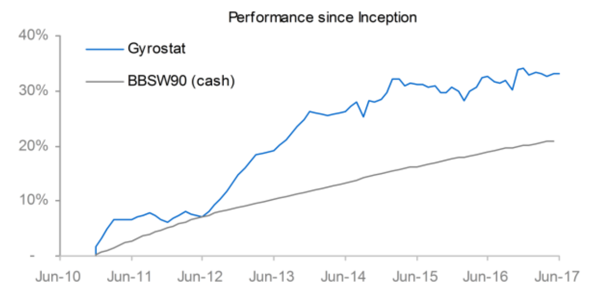
GYRATIONS

Insights into risk management of an equity portfolio for conservative investors

Gyrostat Capital Management Pty Ltd July 2017

THIS MONTH



Gyrostat Absolute Return Income Equity Fund compounded returns are net of fees and include franking credits, cash (BBSW90) includes re-investment of interest.

Gyrostat buys and holds ASX 'Blue chip' shares with lowest cost protection always in place with upside. With the progression of investment risk management, it is now possible to protect and benefit in changing markets. We have a 7 year track record of delivering our investment objectives.

- **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%

SIGNIFICANT ADVANCES IN RISK PROTECTION

Protect and grow capital with reliable income through the complete investment cycle

Expanding the investment menu

There have been significant advances in risk management for conservative investors, enabling them to protect and grow capital with reliable income through the complete investment cycle. This is achievable by combining the three approaches outlined below, and adjusting asset allocation now before volatility returns.

With protection always in place with upside, it is possible to ride out the storm and make money when other strategies don't.

The gap in today's market is the ability to **benefit from volatile markets with capital growth (including large 'one off' share price falls)**. This investment risk management approach is now available on the expanded investment menu.

Our feature article explains how the ASX options market can be utilised to reduce investment risk with the ASX the counterparty to the options contract.

In June our feature article shows the significant progress – possible from technological advances and deregulation.

In summary:

	Approach	Feature	Capital value	Benchmark
Level 1 **Diversify risk**	Asset allocation between 'conservative' and 'growth' assets	Diversification	Initial capital ± market moves	Model portfolio performance
Level 2 **Partial protection**	Protection sometimes in place using predictions	Additional 'growth' asset Predictive risk management - technology	Initial capital ± mitigated market moves	Equity index
Level 3 **Always in place protection**	Protection always in place with upside Absolute return - always minimal capital at risk	Additional 'conservative' asset Lowest cost bought put options - technology Active management options - deregulation	Initial capital + capital growth in trending and volatile markets (incl large falls)	BBSW
Short term bonds	Conservative asset (no capital growth)	Nil	Initial capital less defaults	BBSW

The investment performance of the approaches varies across the investment cycle. By combining the three and adjusting asset allocation now, it is possible to benefit with capital growth in volatile markets (including large 'one off' share price falls).

	Approach	Falling market (trending)	Volatile market (including 'one off' large falls)	Stable market	Rising market (trending)
Level 1 **Diversify risk**	Asset allocation 'conservative' and 'growth' assets	Unfavourable	Unfavourable – capital losses	Favourable	Favourable
Level 2 **Partial protection**	Protection sometimes in place using predictions	Unfavourable	Unpredictable – capital gains and losses	Favourable	Favourable (possibly mitigated)
Level 3 **Always in place protection**	Protection always in place absolute return Absolute return - always minimal capital at risk	Favourable (mitigated)	Very favourable – capital growth potential	Less favourable (lower returns)	Favourable (mitigated)

Our solution – stable and rising absolute returns with regular income

Our risk management approach has **protection always in place** with **absolute returns through the investment cycle.** With protection always in place we complement 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%

We have a track record of achieving these objectives every year since our inception in 2010.

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 Absolute Return Income Equity 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

There appear to be increasing tensions in the USA-Europe relationship as USA priorities change. Political instability is increasing with anti-establishment parties gaining traction. Many geopolitical commentators expect an increase in armed conflict within and between nations.

