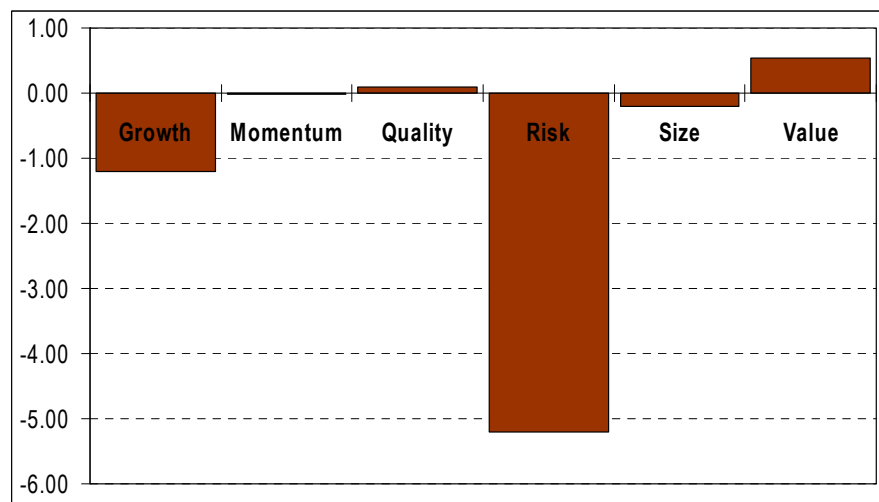


Quantitative Market Profile - Australia

Australian Equities: Debunking the Myths

- **Myth #1: this is a high yield sell-off** — While yes, there are examples of the high dividend yield stocks being sold off in the recent three weeks, such as Telstra or Transurban, this is not a uniform effect, the banks having actually rallied.
- **Myth #2: Gearing levels model the price action** — Gearing alone is not sufficient to model the price action of the last few months. Gearing and cyclical risk have been overly punished/rewarded in July/August.
- **Lock and Step with Credit Markets** — We show that our credit factor sensitivity from AURAM is a better means of modeling the pricing within equities over the last few weeks.
- **Analysts versus Mr Market** — Our DuPont market pricing tell us that already some very conservative assumptions are built into Resources and Industrial Cyclical PEs. In stark contrast analyst recommendations are bullish on cyclical risk, credit and interest rate sensitive stocks, so positioned for a cyclical rebound.
- **RAM Monitors** — Our RAM Monitors are pricing in a continued decline in the Australian Dollar, a slowdown in China's economy and bearish market sentiment.

Figure 1. Citi QuantIFI total index returns – rolling 1 month to 31 July, 2012



Source: Citi Research

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See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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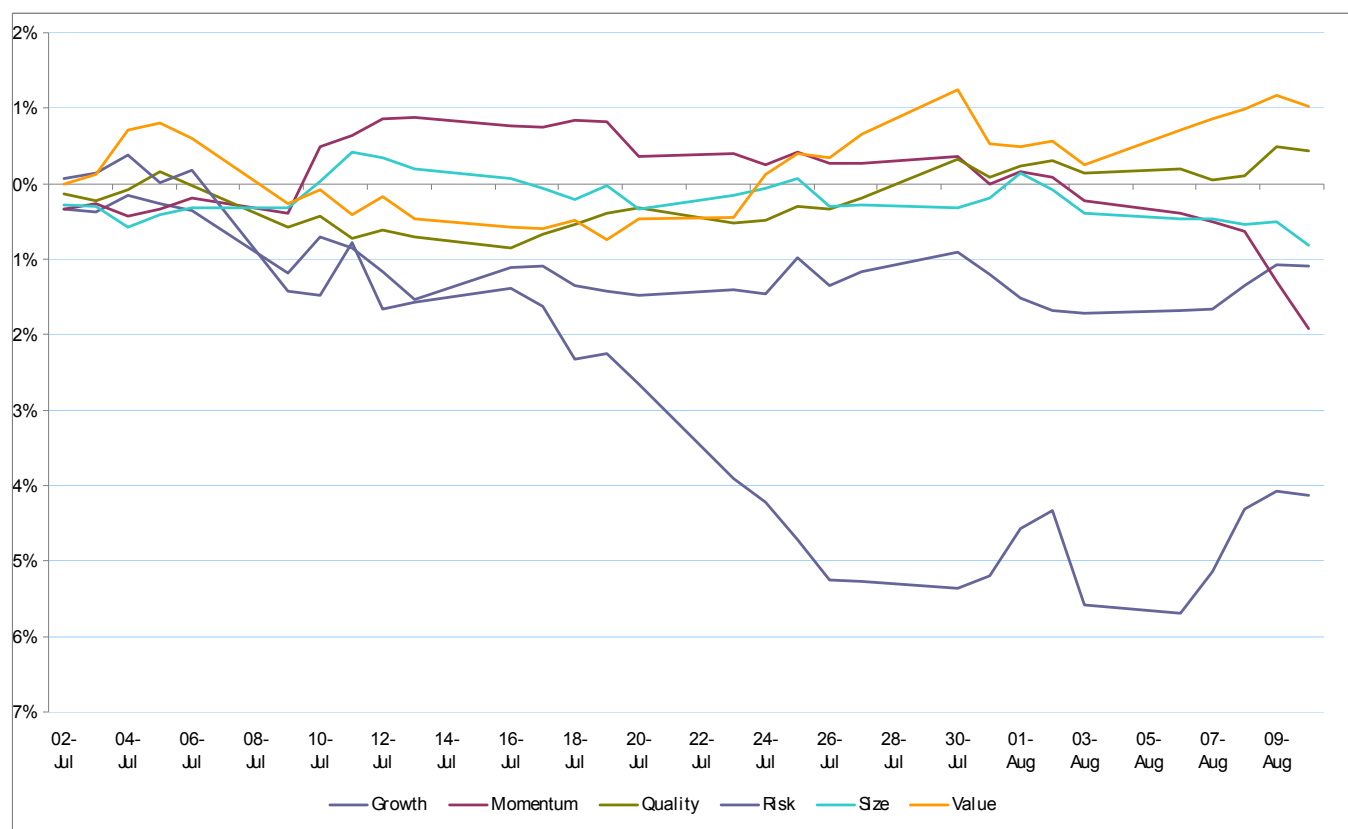
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Style View with QuantIFI

July was another volatile month for equity investors. It was a month that was characterized by continuing uncertainty surrounding the crisis in Europe and the US quarterly reporting season seeing companies report earnings above expectations. Domestically the economic data was positive, with the RBA seeing some early signs that its monetary policy is working, with the recent firming of house prices and business credit growth.

The early signs for August were encouraging for Australian equities. Since the 25th of July we have the S&P/ASX 200 accumulation rally by over 3.5%. The purpose of our note is to shed some light on the nature of this rally and the sell-off that preceded it, to describe the primary stock selection drivers within it. This also has important ramifications for trend based strategies such as price momentum, which rely on persistence in thematic in heavily macro driven markets.

Figure 2. Citi QuantIFI indices day by day since 1st of July (CITQAU Index on Bloomberg)



Source: Citi Research, Bloomberg

Figure 2 above highlights the evolution of our long short pure style indices over the last month and a bit. The sell-off was dominated by Risk. And it is Risk that has rallied over the last few days. What interests us particularly about this rally is what the common drivers of returns are at stock level. We note from the chart above that Quality has in fact in the Australian context kept on rallying in recent weeks.

We have heard a number of suggestions:

1. dividend yield basket swapped for beta stocks
2. high-gear balance sheets

Figure 3. Outperformers vs underperformers long short portfolio

Ticker	Outperformers	Underperformers
ILU	9.09%	
QAN	9.09%	
NCM	9.09%	
LEI	9.09%	
TOL	9.09%	
RIO	9.09%	
STO	9.09%	
CPU	9.09%	
ORG	9.09%	
MQG	9.09%	
WOR	9.09%	
IAG		9.09%
WOW		9.09%
SYD		9.09%
SHL		9.09%
DXS		9.09%
CCL		9.09%
AMC		9.09%
AGK		9.09%
TLS		9.09%
CSL		9.09%
TCL		9.09%

Source: Citi Research

We find that neither of these explanations perfectly match the returns and market behaviour we have seen. To test both of these we look at the top 11 outperformers and underperformers in the S&P/ASX 50 since 25 of July. (See Figure 3 in the margin)

We look at the exposures of this portfolio. This will enable us to test the exact nature of what has been driving this risk rally. These exposure are all translated into a z-score – e.g. number of standard deviations from the mean of the sample. For instance, a score 1 for a portfolio relative to a benchmark on dividend yield would signify that the portfolio had an positive exposure 1 standard deviation in excess of the average across the S&P/ASX 200.

Figure 4. Negative Exposure to Dividend Yield: winners have only marginally worse yields than losers



Source: Citi Research, IBES, Thomson TQA

Figure 5. Negative Exposure to Gearing: winners have less financial leverage than losers!



Source: Citi Research

Figure 4 and Figure 5 tell us essentially that the long short portfolio of winners versus losers in Figure 3 has neither a pronounced dividend yield exposure nor a gearing (net debt to equity) exposure.

One of the key questions in our minds is the necessary distinction between gearing and credit exposure. We have read much in the press and elsewhere about the markets rejection of highly geared companies, but we argue that this is better modeled as credit exposure.

The time series sensitivity of stocks to the Itraxx Australia 5Y IG spreads is a better proxy for the sort of common factor driving stock returns in recent weeks. This is the credit factor from our RAM model ([Australian RAM Version 2.0](#))

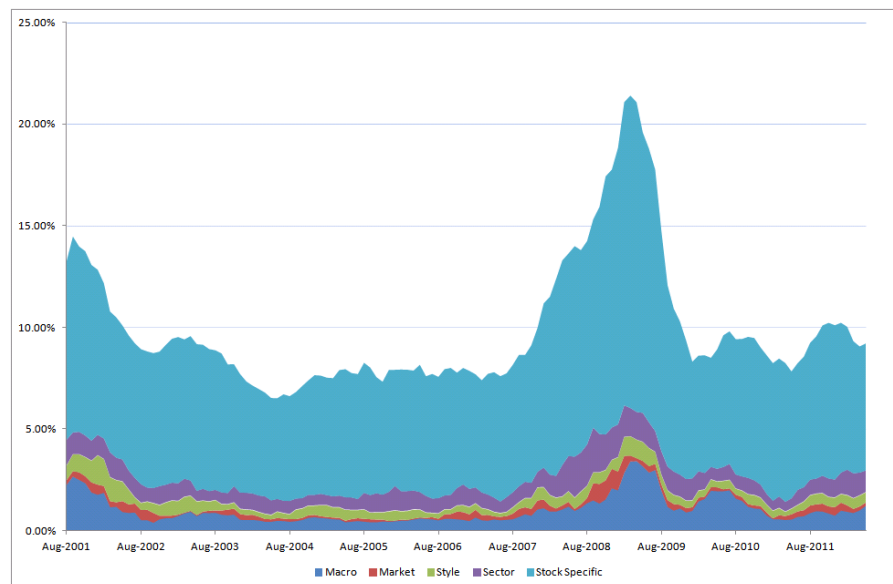
Figure 6. Nearly a one standard deviation exposure to easing credit conditions



Source: Citi Research, IBES, Thomson TQA

Financial market uncertainty continues to dominate the landscape, and Macro cross sectional volatility (Figure 7) has been continuing to creep up since early 2011, however is nowhere near levels reached during the Global Financial Crisis. We are currently sitting at levels synonymous with the end of 2007/early 2008 in Australian equities.

