are exposed to large investment losses. Returns have more impact at some points in your investment 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.

A major challenge confronting investors now is that 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.

Phase 1: Traditional approach asset allocation 'income' and 'growth' assets

The traditional risk management approach has been to vary the allocation of 'income' and 'growth' assets to reflect the lifecycle of the investor. In addition, there is a tactical allocation of growth assets for diversification of stocks.

Throughout the investment cycle, this approach has acknowledged deficiencies at times of substantial downside share price falls. In summary:

- **Non-correlated asset allocation** with both 'growth' and 'income' assets varied over the investors' lifecycle: 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.

- **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.

Phase 2: Risk management sometimes in place – downside tail and prediction risk

Risk management techniques have evolved in an attempt to address these acknowledged deficiencies. Of particular note are the following two approaches:

- **"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.

These approaches offer additional protections from the asset allocation approach of Phase 1. It is anticipated that these approaches will experience rapid uptake as the challenges faced by an increasing number of conservative investors from an ageing population expands the pool of investor funds from 'accumulation' to 'retirement' phase.

These approaches typically benchmark performance against an equity index such as the ASX accumulation index as they are subject to downside 'tail risk' and prediction risk. These are considered an alternative 'growth' asset with fluctuations experienced in the value of investment capital (both up and down).

Phase 3: Risk management always in place – stable and rising absolute returns with capital growth in trending and more volatile markets including large market falls.

Our risk management approach has **protection always in place** with **absolute returns through the investment cycle.** With protection always in place we are considered an alternative to short term bonds and benchmarked against the BBSW90. Our expected returns vary with the stage of the investment cycle and prefer trending and volatile markets as this provides the opportunity to re-set protection levels and lowers the costs.

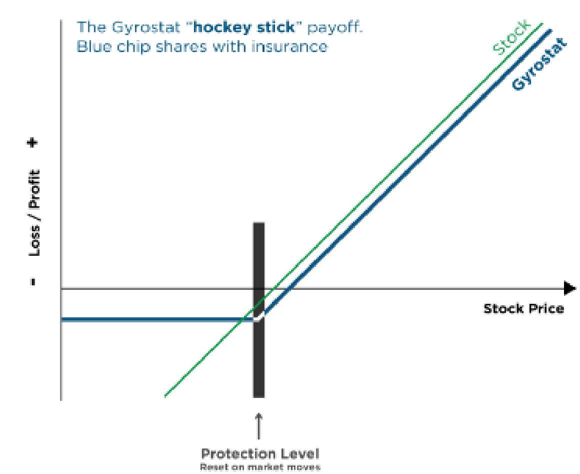
Our investment objectives are:

- **Returns**: 6% - 8% pa in trending markets, greater than 8% pa in volatile markets, short term bond returns in stable markets
- **Income**: Minimum **cash rate + 3%** paid semi-annually (currently 4.7% p.a.) from dividends and franking credits
- **Protection:** No quarterly NAV draw-downs exceeding 2%

Throughout the complete investment cycle our risk management approach has a risk-return profile which always has minimal capital at risk at the stock specific level with upside return potential. Each stock always has a protection level in place near the current stock price. This level is re-set as stock prices move to protect on share price downside and participate in upside.

Gyrostat investment approach

1. **Buy and hold blue chip shares with protection** on the Australian Stock Exchange.
2. **Set amount of protection** - to always participate in the upside with minimal capital at risk.
3. **Reset the protection level on market moves for risk-return profile to match stock view** - if the share price rises, increase protection level, on falls reduce protection 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/

"Global Debt Bomb" history of sovereign defaults: Reinhart and Rogoff
https://www.forbes.com/forbes/2010/0208/debt-recession-worldwide-finances-global-debt-bomb.html

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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