Key dates are:

24 September 2017: German elections

May 2018: Italian elections, potentially early elections

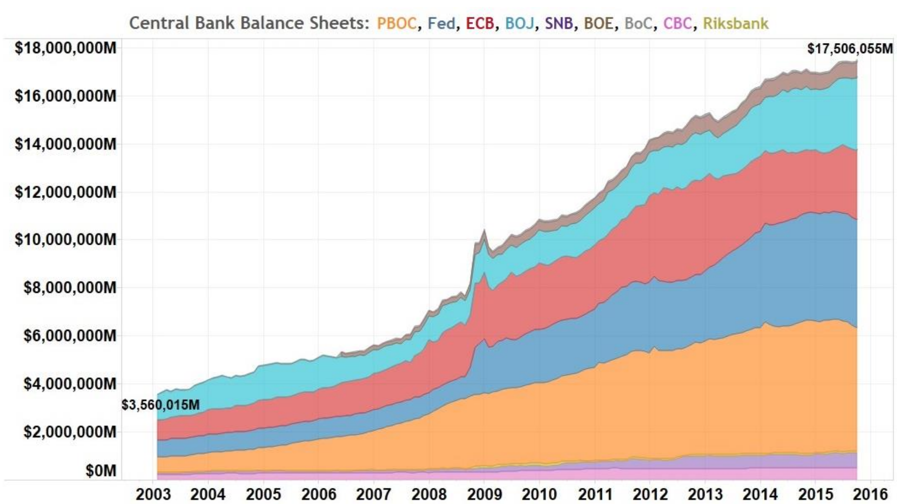
Trade

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.