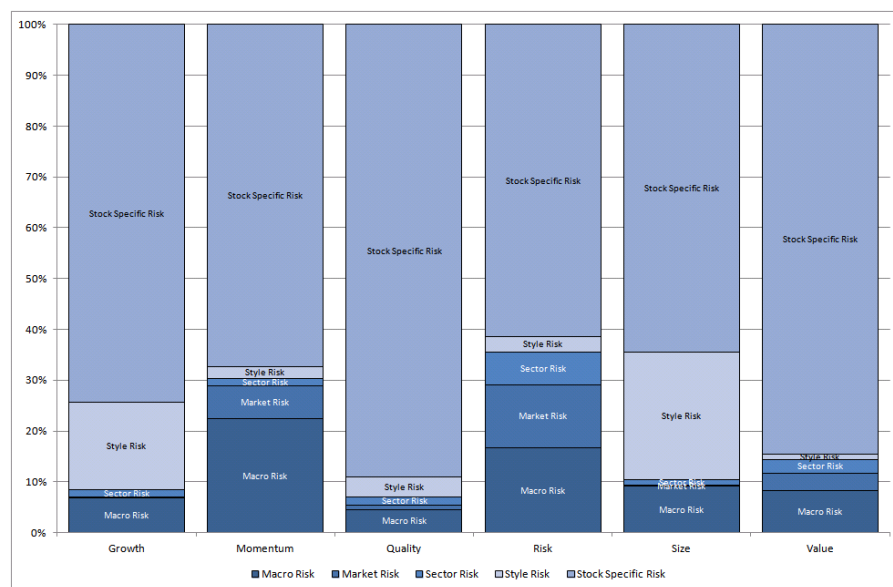
Figure 7. 6 month trend in cross-sectional volatility and its principal drivers



Source: Citi Research

Figure 8 shows that the Momentum style currently has the highest proportion of macro risk concentration of any of the styles, which is undoubtedly a result of macro driven markets that we are currently embroiled in. This currently represents the greatest risk to screening processes.

Figure 8. Macro Risk Concentration of Citi QuantFI Styles



Source: Citi Research

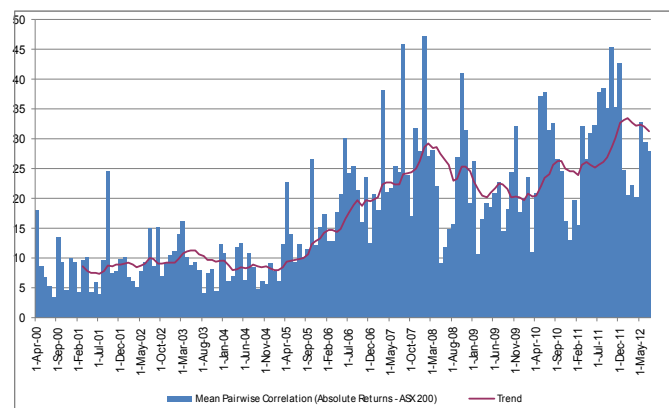
Figure 9. Macro Exposures of Style Portfolios

	Factor	Growth	Momentum	Quality	Risk	Size	Value
Macro	Economic Growth	1.09	1.65	0.36	-2.84	-0.73	-1.46
	China IP	-1.18	0.37	-1.11	0.59	-0.04	1.78
	Australia CDS	0.02	0.03	0.03	-0.05	0.01	0.01
	Australia Int Rate	-0.04	-0.02	0.04	0.06	0.02	-0.06
	AUD/USD	0.14	-0.31	0.16	0.34	-0.23	-0.05
	Australia Inflation	-1.39	-7.95	3.06	3.48	4.95	0.21
Market	Market	-0.07	-0.25	0.11	0.51	0.04	0.21
Style	QuantIFI Size Index	-0.58	0.39	-0.22	-0.60	1.34	0.08
	QuantIFI Growth Index	1.07	-0.02	0.31	0.20	-0.51	0.2
	QuantIFI Value Index	-0.23	0.01	-0.34	0.14	0.01	0.14
Sector	Energy	-0.04	0.04	-0.04	0.09	0.00	-0.09
	Materials	0.06	-0.04	-0.09	0.30	0.04	-0.11
	Industrials	0.10	-0.09	-0.08	0.00	0.05	-0.07
	Consumer.Discretionary	-0.03	0.00	-0.07	0.09	0.05	0.02
	Consumer.Staples	0.00	0.00	0.01	-0.02	0.01	0
	Health.Care	-0.01	0.02	0.01	-0.01	0.03	0.02
	Financials	-0.03	0.03	0.03	0.02	0.08	-0.02
	Information.Technology	0.00	-0.01	0.02	-0.01	0.00	-0.01
	Telecommunication.Services	0.00	0.01	0	0.00	0.01	0
	Utilities	0.00	0.00	0	0.00	0.00	0

Source: Citi Research

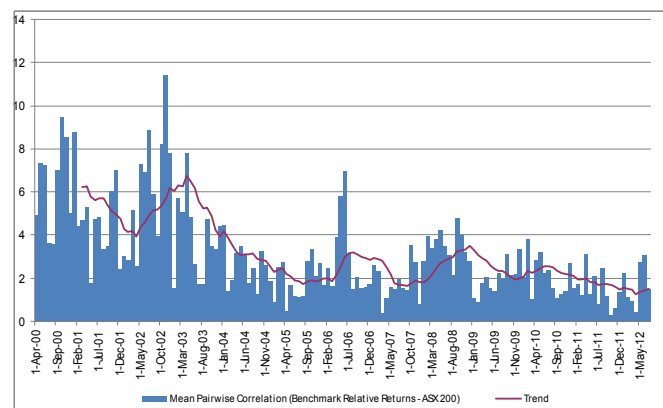
Looking at pairwise correlations (Figure 10 and Figure 11) between stocks over the last few months shows that correlations are currently high. Another means of gauging the environment for momentum strategies is looking at pairwise correlations in the market excess return space. We note a marked increase in excess return correlations over the last two months which inevitably leads to common factors showing an increased prevalence in driving the signal.

Figure 10. Pairwise Correlations



Source: Citi Research

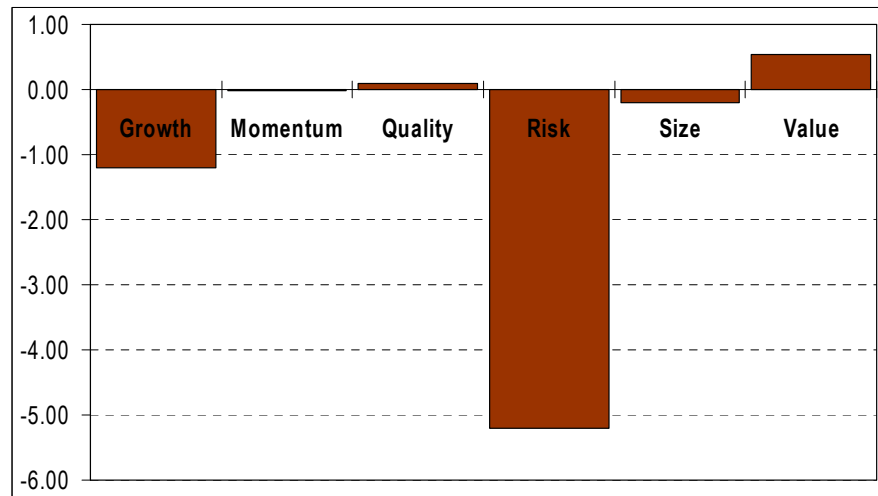
Figure 11. Pairwise Correlation of Market Excess Return



Source: Citi Research

Value was the best performer in July, whilst Risk continues to strongly underperform.

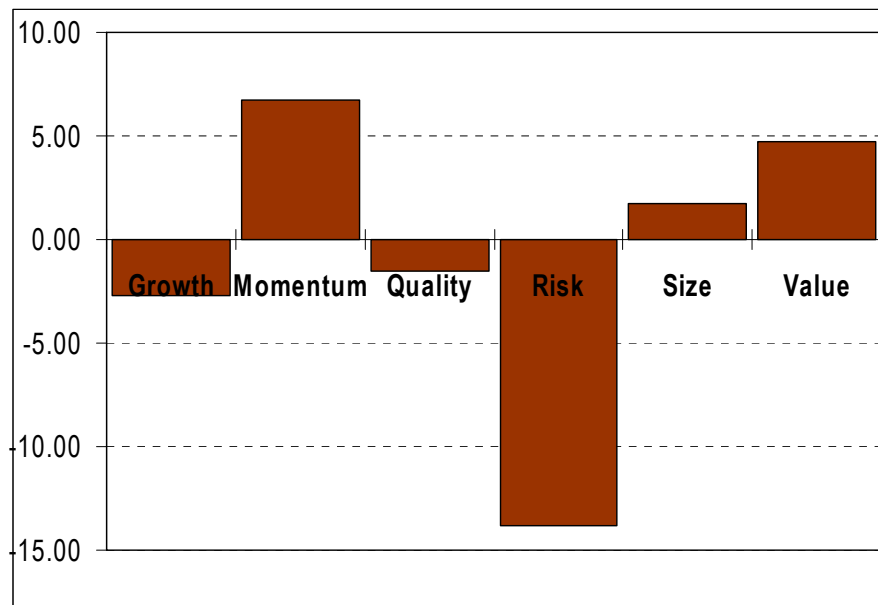
Figure 12. Citi QuantIFI total index returns – rolling 1 month to 31 July, 2012



Source: Citi Research

Momentum and Value are the standout performers on a rolling 12 month basis

Figure 13. Citi QuantIFI total index returns – rolling 12 months to 31 July, 2012



Source: Citi Research

Style and Factor Timing with Radar

The Australian Radar model is based on a number of Value and Momentum factors:

- **Value:** Earnings Yield, Book to price, Margin, Asset Turnover, Efficiency, Write Down and Total Liabilities
- **Momentum:** 100 day T-Stat and Earnings Revision Ratio

For complete details and backtesting results for the Australian Radar model, see: [Australian Radar Screen - Wholesale Revamp of Our Stock Selection Model](#), Citigroup Australian Quantitative Research, 25 August, 2011.

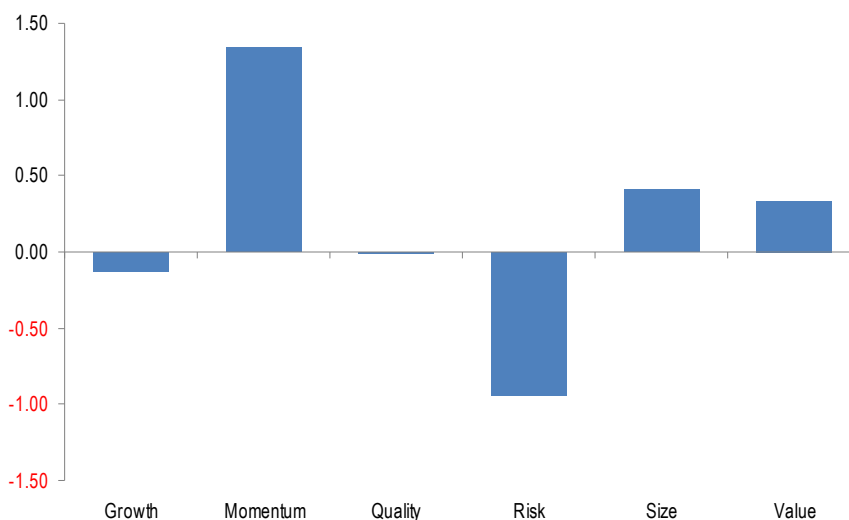
In the document we show that much of the performance attributable to Radar in the long run comes from rotating between QuantIFI styles Momentum, Value, Growth, Risk, Size and Quality, not sectors or stock specifics. The implied rotation has returned an IR of 1.3 since 1997, on a long short dollar neutral, sector neutral basis.

Although focused on valuation, it does take tilts to Growth and Quality at various points in the market, especially when cheap stocks look cheap for a reason, crowded out by unrealistic margin, turnover or leverage assumptions.

What is The Model Currently Saying?

As shown in Figure 14, in accordance with our qualitative view, the model favours Momentum, and Value, heavily underweight Risk and this month has reduced its small cap exposure.

Figure 14. Implied Style View (Exposure is a z-score relative to the S&P/ASX 200)



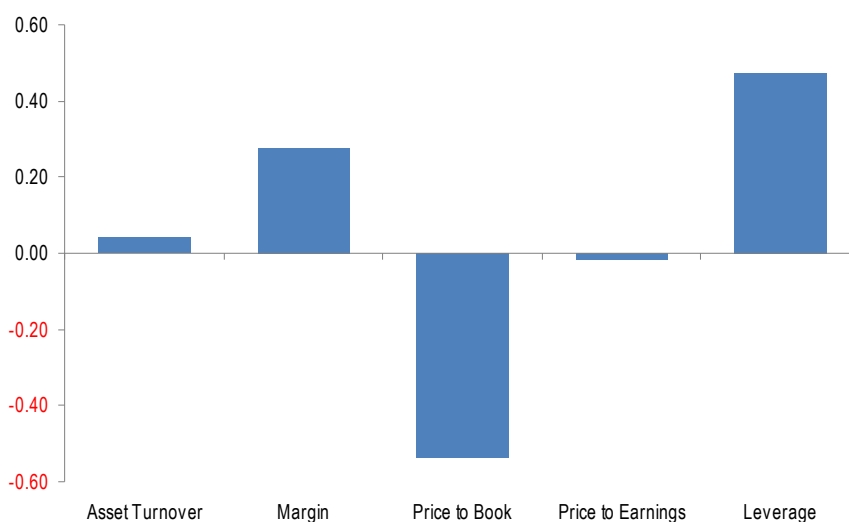
Source: Citi Research

Which Quality Factor Should I Be Using?

Looking at the process bottom-up, we have a number of levers that contribute to the overall alpha model. The cornerstone of the model is estimating the current PE price of each of the DuPont components of cyclicality, and estimating fair value net of what is explained by a stock's exposure to these.

Interestingly, the model has shifted its risk focus away from turnover and towards margins, perhaps reflecting a strong domestic economy where rates are low and potentially driving inflation and costs going forward. In addition, the model is still seeking the more highly geared names.

Figure 15. Implied Quality View



Source: Citi Research

Style and Macro Bias Monitors

We have previously shown that IBES Consensus Recommendations are subject to Style bias and that Earnings Revisions are subject to Macro bias¹. We can estimate the magnitude and direction of the bias through regression analysis.

In this section, we update our bias monitors to gauge whether analysts are especially leaning to one style or another with either their recommendations or their earnings changes.

These monitors can help us gauge where future style upside and downside risk lies as analysts seek to move their numbers to long term levels. It also serves as a qualitative guide as to what is currently priced in by equity analysts, a decent proxy for the institutional investment sector.

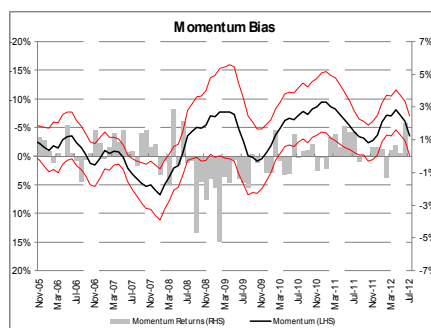
In terms of styles, analysts are remaining less overweight Momentum (Figure 16) and started to become overweight Growth again (Figure 18) in preference to Value (Figure 17). This is a positive sign that analysts are more aggressive with the Growth projections as a contributor to overall valuations.

For quant strategies we are not seeing any EPS changes as yet as a result of this global turmoil – this is an important point for EPS revision strategies. They become especially vulnerable once macro fears permeate changes. The only concern is the tilt to negative bond yields (Figure 26).

From a recommendation perspective analysts are positioned pro-cyclically: very tilted to stocks that benefit from a rising Australian dollar (Figure 33), easing credit conditions and rising bond yields. This is at odds to what the market has been penalizing in its risk averse state.

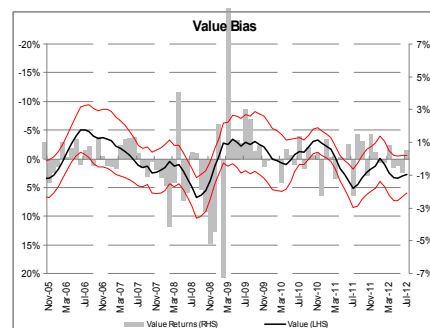
QuantIFI Analyst Style Bias Monitors

Figure 16. Momentum Monitor



Source: Citi Research

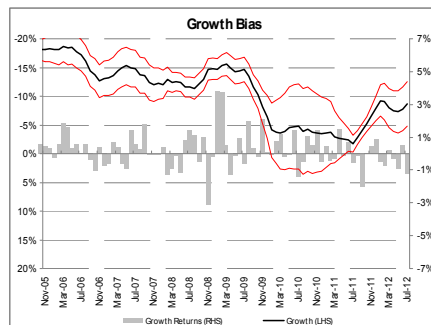
Figure 17. Value Monitor



Source: Citi Research

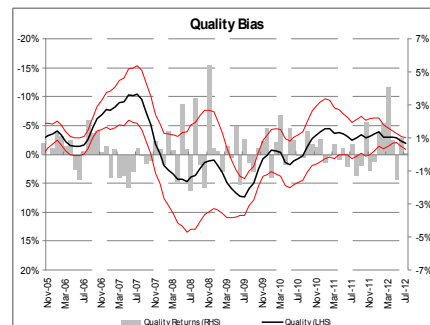
¹ See 'Searching for Alpha – On Forecasting Bias and Factor Conditioning', by Nick Morton, Citi Quantitative Research, March 19th, 2010

Figure 18. Growth Monitor



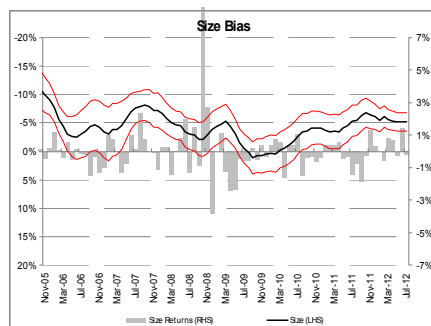
Source: Citi Research

Figure 19. Quality Monitor



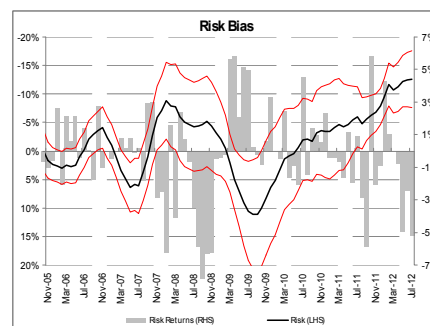
Source: Citi Research

Figure 20. Size Monitor



Source: Citi Research

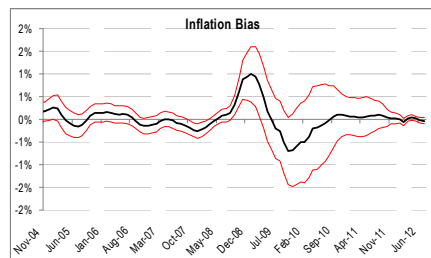
Figure 21. Risk Monitor



Source: Citi Research

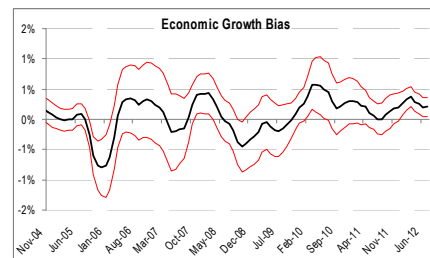
RAM Analyst EPS Bias Monitors

Figure 22. Inflation Bias



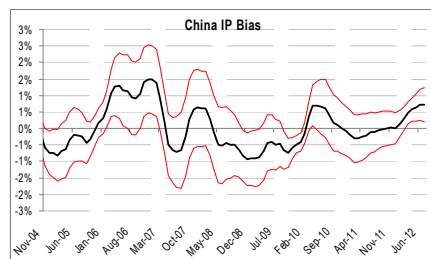
Source: Citi Research

Figure 23. Economic Growth Bias



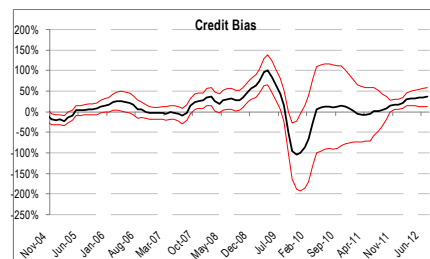
Source: Citi Research

Figure 24. China IP Bias



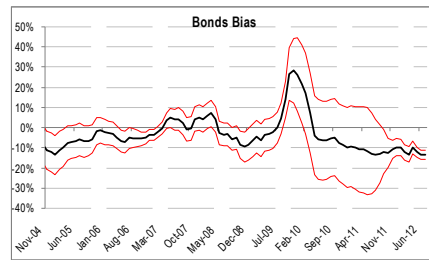
Source: Citi Research

Figure 25. Credit Bias



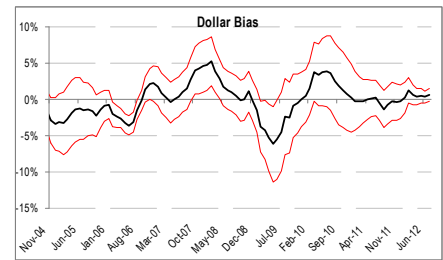
Source: Citi Research

Figure 26. Bonds Bias



Source: Citi Research

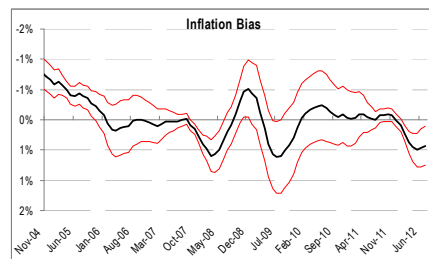
Figure 27. Dollar Bias



Source: Citi Research

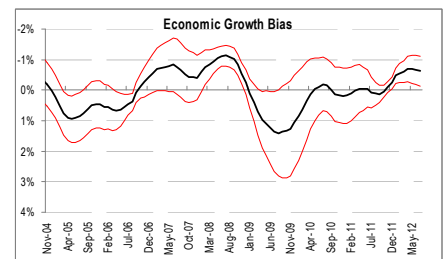
RAM Analyst Recommendation Bias Monitors

Figure 28. Inflation Bias



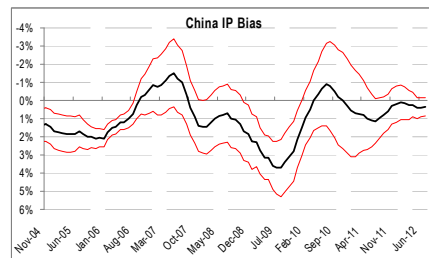
Source: Citi Research

Figure 29. Economic Growth Bias



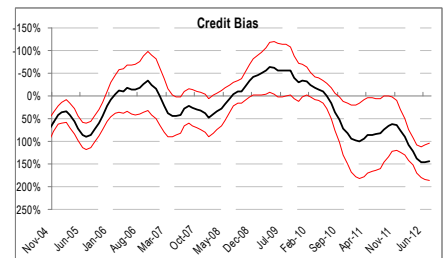
Source: Citi Research

Figure 30. China IP Bias



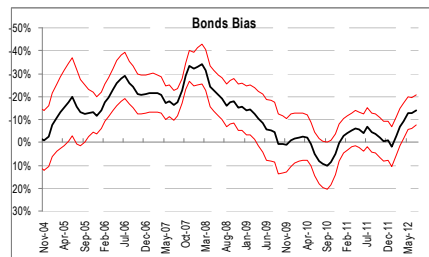
Source: Citi Research

Figure 31. Credit Bias



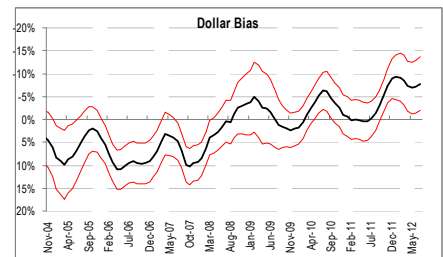
Source: Citi Research

Figure 32. Bonds Bias



Source: Citi Research

Figure 33. Dollar Bias



Source: Citi Research

DuPont Coefficients

In our recent revamp of the Australian Radar model, we show how de-ratings and re-ratings can be driven at different points in the cycle by the market's appetite for different forms of cyclical.