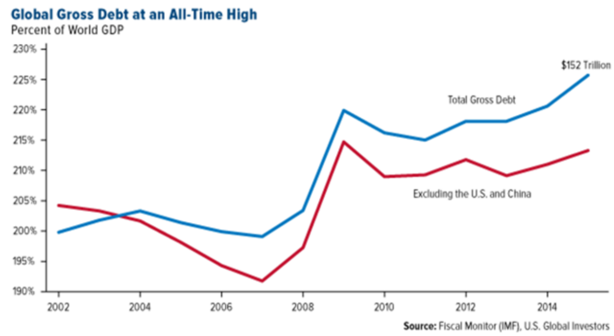


http://inflation.us/central-bank-balance-sheets/

MACRO ECONOMIC

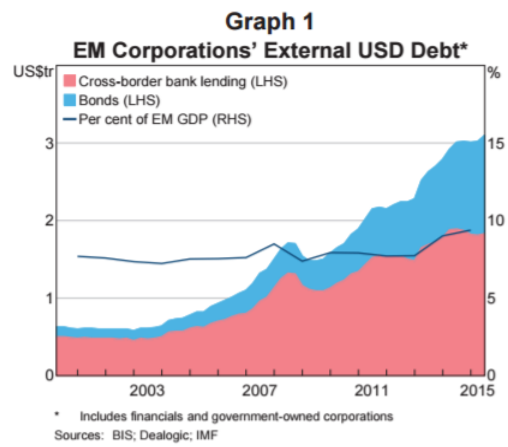
Debt

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



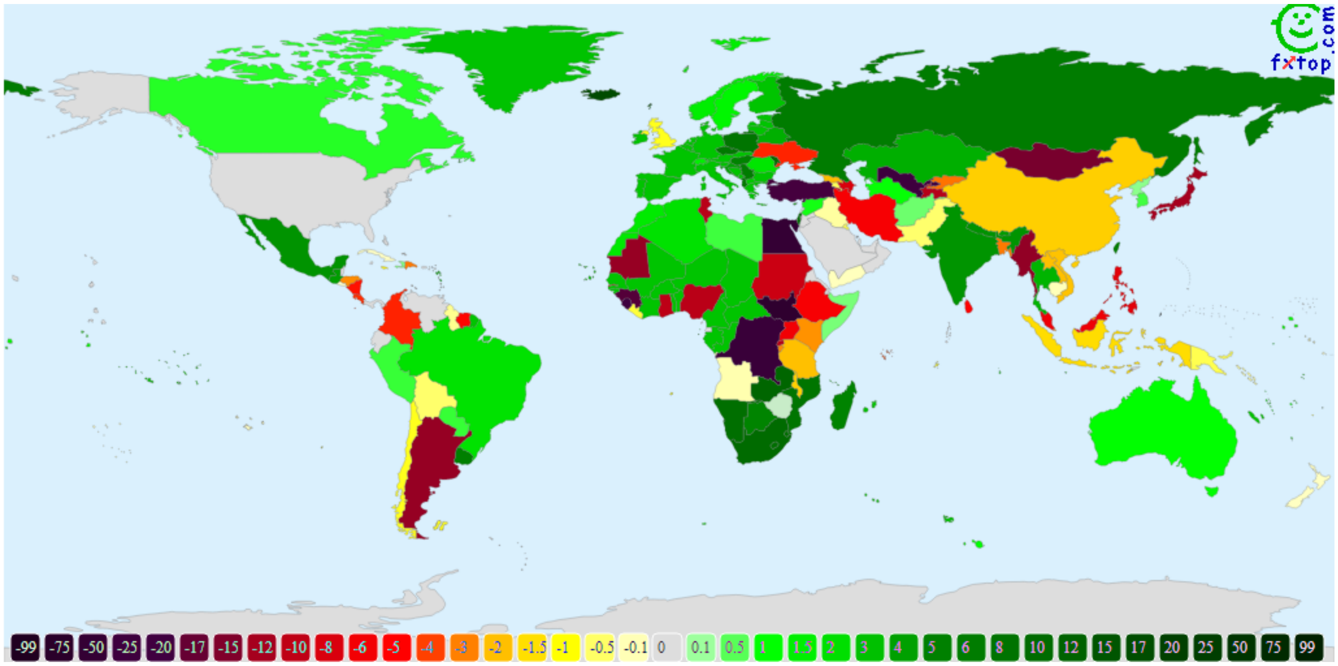
Gigantic Debt

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:

July 20 Australia unemployment. Previous 5.5% below consensus.

August 4: US unemployment. Previous 4.4% at consensus.

July 17 China GDP growth. Previous 6.9% slightly above consensus.

July 28: USA GDP growth. Previous annualised 1.4%, above consensus.

August 1: Euro zone GDP growth. Previous annualised 1.9% above consensus.

September 6: Australia GDP growth. Previous annualised 1.7% 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 rising in China.

Key dates are:

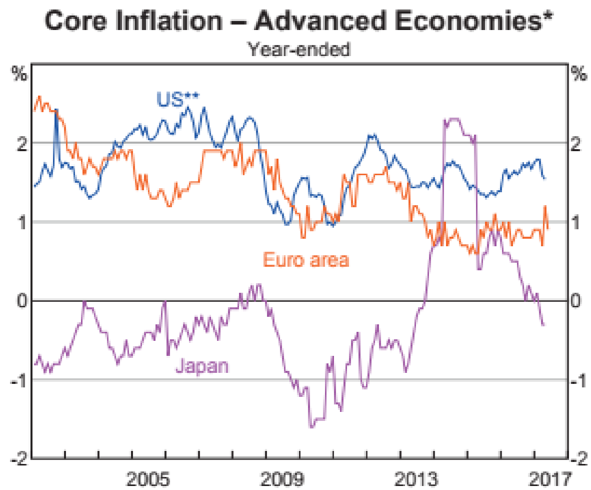
July 14: USA inflation rate. Previous 1.9% slightly below consensus.

July 17: EU inflation rate. Previous 1.3% above consensus.

July 29: Japan inflation rate. Previous 0.4% below consensus.

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

August 9 China inflation. Previous 1.5% YoY at consensus.



* Excluding food and energy, and for the euro area also excluding alcohol and tobacco

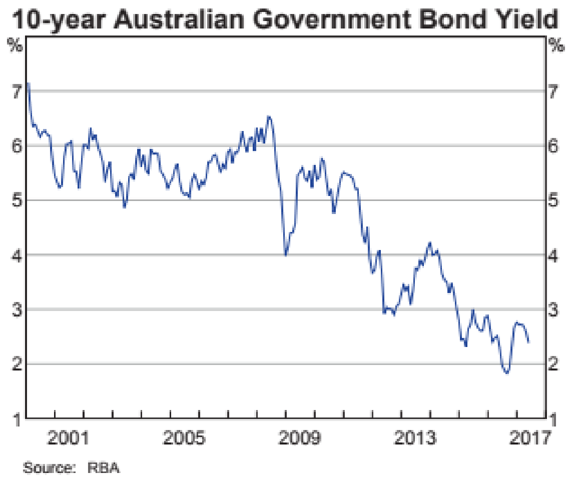
** Core price index for personal consumption expenditures

Source: Thomson Reuters

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.