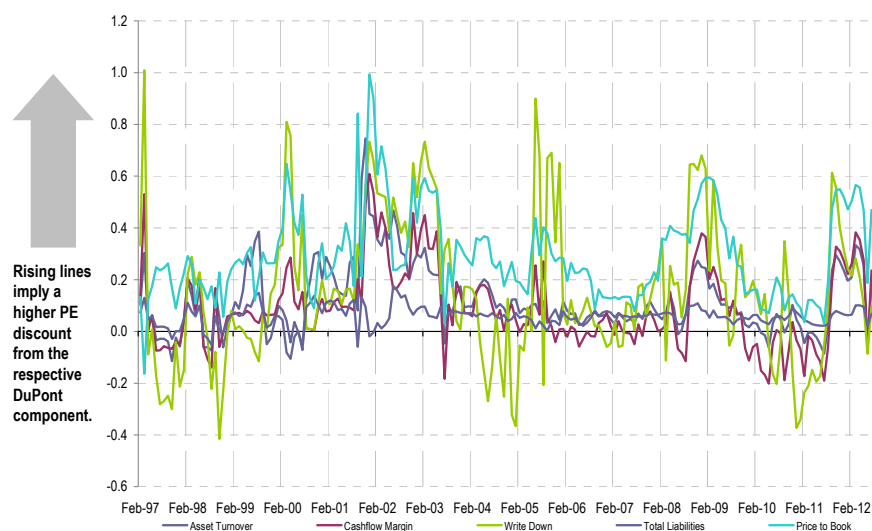
In our model, we run cross-sectional regressions of earnings yields against the DuPont components (Profit Margin, Asset Turnover, Total Liabilities) and book to price ratio in log-linear space – reflecting the non-linear relationships between the variables. Our DuPont breakdown in Financials comes from our Banks team, and breaks out ROE into Income Generation, Cashflow Margin, Write Down terms.

All of our data is based on 12m forward IBES consensus estimates. Generally speaking in Industrial Cyclical and Resources, the market applies a PE discount for cyclical, ie any stock with high margin, turnover or gearing.

Within all super-sectors we see investors have been selling off cyclical aggressively – suggesting only modest top down assumptions are currently priced into relative valuations.

Investors are gradually becoming more comfortable with the risks prevalent in the financial sector over late last year and early this year, potentially also re-rating stocks on the back of exceptionally attractive dividend yields.

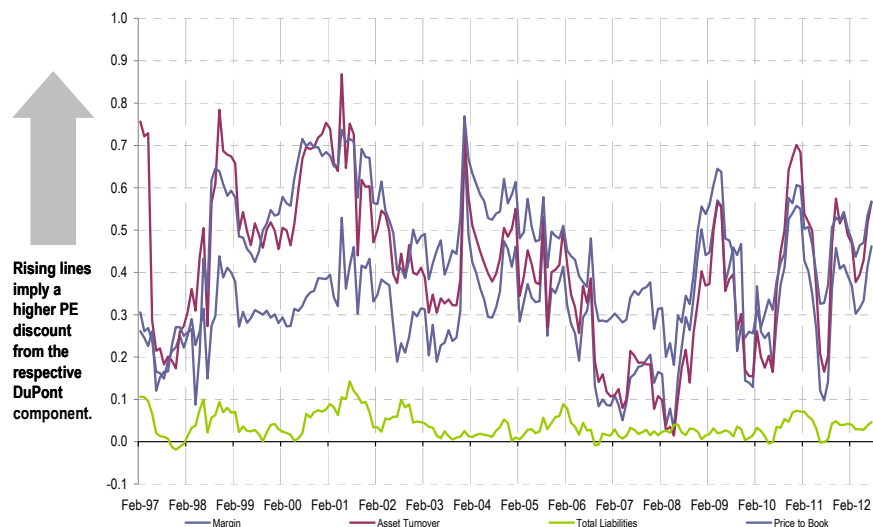
Figure 34. Financials



Source: Citi Research

With the prospect of interest rate cuts seemingly subsiding, we see all of the risk factors come back to bite the sector once again. We may need to wait until after reporting season before risks perceptions abate.

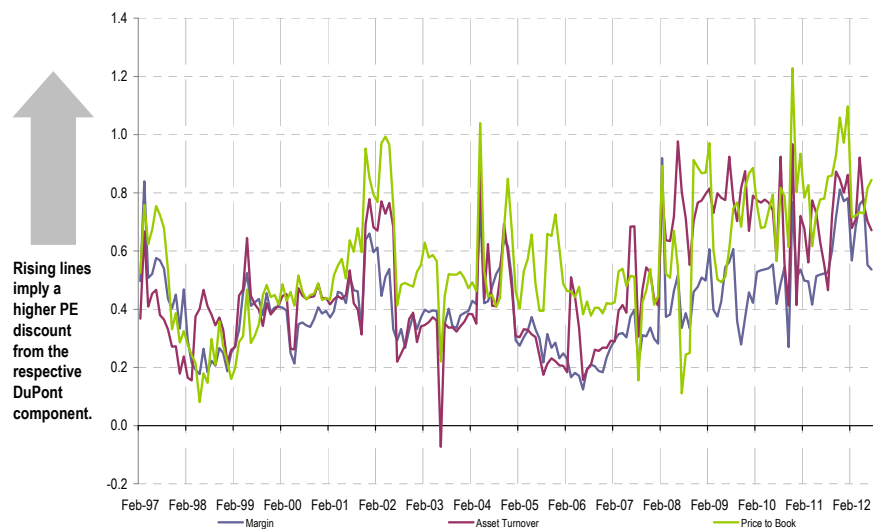
Figure 35. Industrial Cyclicals



Source: Citi Research

Cyclicality continues to be sold off aggressively and we are looking at some very conservative assumptions priced in. The book to price indicator to us suggests that the asset heavy diversified miners are de-coupling from the asset light junior players as the softening of commodities runs its course.

Figure 36. Resources



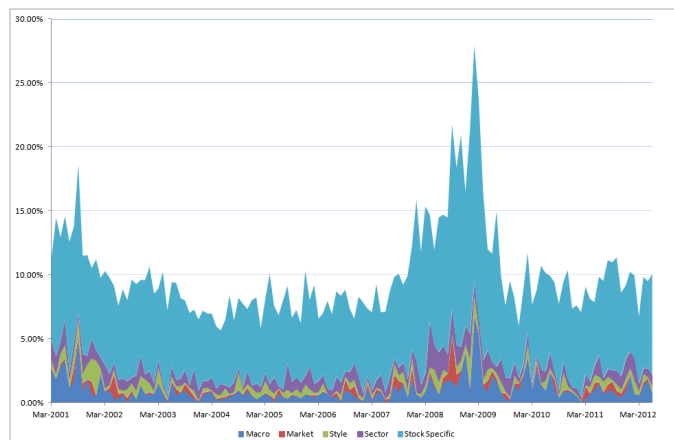
Source: Citi Research

Volatility Environment

The proportion of cross-sectional dispersion explained by macro has been on a downtrend, but picked up over recent months (See Figure 37). This is a key indicator for price momentum strategies in particular and active management in general.

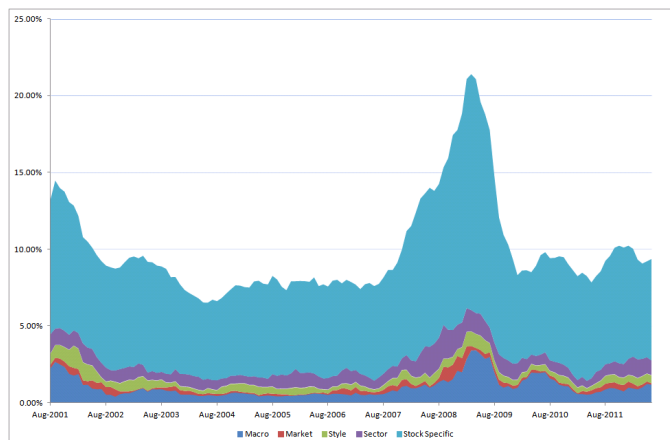
The charts below overall suggest an environment best described as tricky, though not impossible for active management. We are currently at levels synonymous with end of 2007/early 2008: alpha is quite possible with a bottom up stock selection process, though certainly not easy.

Figure 37. Cross-Sectional Volatility Decomposition



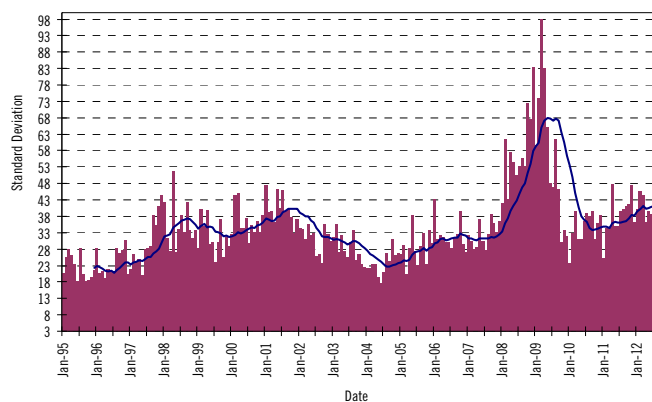
Source: Citi Research

Figure 38. Cross-Sectional Volatility Decomposition (6 month Trend)



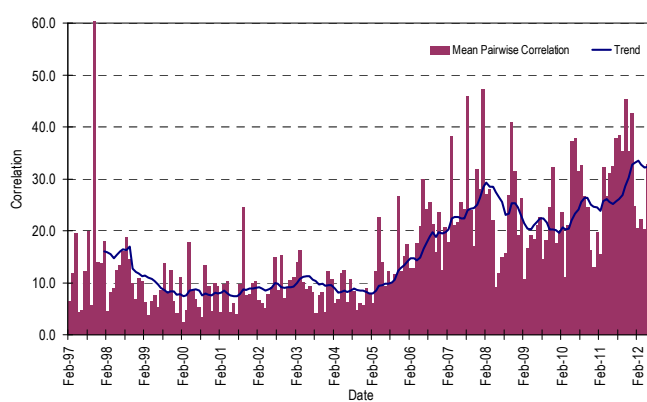
Source: Citi Research

Figure 39. Cross Sectional Dispersion S&P BMI Australia



Source: Citi Research

Figure 40. Mean-Pairwise Correlation S&P/ASX 200



Source: Citi Research

Screening Construction Strategy With In-Style

Figure 41 highlights the inter-quartile factor returns for the month of June. While the QuantIFI indices give us a broad Style view, these drill into specific factors and help gauge which particular indicators have or are working particularly well.

It is often surprising just how uncorrelated many factors within various categories can be in the Australian market. Perhaps this originates in the lack of breadth, which can clearly lead to style or stock specific biases, but regardless actual factor selection thus becomes an important consideration in designing a screen or similar quantitative stock selection process. Broad performance statistics are just one useful part of the selection process.

Momentum strategies performed favorably over July. Of particular note, all short term price momentum strategies and likewise dividend yield continued to perform well in this environment.

Figure 41. Long Top Quintile Short Bottom Quintile Factor Returns

S&P/ASX 200	Returns										IC					IR's				
	1m		3m		1y		2y		5y		1M		12M		5Y		12M		5y	
Growth																				
1Y EPS Growth	3.0%	(20)	6.1%	(20)	6.6%	(26)	-7.8%	(31)	7.7%	(14)	8.6%	(26)	3.7%	(17)	1.0%	(18)	0.7	(20)	0.2	(12)
EPS Trend Growth (3+2)	-3.8%	(44)	-10.0%	(44)	-16.2%	(45)	-1.5%	(25)	2.9%	(20)	-16.2%	(47)	-3.4%	(46)	0.9%	(20)	-1.3	(48)	0.1	(21)
Historical EPS Growth	-3.5%	(43)	-3.3%	(40)	-5.0%	(42)	-8.0%	(32)	8.6%	(11)	-10.9%	(45)	-1.5%	(41)	-0.8%	(38)	-0.6	(43)	0.2	(15)
Long Term PEG Ratio	-6.1%	(45)	-14.7%	(45)	-15.9%	(44)	-8.8%	(35)	-8.9%	(28)	26.1%	(7)	7.2%	(5)	0.7%	(22)	-0.9	(46)	0.0	(25)
PEG Ratio	-0.9%	(36)	-4.0%	(41)	8.0%	(21)	11.8%	(15)	-20.4%	(37)	8.7%	(25)	-0.2%	(37)	1.7%	(12)	0.8	(14)	-0.3	(40)
Liquidity																				
260D Trading Value	1.3%	(30)	8.3%	(18)	9.7%	(16)	2.6%	(23)	16.0%	(7)	9.5%	(22)	2.2%	(24)	1.9%	(9)	1.1	(7)	0.3	(8)
30 Days to 260 Days Trading Value	6.4%	(7)	10.7%	(11)	17.4%	(6)	34.1%	(6)	7.9%	(12)	23.2%	(11)	4.5%	(11)	2.5%	(7)	1.4	(4)	0.2	(13)
Momentum																				
Dividends Revision Ratio	2.4%	(23)	5.9%	(21)	14.8%	(10)	22.3%	(9)	11.0%	(9)	17.7%	(16)	6.4%	(6)	1.6%	(13)	1.7	(2)	0.2	(10)
Earnings Revisions Ratio	-0.7%	(35)	6.1%	(19)	17.1%	(9)	30.9%	(8)	-14.5%	(31)	1.7%	(36)	8.2%	(4)	1.4%	(16)	1.9	(1)	-0.2	(34)
% Earnings Momentum (6M)	-2.3%	(41)	-0.6%	(34)	5.9%	(28)	15.8%	(13)	10.9%	(10)	-4.0%	(40)	4.2%	(15)	1.5%	(14)	0.5	(27)	0.4	(4)
% Price Change (12M)	9.3%	(4)	17.3%	(4)	21.1%	(3)	52.8%	(1)	6.0%	(15)	34.9%	(2)	6.2%	(7)	2.9%	(4)	0.9	(10)	0.2	(11)
% Price Change (1M)	6.1%	(10)	22.4%	(3)	14.2%	(11)	16.5%	(12)	66.8%	(2)	28.0%	(5)	8.3%	(3)	3.7%	(2)	0.5	(26)	0.5	(3)
% Price Change (3M)	9.8%	(2)	26.7%	(1)	28.1%	(2)	48.2%	(2)	111.1%	(1)	39.5%	(1)	11.5%	(2)	6.2%	(1)	1.0	(9)	0.8	(1)
% Price Change (6M)	6.0%	(11)	15.3%	(7)	14.0%	(13)	35.1%	(5)	25.2%	(4)	22.6%	(13)	3.3%	(18)	3.0%	(3)	0.6	(23)	0.3	(5)
% Price Change (9M)	8.2%	(5)	16.9%	(5)	18.6%	(4)	46.8%	(3)	-3.3%	(23)	27.8%	(6)	5.4%	(8)	1.8%	(11)	0.8	(15)	0.1	(19)
First 11 of Last 12M	9.8%	(1)	14.1%	(8)	14.1%	(12)	45.0%	(4)	-6.2%	(25)	32.1%	(4)	5.3%	(9)	2.5%	(6)	0.8	(17)	0.1	(23)
First 5 of Last 6M	5.6%	(13)	9.4%	(15)	2.0%	(33)	22.1%	(10)	-13.9%	(30)	18.5%	(15)	-0.7%	(38)	1.4%	(17)	0.2	(34)	0.0	(24)
Profitability																				
EBIT Margin	3.7%	(17)	9.3%	(16)	9.0%	(18)	5.1%	(19)	-15.8%	(34)	9.3%	(24)	1.9%	(26)	-0.2%	(31)	0.8	(18)	-0.2	(36)
Forecast Net Margin	-2.7%	(42)	-2.8%	(38)	-2.7%	(39)	19.3%	(11)	-7.3%	(27)	-6.1%	(43)	0.9%	(29)	1.0%	(19)	-0.2	(39)	0.0	(27)
Forecast ROE	-0.1%	(34)	3.0%	(28)	8.8%	(19)	3.7%	(21)	5.1%	(17)	-2.8%	(39)	3.1%	(19)	2.6%	(5)	1.0	(8)	0.1	(17)
Reported Net Margin	2.2%	(24)	5.7%	(22)	-1.5%	(37)	-8.7%	(34)	-16.3%	(36)	5.4%	(28)	0.0%	(35)	-0.4%	(34)	-0.1	(37)	-0.6	(46)
Reported ROE	2.7%	(22)	8.7%	(17)	6.8%	(24)	-13.9%	(39)	-5.4%	(24)	4.5%	(29)	2.5%	(22)	0.9%	(21)	0.5	(25)	0.0	(29)
Quality																				
Dividends Estimate Dispersion FY1	-7.8%	(48)	-16.4%	(48)	-17.0%	(46)	-14.0%	(40)	4.6%	(18)	-36.8%	(48)	-8.8%	(48)	-1.2%	(41)	-0.7	(44)	0.1	(18)
Asset Turnover Ratio	0.6%	(33)	1.7%	(31)	4.0%	(30)	-14.4%	(42)	-22.4%	(38)	-0.5%	(38)	1.6%	(27)	-1.6%	(45)	0.4	(30)	-0.6	(47)
Financial Leverage	-7.4%	(47)	-15.7%	(47)	-18.8%	(48)	-5.2%	(28)	18.7%	(6)	25.6%	(8)	4.5%	(13)	0.5%	(24)	-0.9	(47)	0.3	(9)
Gearing Ratio	-6.9%	(46)	-15.2%	(46)	-18.4%	(47)	-5.0%	(27)	21.5%	(5)	23.8%	(9)	4.3%	(14)	0.3%	(27)	-0.9	(45)	0.3	(7)
Interest Cover	-1.1%	(38)	-0.8%	(35)	-2.1%	(38)	-13.6%	(38)	4.2%	(19)	-6.6%	(44)	0.4%	(33)	1.5%	(15)	-0.3	(41)	0.1	(20)
Tax Cover	3.2%	(19)	5.0%	(23)	6.6%	(25)	14.5%	(14)	-6.9%	(26)	12.2%	(19)	2.1%	(25)	0.6%	(23)	0.9	(12)	0.0	(28)
Cashflow to Earnings	5.8%	(12)	10.6%	(13)	17.2%	(8)	3.0%	(22)	47.7%	(3)	15.1%	(17)	2.6%	(20)	1.8%	(10)	1.2	(6)	0.7	(2)
Earnings Estimate Dispersion FY1	-0.9%	(37)	3.0%	(29)	5.4%	(29)	-3.4%	(26)	-16.2%	(35)	-0.3%	(37)	-2.9%	(44)	0.3%	(26)	0.7	(19)	-0.2	(33)
Earnings Estimate Variability (Hist)	3.9%	(15)	11.3%	(10)	11.0%	(15)	10.2%	(17)	14.9%	(8)	-13.5%	(46)	-3.7%	(47)	-1.4%	(43)	0.7	(21)	0.3	(6)
Risk																				
260D Volatility - LC	6.4%	(7)	10.7%	(11)	17.4%	(6)	34.1%	(6)	7.9%	(12)	23.2%	(11)	4.5%	(11)	2.5%	(7)	1.4	(4)	0.2	(13)
Valuation																				
Book Yield	1.3%	(31)	-0.2%	(33)	0.6%	(36)	-6.7%	(30)	-29.4%	(41)	3.8%	(31)	-2.3%	(43)	-2.6%	(47)	0.1	(36)	-0.2	(37)
Book Yield FY1	1.1%	(32)	-1.2%	(36)	-4.5%	(41)	-8.3%	(33)	-40.6%	(44)	3.1%	(32)	-3.3%	(45)	-3.0%	(48)	-0.3	(42)	-0.4	(42)
Cashflow Yield	1.6%	(27)	2.3%	(30)	2.0%	(34)	-20.9%	(47)	-13.3%	(29)	2.9%	(34)	-0.1%	(36)	-0.2%	(32)	0.2	(33)	-0.1	(32)
Cashflow Yield FY1	1.5%	(28)	-2.8%	(39)	-3.4%	(40)	-14.4%	(41)	-27.0%	(40)	5.9%	(27)	-2.1%	(42)	-1.1%	(40)	-0.2	(38)	-0.3	(38)
Dividend Yield	6.1%	(9)	16.2%	(6)	17.8%	(5)	0.8%	(24)	-39.3%	(43)	23.7%	(10)	4.9%	(10)	0.0%	(30)	0.9	(13)	-0.3	(39)
Dividend Yield FY1	9.6%	(3)	23.8%	(2)	36.0%	(1)	11.1%	(16)	-51.0%	(48)	33.1%	(3)	11.6%	(1)	0.5%	(25)	1.4	(3)	-0.4	(45)
Earnings Yield (12m Forward)	-1.6%	(39)	-6.0%	(42)	6.8%	(23)	8.9%	(18)	-44.8%	(46)	-5.3%	(41)	0.1%	(34)	-1.6%	(46)	0.5	(28)	-0.4	(44)
Earnings Yield (Trailing)	4.3%	(14)	11.4%	(9)	12.5%	(14)	-13.4%	(37)	-50.4%	(47)	12.6%	(18)	3.7%	(16)	-1.4%	(44)	0.9	(11)	-0.9	(48)
Earnings Yield FY1	2.8%	(21)	3.3%	(27)	9.2%	(17)	4.4%	(20)	-41.5%	(45)	9.3%	(23)	2.3%	(23)	-0.4%	(33)	0.6	(22)	-0.4	(43)
Earnings Yield FY2	-2.2%	(40)	-9.1%	(43)	-5.6%	(43)	-6.5%	(29)	-31.3%	(42)	-6.0%	(42)	-1.4%	(40)	-0.8%	(39)	-0.3	(40)	-0.2	(35)
EBIT to EV	1.8%	(26)	3.3%	(26)	2.5%	(32)	-21.3%	(48)	-22.9%	(39)	4.0%	(30)	1.3%	(28)	-0.6%	(37)	0.2	(32)	-0.3	(41)
EBITDA to Enterprise Value	1.5%	(29)	0.2%	(32)	3.9%	(31)	-18.8%	(46)	5.5%	(16)	1.7%	(35)	0.8%	(31)	0.0%	(29)	0.4	(31)	0.1	(16)
Free Cashflow Yield	6.6%	(6)	9.6%	(14)	8.6%	(20)	-9.0%	(36)	-3.3%	(22)	18.6%	(14)	2.6%	(21)	0.0%	(28)	0.8	(16)	0.0	(22)
Sales to Enterprise Value	3.8%	(16)	4.0%	(24)	6.9%	(22)	-16.3%	(45)	2.3%	(21)	9.6%	(21)	0.5%	(32)	-0.6%	(36)	0.6	(24)	0.1	(26)
Sales Yield	3.3%	(18)	3.7%	(25)	6.4%	(27)	-15.6%	(44)	-15.5%	(33)	10.8%	(20)	0.8%	(30)	-0.5%	(35)	0.5	(29)	0.0	(30)
Sales Yield FY1	2.1%	(25)	-1.3%	(37)	1.2%	(35)	-15.3%	(43)	-14.8%	(32)	3.0%	(33)	-1.1%	(39)	-1.3%	(42)	0.2	(35)	-0.1	(31)

Source: Citi Research

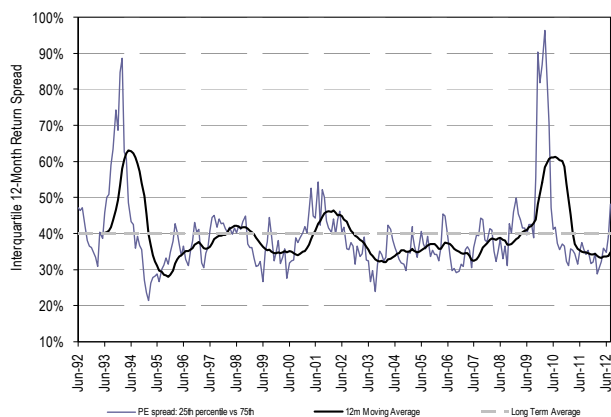
Quantitative Market Health Check

We measure the market's pulse below using valuations, earnings revisions, pair wise correlations & dispersion.