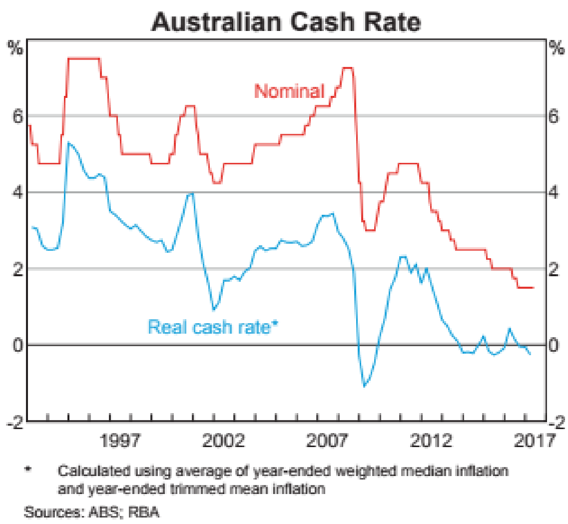
The RBA cut cash rates to 1.50% on 2 August 2016

RBA meetings:

- August 1
- September 5

Market pricing of interest rate cut to 1.75% at August meeting based on inter-bank cash rate futures: no rise: 100%; rise 0%

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



Interest Rates and QE- International

Key dates are:

US Federal Reserve decisions (now 1.00%-1.25%):

- July 27
- September 21

Bank of Japan decisions (now -0.1%):

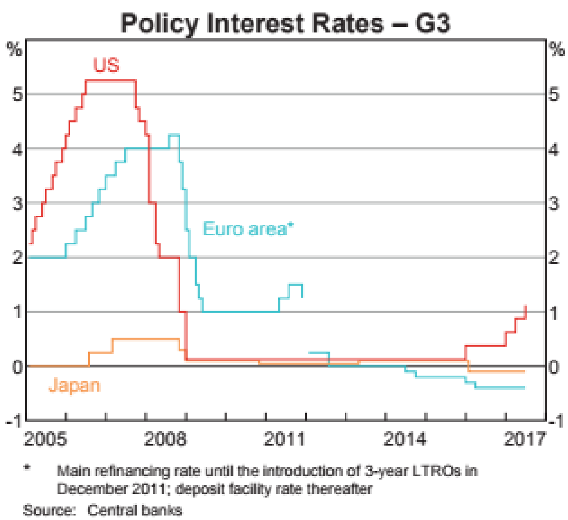
- July 20
- September 21

European Union decisions (now 0.0%):

- July 20
- September 7

Bank of England decisions (now 0.25%)

- August 3
- September 14



COMPANY VALUATIONS

Company Earnings

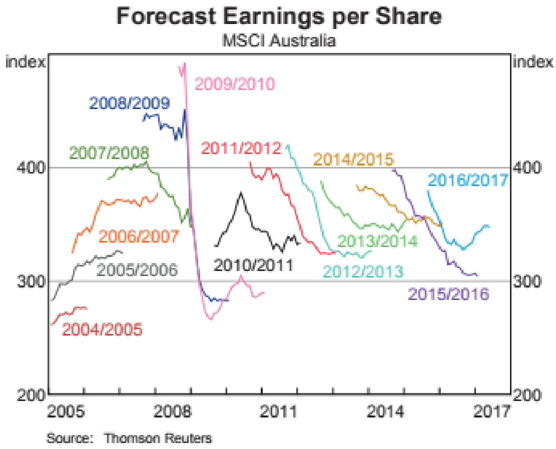
Corporate earnings expectations are influenced by macro economic and company specific factors. Substantial changes in market valuations often occur as investors adjust for new data, particularly where it differs from the 'consensus' view.