The Opportunity Set

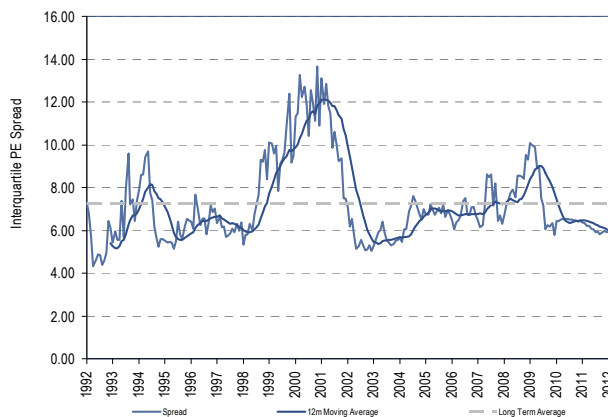
The 12-month S&P/ASX 200 return spread remains at below long term levels, despite all of the negative newsflow. This is in stark contrast to 2008-2009. The PE Spread has stabilized below the long term average, suggesting Growth is cheap.

Figure 42. 12-Month Return Spread – S&P/ASX 200, Quartile 4 less Quartile 1



Source: Citi Research, IBES

Figure 43. 12-Month Forward PE Spread – Quartile 4 less Quartile 1



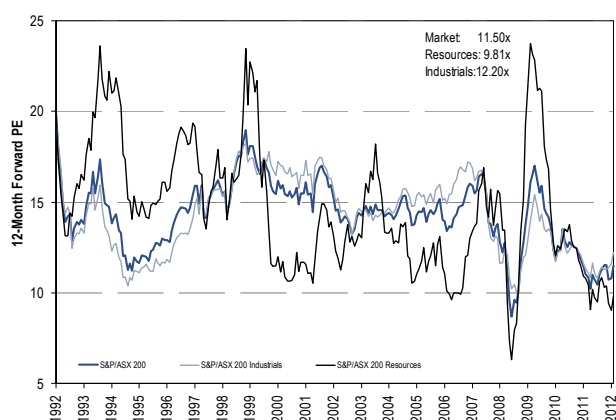
Source: Citi Research, IBES

Market Valuation

Valuations within Australia are still compelling. The market continues to look cheap at just over 11.5x – this is well below the long term average of 15x. Overall this suggests that valuations will still hold up even if we see downgrades to the macro-economic outlook or due to the currency maintaining a lofty level.

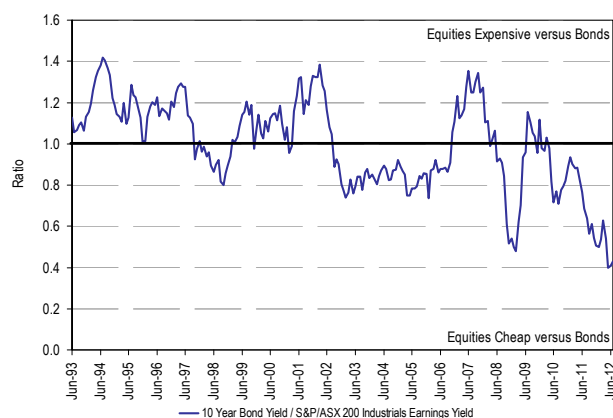
Implied ROE and Price to Book ratios are in line with long-term averages. The Fed Model (Figure 45) shows that equities remain impossibly cheap relative to bonds at present – at its lowest levels since the series began back in 1993. This feels particularly at odds with the stream of positive local macro-economic data.

Figure 44. 12 Month Forward PEs – S&P/ASX 200



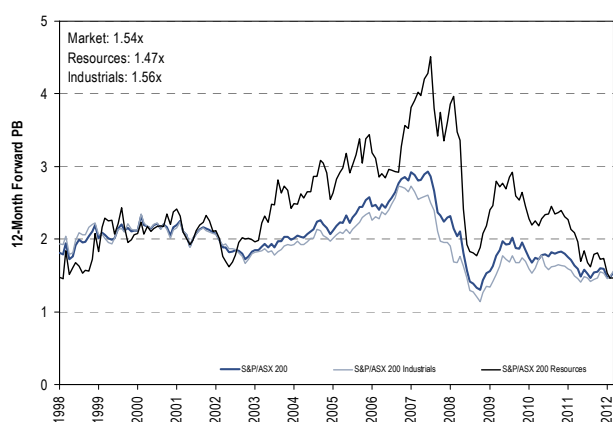
Source: Citi Research, IBES

Figure 45. 10 Year Bond Yield versus 10 Year Earnings Yield



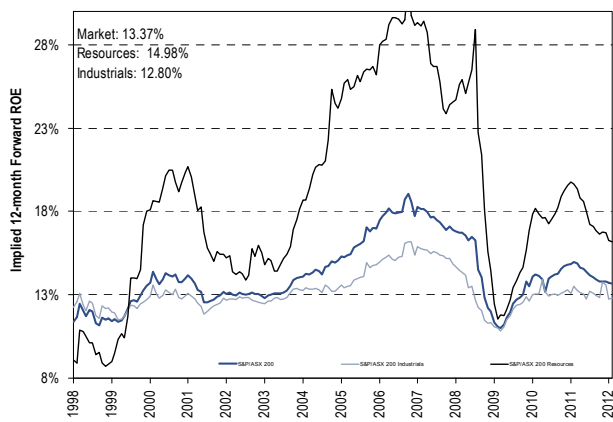
Source: Citi Research, IBES

Figure 46. 12 Month Forward PBs – S&P/ASX 200



Source: Citi Research, IBES

Figure 47. Implied ROE – S&P/ASX 200

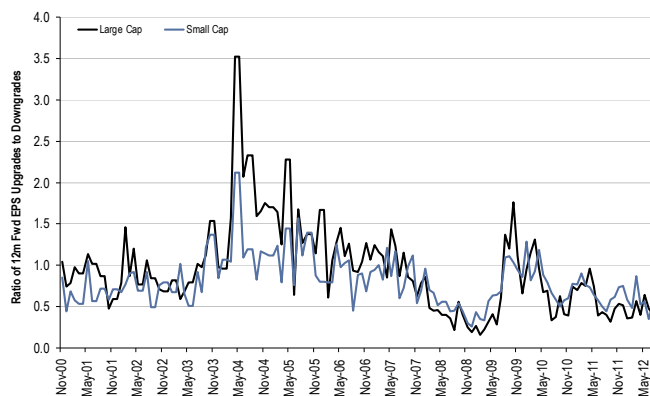


Source: Citi Research, IBES

Earnings Revisions Update

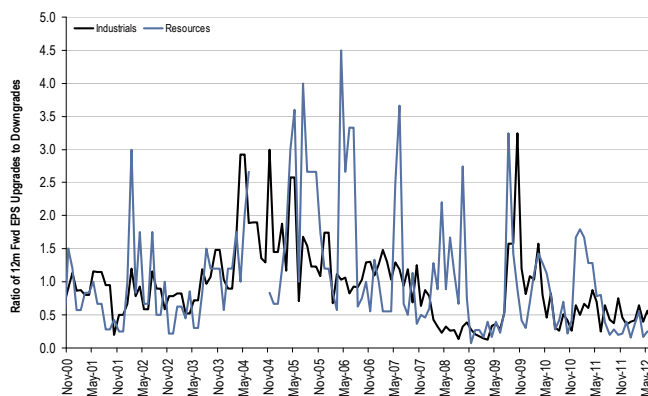
We continue to see downgrades within the Resources as analysts revise down commodity expectations. Additionally, we are continuing to see negative earnings momentum in all segments, Resources, Industrials, Smalls and Large Caps, a consistent theme over the last 12 months.

Figure 48. Consensus EPS Revisions – Large Caps versus Small Caps



Source: Datastream, IBES, S&P

Figure 49. Consensus EPS Revisions – Resources versus Industrials



Source: Datastream, IBES, MSCI

Value-Growth Style Analysis

Value-Growth Index Performance

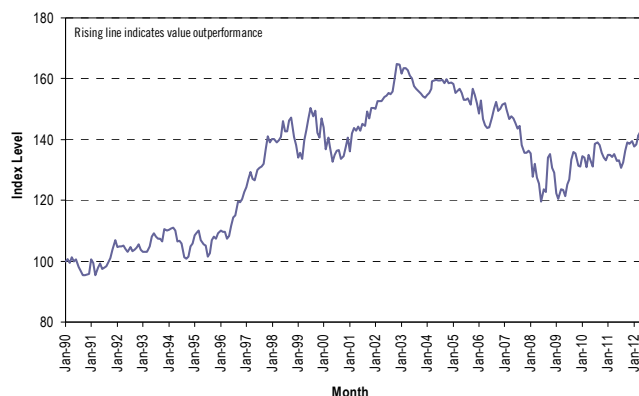
The S&P BMI Australia Value index outperformed its Growth counterpart by 2.68% over the month of July.

Figure 50. Growth and Value Stock Performance for Major Markets

	Month Ending 31/7/2012			YTD 2012		
	Value Return	Growth Return	Performance of Growth Over Value	Value Return	Growth Return	Performance of Growth Over Value
Regional Composites (\$US)	(%)	(%)	(%)	(%)	(%)	(%)
Asia Pacific	1.66	0.86	-0.80	-6.55	-9.56	-3.01
Europe	0.69	1.35	0.66	-9.98	-4.96	5.02
North America	1.09	1.25	0.16	7.83	10.51	2.68
World	1.09	1.22	0.12	0.13	2.35	2.23
Country (local ccy)	(%)	(%)	(%)	(%)	(%)	(%)
Australia	5.27	2.58	-2.68	10.41	2.92	-7.50
Canada	1.02	0.35	-0.67	-0.76	-1.97	-1.21
US	0.94	1.18	0.24	10.09	10.92	0.84
France	2.63	3.06	0.42	5.17	12.71	7.54
Germany	4.33	6.42	2.09	14.32	16.07	1.75
Italy	-3.81	-1.47	2.34	-6.69	0.29	6.98