Details of upcoming Australian company earnings announcements are available at:

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

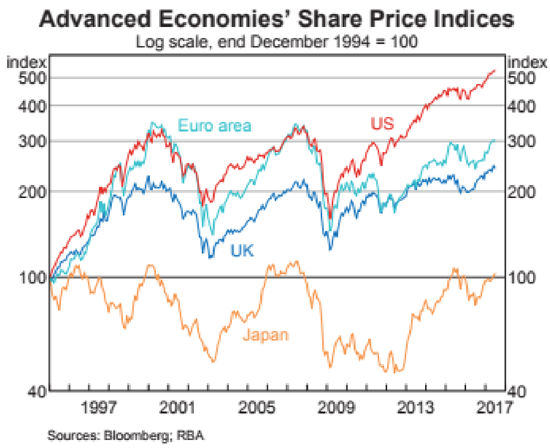
Listed companies also have continuous disclosure requirements to advise the market of any material changes in the companies projected earnings, particularly where they vary from the market consensus.

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. Recently earnings estimates have increased slightly.

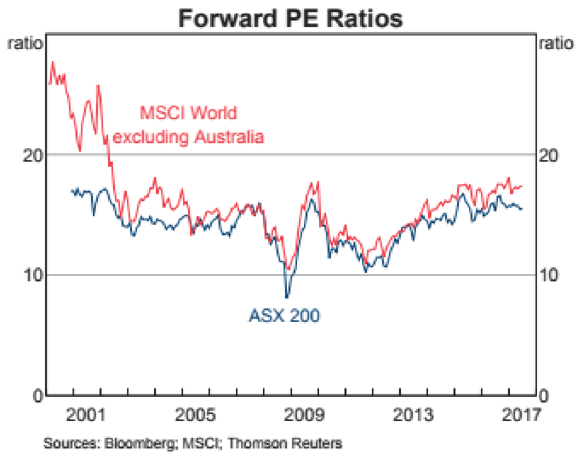


Share prices

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



Price Earnings Ratios



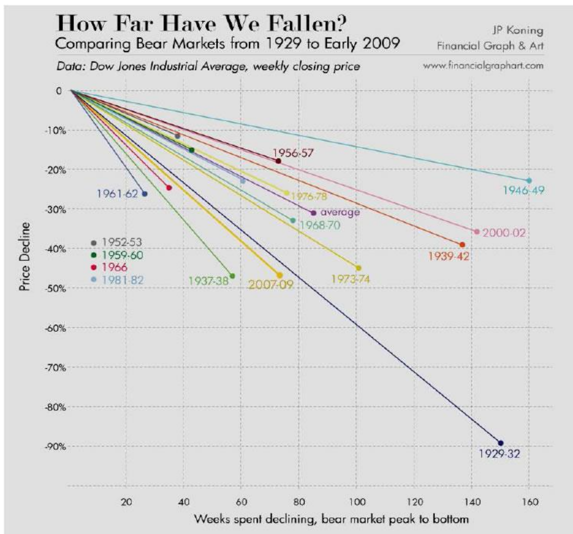
The price/earnings ratio is often used as a metric for stock market valuations.

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

Insuring your investments – how the ASX options market works

Executive summary

- Similar in purpose to buying insurance on your house or car, you can ensure you don't lose significant amounts of your investment capital on the ASX.
- Buying protection for your shares is termed a put option. When buying put options you pay a premium to lock in a value for shares you own at the agreed value or exercise price.
- Options can be used to either reduce risk (hedge -not risky) or to speculate (can be risky). Options are sometimes considered risky and overlooked.
- When you buy protection to hedge risk (the Gyrostat approach) it is the ASX who is the counter party.
- The ASX imposes collateral requirements on the seller of the option. The ASX had over $ 6 billion collateral from market participants at 30 June 2016

Protecting your investment capital

The first question is what protection is available?

ASX Options are available over the top 71 shares in the market as well as the ASX 200 index (XJO). These can be exchange traded or over the counter. http://www.asx.com.au/services/clearing/asx-equity-flex-clear.htm

When buying put options you pay a premium to lock in a value for shares you own at the agreed value or exercise price. If a company's shares fall significantly in value, you simply exercise your option to redeem at the contract exercise price.

With options the person selling is obligated to buy the shares from you at the pre-determined price.

The pricing dynamics in the world of options market mean if you purchase 12 months protection it costs more than the 6 month equivalent as the seller is taking on more risk.

Similarly if you are seeking to protect shares, the price at which your protection kicks-in will have an effect on the premium you pay. A protection level around or higher than the prevailing share price will cost more than selecting a protection level below the prevailing share price.

The ASX offers investor education at their web site, including a specific section “Equity Options from SMSFs”. http://www.asx.com.au/education/investor-update-newsletter/201405-sleep-easy-investments.htm

The mechanics of the ASX options markets

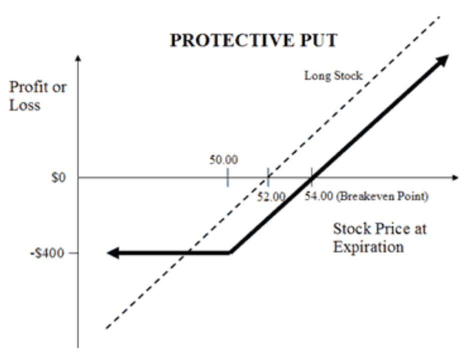
A put option gives you the right to sell a stock at a pre-defined price for a pre-defined period of time. It is like an insurance policy, and like all insurance it comes at a price or premium.

Options can be used to either hedge risk (the buyer of the option - not risky) or to speculate (the seller of the option - can be risky). They are traded on the ASX and you place an order through a broker, just as investors do with shares.

Option strategy	Risk	Return
Buy put option	Limited to 'premium' cost	Uncapped
Sell put option	Uncapped	Limited to 'premium' received

Let's consider the workings of the market through an example. You own shares and decide to pay a premium to buy a put option to lock in the sale price of your shares for the life of the option, no matter how low the share price may be. As the buyer of the option, a so called "protective put" that you have at risk is the put option premium you have paid.

Buy option – hedge risk



Protective Put Payoff Diagram

If the stock does fall, the other party must "honour" the insurance contract. As counterparty the ASX is liable for the settlement of these derivative contracts traded between its clearing participants, and is supported by collateral received from clearing participants.

The seller of the put option, or insurance policy, is required at the close of business each day to lodge collateral to show they can "honour" the contract. If the share price falls that day, they are required to lodge additional collateral.

Lowering the cost of protection

Active 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'. In effect, some insurance policies are cheaper than others.

- 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.

Progression of investment risk management

The continued development of the ASX options market has contributed to the significant progression in risk management approaches now available to conservative investors.

These risk management approaches have different risk and return characteristics through the complete investment cycle.

- "Level 1" was the traditional risk management approach - varying the allocation of 'income' and 'growth' assets.

- "Level 2" introduced additional 'growth' asset risk management approaches with protection <u>sometimes</u> in place through a predictive risk management overlay. Benchmarked to equity index.

- "Level 3", the Gyrostat approach, is a complement to level 2 approaches with protection <u>always</u> in place. We complement 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). Benchmarked to BBSW.

By combining the three, conservative investors can protect and grow capital with reliable income through the investment cycle

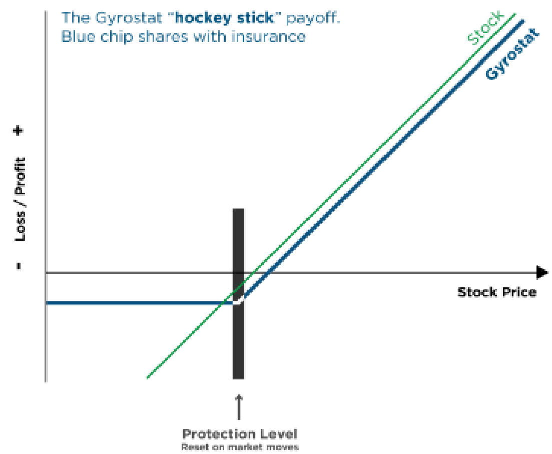
Our solution – the three step investment approach

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.

Super impose a 'hockey stick' pay off at all times on a share price chart, moving the protection level on market moves.

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

Steve Blumenthal: On My Radar: Near tern looks good, long term looks scary (Ray Dalio)
https://www.cmgwealth.com/ri/radar-near-term-looks-good-long-term-looks-scary/

John Mauldin: Prepare for turbulence – Thoughts from the frontline July 9 edition
http://www.mauldineconomics.com/frontlinethoughts

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

"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 feature article: Absolute return income equity fund ASX20 'Blue chip' shares
http://www.gyrostat.com.au/news/feature-article-absolute-return-income-fund-asx20-blue-chip-shares/

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