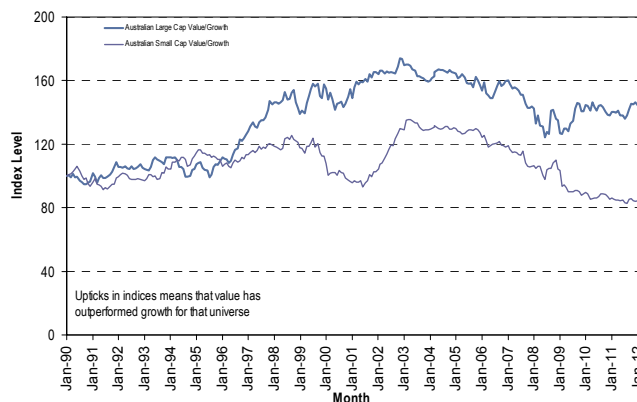
Source: Citi Research

Figure 51. Australian Exhaustive Value/Growth Index



Source: Citi Research

Figure 52. Small & Large Cap Value/Growth Performance

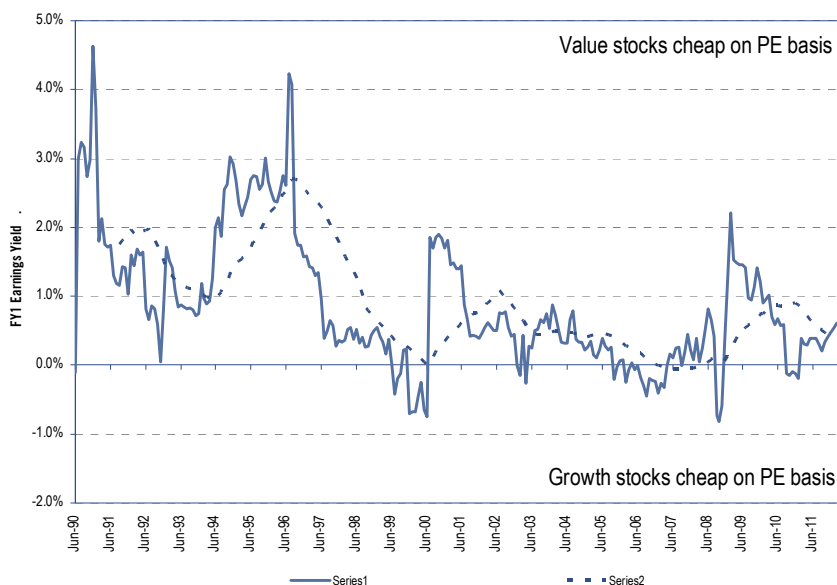


Source: Citi Research

Style-Timing Model

Our style timing model picks Value for August, driven by a flattening yield curve which is a key component of our Style Timing model. The downwards momentum in long term bond yields and a flattening yield curve are generally associated with Value outperformance, through their association with weak future economic prospects.

Figure 53. FY1 Earnings Yield Spread between S&P BMI Australia Value and Growth Indices



Source: Citi Research, IBES

Quant-Style Timing Model Performance

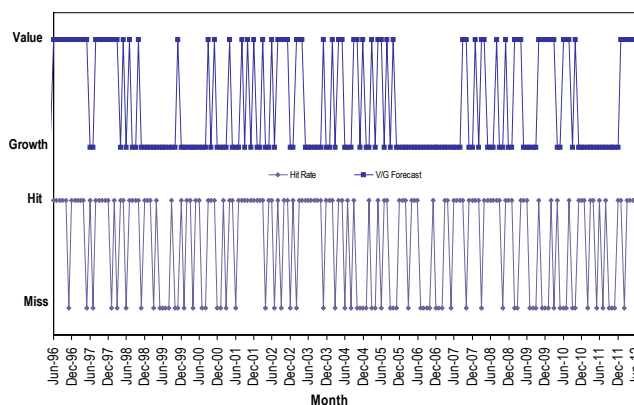
Figure 54 shows the historical outperformance achieved by investing in the model's predicted outperforming style, relative to a portfolio invested in a 50/50 benchmark consisting of value and growth stocks.

Figure 54. Australian Style Model Outperformance Index



Source: Citi Research

Figure 55. Monthly Forecasts vs. Actual Results



Source: Citi Research

Figure 56 shows the accuracy of the model. The model has achieved an out of sample overall 'hit rate' of approximately 60%, in correctly explaining which style has outperformed over the period since 1996. It has been particularly effective at predicting Value over Growth with a hit rate of 65.3% when it has favored Value.

Figure 56. Style Timing Model Hit Rate

	% of times model has correctly selected	
	Value over Growth	Growth over Value
Hit	65.3%	57.8%
Miss	34.7%	42.2%

Source: Citi Research

Model Factors

In arriving at the end model, we tested a set of factors within these broad groupings:

- **Economic** – growth, inflation, interest rates, yield curve;
- **Valuation** - earning yield for the overall market and on a value/growth relative basis, earning yield to bond yield gap, real bond yield;
- **Growth** – earnings growth for the overall market and on a value/growth relative basis, encompassing short and longer term measures; and
- **Momentum** – short and medium term price momentum, earnings revision.

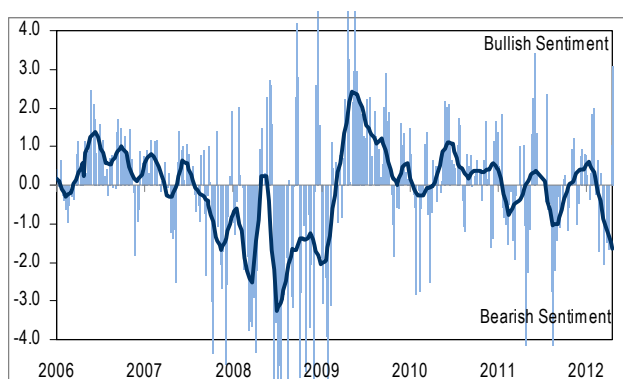
RAM Monitors: What is the Market Pricing?

Another useful set of market diagnostics is the Citi RAM Monitors. The Citi RAM (Risk Attribute Model) is a quantitative model that measures the historical relationship between individual stock returns and macroeconomic factors. The RAM Monitors are one application of this model – essentially a reverse engineering of the model to tell us which factors the market is buying or selling.² Note the RAM betas and covariance matrix have been re-estimated as at the 31st of July, 2012.

What have the RAM Monitors been saying?

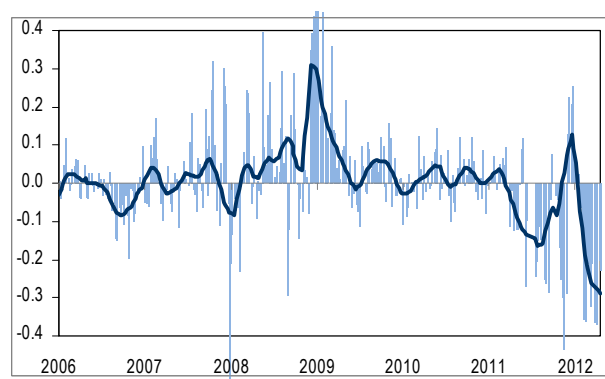
The Inflation Monitor (Figure 58) is showing that investors are pricing in an easing cycle for a while in anticipation of rates moving down. The Drift monitor (Figure 57) remains in negative territory suggesting that investors are continuing to be cautious about the market.

Figure 57. Drift or “Sentiment” Monitor



Source: Citi Research

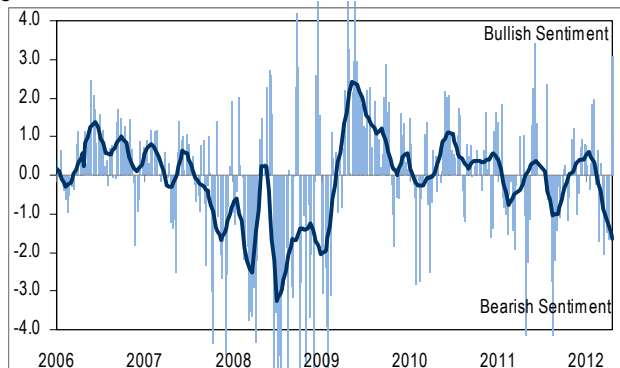
Figure 58. Inflation Monitor



Source: Citi Research

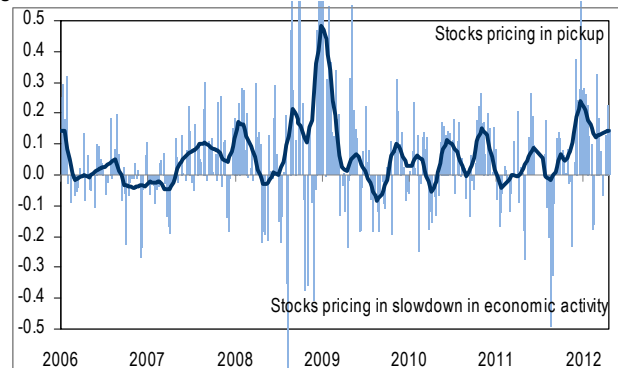
² For further details of the RAM model see: 'Australian RAM Version 2.0 – Wholesale Changes to our Flagship Macroeconomic Risk Model', 31st May 2011, Citigroup Global Quantitative Research

Figure 59. Drift or "Sentiment" Monitor



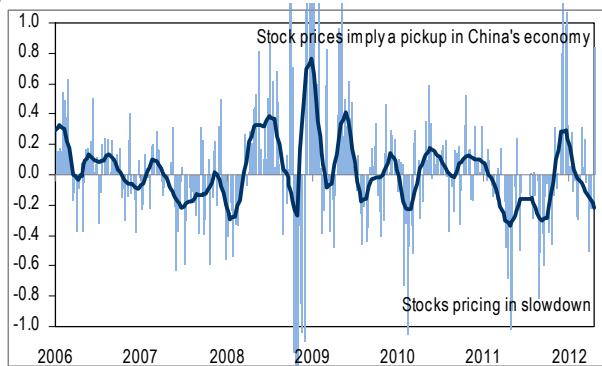
Source: Citi Research

Figure 60. Economic Growth Monitor



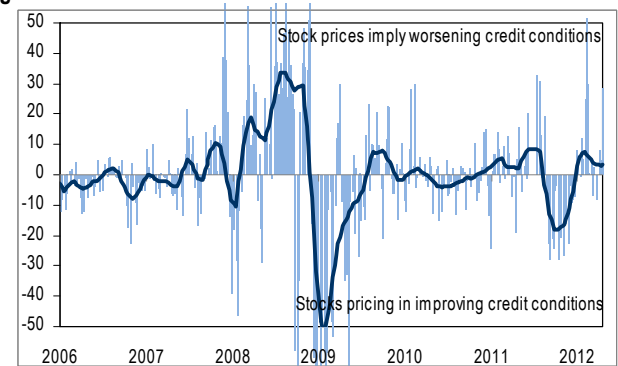
Source: Citi Research

Figure 61. China IP Monitor



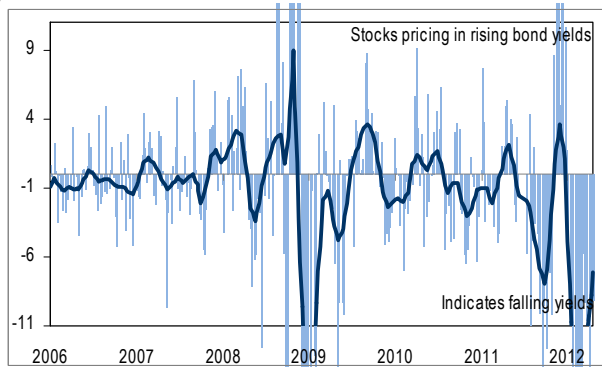
Source: Citi Research

Figure 62. Credit Monitor



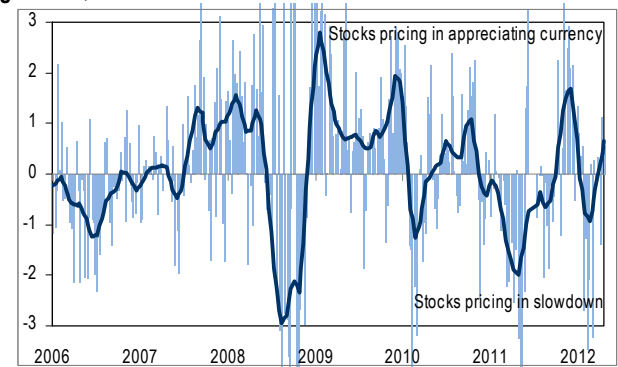
Source: Citi Research

Figure 63. Bond Yield Monitor



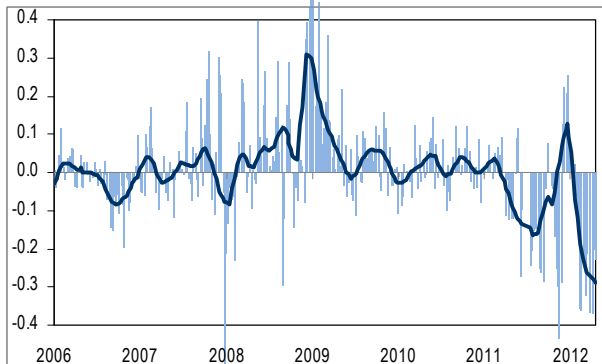
Source: Citi Research

Figure 64. \$AUD Monitor



Source: Citi Research

Figure 65. Inflation Monitor



Source: Citi Research

RAM Betas

Figure 66. Stocks with Highest RAM Beta to each Factor (S&P/ASX 100)

Ticker	Eco Growth	Ticker	China IP	Ticker	Credit	Ticker	Bonds	Ticker	Dollar	Ticker	Inflation
LYC	15.27	MYR	8.27	RMD	0.04	WHC	0.45	WHC	2.59	ILU	27.35
PRU	11.82	AIO	7.64	SHL	0.00	ORI	0.22	AGO	2.52	AUT	24.21
BXB	10.66	ARI	7.44	TTS	-0.03	ASX	0.20	BLY	2.07	LYC	23.60
COH	9.85	BOQ	5.67	RHC	-0.03	FMG	0.18	SGM	1.86	BLY	19.17
SUN	9.65	AWC	5.63	CSL	-0.03	DJS	0.18	PNA	1.77	BPT	17.72
WHC	7.40	LEI	5.61	AMC	-0.03	QBE	0.17	FMG	1.67	GMG	15.23
BEN	7.33	GMG	5.08	WOW	-0.04	IPL	0.16	WOR	1.50	PDN	14.56
QAN	7.26	HVN	5.06	ASX	-0.05	ARI	0.16	ARI	1.44	MYR	14.52
ANN	6.07	BLY	4.73	TLS	-0.05	SPN	0.14	AWC	1.43	SGM	13.75
SKI	5.86	UGL	4.57	TCL	-0.05	SHL	0.13	PDN	1.30	BHP	12.77
IOF	5.42	IOF	4.49	CCL	-0.06	TOL	0.13	RRL	1.29	TAH	12.00
DUE	4.75	SEK	4.15	WDC	-0.06	AUT	0.12	MND	1.28	CPBDA	11.92
MQG	4.58	GNC	4.11	ORG	-0.06	BSL	0.12	IPL	1.19	MGR	10.77
GPT	4.49	ANZ	3.92	CFX	-0.06	RIO	0.12	BSL	1.15	TLS	10.44
TLS	4.43	DJS	3.85	AGK	-0.06	ANZ	0.11	CPBDA	1.05	IOF	9.63
MGR	4.41	FMG	3.58	CPA	-0.06	QRN	0.11	SYD	1.02	WES	9.49
ASX	4.18	CBA	3.48	MTS	-0.07	PDN	0.11	CTX	1.01	SUN	8.87
OZL	4.12	DOW	3.38	BXB	-0.07	NAB	0.10	GMG	0.93	AGK	8.86
SHL	3.92	BLD	3.37	NWS	-0.07	PRY	0.09	OZL	0.82	IPL	8.73
WDC	3.87	WBC	3.04	SKI	-0.07	CTX	0.09	AIO	0.80	RIO	8.57

Source: Citi Research

Figure 67. Stocks with Lowest RAM Beta to each Factor (S&P/ASX 100)

Ticker	Eco Growth	Ticker	China IP	Ticker	Credit	Ticker	Bonds	Ticker	Dollar	Ticker	Inflation
RIO	-3.54	SHL	-1.31	MQG	-0.22	RHC	-0.06	SUN	-0.13	AWC	-3.36
ILU	-3.57	BHP	-1.35	AWC	-0.22	RMD	-0.07	BXB	-0.15	HVN	-3.91
BSL	-3.59	IAG	-1.45	BLD	-0.23	CFX	-0.07	QBE	-0.16	BLD	-4.06
QBE	-3.74	CTX	-1.53	UGL	-0.23	LLC	-0.07	AMC	-0.19	WOR	-4.35
FMG	-3.96	ASX	-1.55	RRL	-0.24	BLY	-0.08	SGP	-0.22	CWN	-4.39
BLD	-4.04	SKI	-1.73	PRU	-0.24	STO	-0.08	BEN	-0.22	ASX	-4.54
MYR	-4.25	SYD	-2.11	SGM	-0.24	CPA	-0.10	CBA	-0.24	AIO	-4.67
GNC	-4.29	QAN	-2.29	AUT	-0.24	AGK	-0.10	PRY	-0.24	WHC	-5.33
CWN	-4.34	TLS	-2.38	AIO	-0.25	BEN	-0.11	CFX	-0.24	TOL	-5.48
WOR	-4.80	LYC	-2.39	DOW	-0.26	IOF	-0.12	JHX	-0.26	JHX	-6.55
AGK	-4.97	COH	-2.72	LEI	-0.26	TCL	-0.12	ORG	-0.27	MND	-6.60
AIO	-5.05	TTS	-3.29	PDN	-0.29	GPT	-0.13	NAB	-0.29	PRU	-6.99
CPU	-6.39	PRU	-3.81	CGF	-0.30	MGR	-0.13	BOQ	-0.29	SHL	-7.10
AWC	-6.78	PDN	-4.87	OZL	-0.30	PNA	-0.14	RHC	-0.30	CTX	-8.79
STO	-7.66	NCM	-5.09	BSL	-0.31	NCM	-0.17	CPA	-0.31	DJS	-8.96
BPT	-8.12	SGM	-6.20	LYC	-0.32	DXS	-0.18	ANZ	-0.37	NWS	-9.58
PDN	-9.16	RRL	-6.20	GMG	-0.33	DUE	-0.19	AGK	-0.43	GNC	-11.20
SGM	-12.58	WHC	-6.34	AGO	-0.33	SGP	-0.24	QRN	-0.47	SEK	-11.77
PNA	-12.98	ILU	-7.00	BLY	-0.38	GMG	-0.33	COH	-0.53	PRY	-11.78
ARI	-16.31	AGO	-10.06	PNA	-0.38	PRU	-0.35	ANN	-0.61	RRL	-19.52

Source: Citi Research

QuantIFI Loadings

The two tables below are the normalized scores or loadings of stocks in the S&P/ASX 100 to each of 6 Citi QuantIFI styles.

Figure 68. Stocks with Highest QuantIFI Loading to each Style

Ticker	Growth	Ticker	Momentum	Ticker	Quality	Ticker	Risk	Ticker	Size	Ticker	Value
AUT	3.33	CSL	2.17	JHX	2.45	LYC	2.77	ANZ	2.89	ARI	2.53
AGO	2.47	CTX	2.11	MND	2.03	ARI	2.70	BHP	2.89	SWM	2.53
RRL	2.31	RHC	2.07	JBH	1.43	ILU	2.17	CBA	2.89	BLY	2.13
ILU	2.23	TLS	1.79	COH	1.23	PDN	1.85	WBC	2.89	FXJ	1.75
SKI	1.68	NWS	1.70	OZL	1.10	BLY	1.63	NAB	2.86	TAH	1.72
TCL	1.57	JHX	1.57	CSL	0.99	AGO	1.50	TLS	2.36	MYR	1.57
FMG	1.40	WDC	1.56	RRL	0.95	PNA	1.43	WES	2.21	DOW	1.48
SYD	1.31	WRT	1.53	PDN	0.87	FMG	1.33	RIO	2.08	CGF	1.36
JHX	1.16	SKI	1.47	LYC	0.86	BSL	1.30	WOW	2.07	JBH	1.11
QRN	1.16	LLC	1.47	ILU	0.68	AWC	1.22	WDC	1.85	MTS	0.88
NCM	1.12	TTS	1.43	BHP	0.56	BPT	0.93	WPL	1.78	SUN	0.87
PRU	0.96	CCL	1.40	AUT	0.56	PRU	0.90	QBE	1.75	TOL	0.86
BBX	0.91	CPA	1.40	PNA	0.51	SWM	0.82	AMP	1.67	ILU	0.82
LYC	0.86	CRF	1.37	ASX	0.50	WHC	0.75	NCM	1.65	MQG	0.81
CSL	0.84	AGK	1.21	RMD	0.41	QAN	0.59	SUN	1.61	BEN	0.80
CRF	0.80	APA	1.20	TLS	0.39	AUT	0.54	CSL	1.59	QAN	0.74
SEK	0.78	GPT	1.16	BEN	0.39	OZL	0.50	MQG	1.55	DJS	0.72
PNA	0.70	DUE	1.15	BPT	0.36	CPBDA	0.45	ORG	1.52	GNC	0.66
WHC	0.67	CBA	1.08	IAG	0.35	RRL	0.44	STO	1.32	OZL	0.62
CWN	0.62	RRL	1.06	AGO	0.31	MQG	0.28	NWS	1.31	NAB	0.61

Source: Citi Research

Figure 69. Stocks with Lowest QuantIFI Loading to each Style

Ticker	Growth	Ticker	Momentum	Ticker	Quality	Ticker	Risk	Ticker	Size	Ticker	Value
OZL	-0.77	ARI	-0.79	DXS	-0.72	MTS	-1.02	ANN	-0.07	CCL	-0.43
TWE	-0.77	ANN	-0.91	ARI	-0.75	CSL	-1.02	FXJ	-0.09	SEK	-0.47
DUE	-0.79	JBH	-0.94	PRY	-0.78	RMD	-1.03	DOW	-0.11	QRN	-0.49
WDC	-0.79	WHC	-0.97	WHC	-0.79	SYD	-1.08	AGO	-0.14	RMD	-0.50
AWC	-0.81	ORG	-0.99	MGR	-0.83	NWS	-1.09	HVN	-0.14	EGP	-0.52
ORG	-0.86	AGO	-1.03	OSH	-0.83	SHL	-1.09	MND	-0.16	RHC	-0.53
WBC	-0.87	PNA	-1.10	EGP	-0.90	TAH	-1.14	ARI	-0.18	SYD	-0.61
HVN	-0.88	BSL	-1.13	CGF	-0.95	AGK	-1.17	BPT	-0.19	AUT	-0.63
MGR	-0.89	RIO	-1.16	SWM	-1.06	ANN	-1.17	BSL	-0.24	NWS	-0.64
GNC	-0.90	OZL	-1.26	MQG	-1.08	RHC	-1.18	DJS	-0.25	CSL	-0.73
APA	-0.96	STO	-1.36	AIO	-1.08	SKI	-1.20	SWM	-0.26	COH	-0.74
FXJ	-1.02	FXJ	-1.39	QAN	-1.21	ASX	-1.28	LYC	-0.27	WHC	-0.87
CTX	-1.15	SWM	-1.52	WDC	-1.24	GPT	-1.30	MYR	-0.29	TCL	-0.89
SGP	-1.15	NCM	-1.57	SKI	-1.26	CPA	-1.31	BLY	-0.31	PRU	-0.91
MYR	-1.25	SGM	-1.61	CRF	-1.44	DUE	-1.33	RRL	-0.33	RRL	-1.00
TTS	-1.47	BHP	-1.63	TCL	-1.47	TLS	-1.35	PNA	-0.34	AWC	-1.09
DJS	-1.47	BLD	-1.76	SPN	-1.60	TCL	-1.44	AUT	-0.34	OSH	-1.14
SWM	-1.54	MTS	-1.85	APA	-1.63	CCL	-1.45	PDN	-0.36	PDN	-1.93
TAH	-1.76	ILU	-2.06	DUE	-2.46	WOW	-1.49	PRU	-0.53	LYC	-2.27
BSL	-3.42	AWC	-2.54	SYD	-2.57	CRF	-1.75	JBH	-0.55	BSL	-2.30

Source: Citi Research

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