

## Equities

10 May 2011 | 28 pages

# Quantitative Market Profile

## Growing Trends

- **Remain Overweight Momentum, Growth** — We expect the near term to very much follow the pattern set in April, with Growth and Momentum performing strongly.
- **Value, Quality Neutral** — We remain concerned that Value is more exposed than Growth to the Australian consumer, as these stocks de-rate and their future earnings profile looks weaker and weaker in the face of an increased risk of interest rate rises. Quality looks a little exposed to macro factors, especially to a fall in the Australian dollar.
- **Australian Dollar Disconnect** — A yawning gap between the FX market (a sharp rally) and the equity market (RAM Monitor negative returns). This suggests that the equity market activity in April was atypical for an FX market appreciation. This probably relates to: 1) risk appetite in Australian equities is gradually de-coupling from risk appetite in the FX markets; 2) sell-side downgrades of typical Australian dollar appreciation beneficiaries; 3) eps downgrades that have started to flow through at these lofty FX levels.

- Quantitative Analysis
- Monthly

### Nick Morton

+61-2-8225-4810  
nick.morton@citi.com

### Zee Yusuf

+61-2-8225-4895  
zee.yusuf@citi.com

### Paul R Chanin

paul.chanin@citi.com

### Puneet Singh

puneet.singh@citi.com

### Anmol Sethy

anmol.sethy@citi.com

### Si An Tan

si.an.tan@citi.com

### Tushar Subhra Mandal

tushar.mandal@citi.com

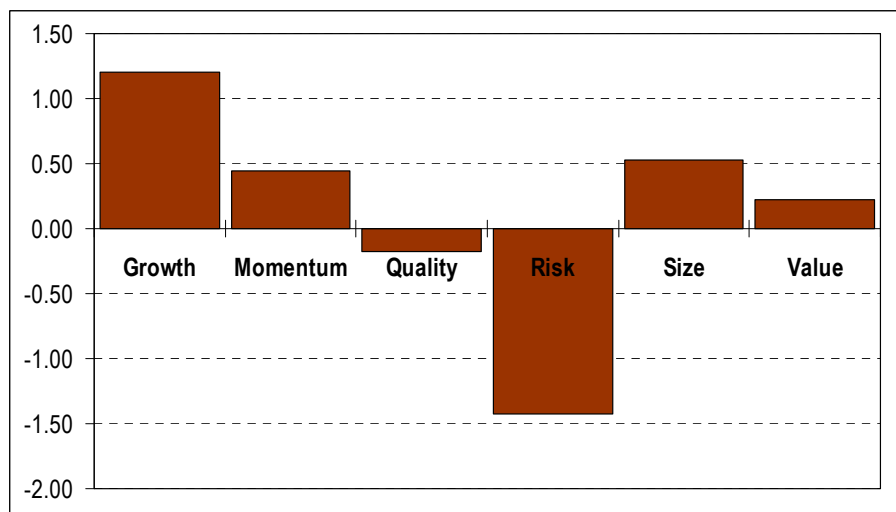
### Nachiket R Garde, CFA

nachiket.garde@citi.com

### Aditya Shah

aditya.b.shah@citi.com

Figure 1. Citi QuantIFI total index returns – rolling 1 month to 30 April, 2011



Source: Citi Investment Research and Analysis

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

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**Two Themes for April: AUD's meteoric rise and upside risk to the cash rate...**

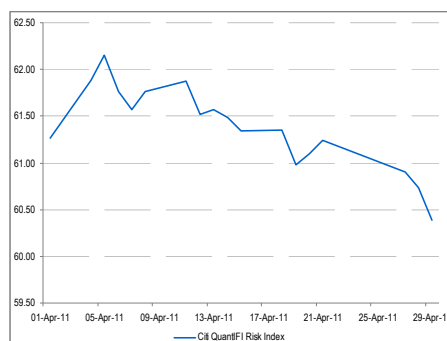
# Australian Dollar Effects and Style View

The Australian dollar's meteoric rise has not been driven by fundamental factors, according to research published by our strategist and economist<sup>1</sup>. They use a regression model, to show how the Australian dollar has run away from fundamentals. In their view, the Australian dollar is 6% above fair value implied by a model based on commodities, EM equities, interest rate differential and risk appetite.

How this trade is playing out is equally of interest to equities investors. This AUD rally in April can be described as atypical. The typical moves in the equity market that follow such an FX rally have not occurred. This is reflected in the consecutive negative returns over recent weeks to our Australian dollar monitor. This disconnect between FX and implied exposure in equities can be attributed to:

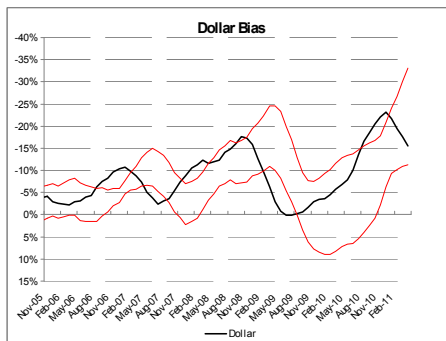
1. **Risk appetite.** Our Citi QuantIFI pure Risk index (Figure 2) fell over by a substantial 1.5%. In contrast, according to our economists, to elevated levels of risk appetite in the FX markets. Generally speaking, through the GFC, domestic risk appetite and global macro risk appetite have been strongly correlated. The impact of global macro factors looks to be gradually receding in the pricing of Australian equities.
2. **Analyst behaviour.** We have long reported the strong Australian dollar bias of sell-side analysts in aggregate (Figure 3). Since the end of last year, they have concentrated their buys around stocks that are set to benefit from a strengthening Australian dollar, and their sells around stocks set to lose out on this factor. In the last two months, they have been gradually unwinding this bias, indirectly downgrading their implied view on the local currency.
3. **The unprecedented level of the AUDUSD exchange rate:** the relationship between earnings and currency is typically non-linear. At these unprecedented levels, we start to see a material impact to earnings. We have started to see meaningful downgrades over the last month to Australian dollar sensitive cyclical names, the likes of which have not been apparent at a less lofty FX rate (Figure 3).

Figure 2. Citi QuantIFI Risk Index



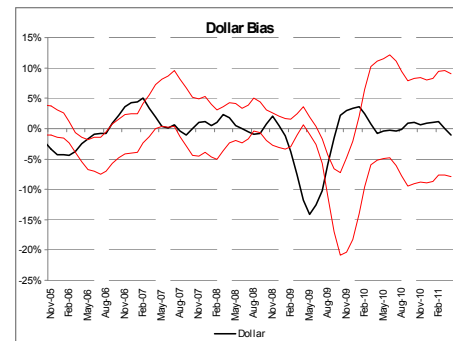
Source: Citi Investment Research and Analysis

Figure 3. Analyst Bias to RAM Australian Dollar Factor



Source: Citi Investment Research and Analysis

Figure 4. 3 M EPS change due to AUD USD exchange rate



Source: Citi Investment Research and Analysis

<sup>1</sup> See 'Australian Economic Themes: Unstoppable? AUD Outlook and Implications', Citi Investment Research, 3<sup>rd</sup> May 2011

## Style View Unchanged

Last month we upgraded Momentum to Buy and Value to Neutral, and downgraded Quality to Neutral. We retain these along with a Buy on Growth, going into May.

Figure 5. Old Recommendations vs New Recommendations

	Size	Value	Growth	Risk	Momentum	Quality
<b>Current</b>	Neutral	Neutral	Overweight	Neutral	Overweight	Neutral

Source: Citi Investment Research and Analysis

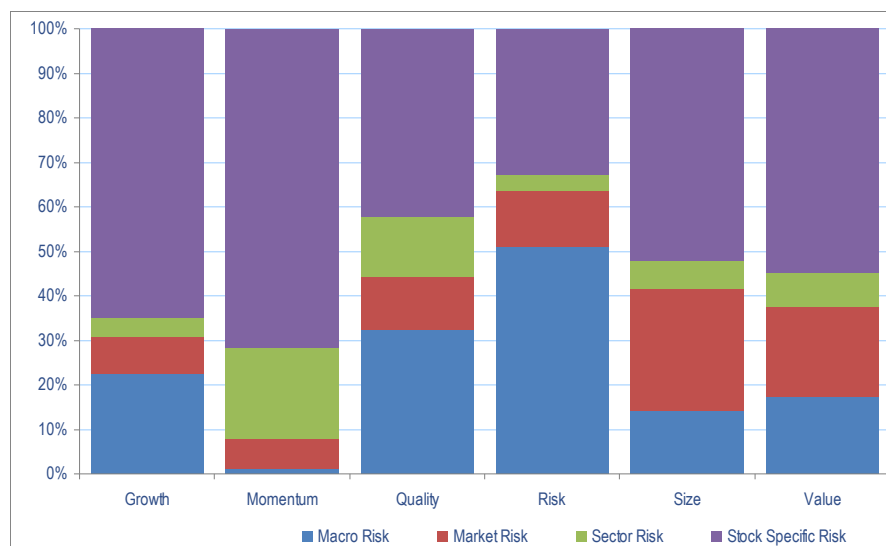
### Macro Picture Firming Up...

In April, the macro picture of Australia has firmed somewhat: this is a two-speed economy, with Resources doing most of the spending while the Consumer has gone missing, forsaking spending for savings. Our economists do not think this will deter the RBA from raising rates, as they re-iterated their hawk-ish stance. They will not be deterred from their mandate, namely to preserve inflation to a band of between 2% and 3%.

The economic imbalances have implications for equity and style investors. We remain concerned that Value is more exposed than Growth to the latter slow stream of the economy, as these stocks de-rate and their future earnings profile looks weaker and weaker in the face of an increased risk of interest rate rises.

The other style we continue to favour is Momentum. In stark contrast to the beginning of 2009, Momentum has little macro exposure. In addition, the volatility environment continues to normalize, and global macro effects are receding in their impact on the equity market... indeed we are finding that the markets are slowly recovering post GFC, and generally able to take negative surprises in the stride. For that reason, we think the probability of a severe market turning point is low, and trends are desirable for investors at this juncture.

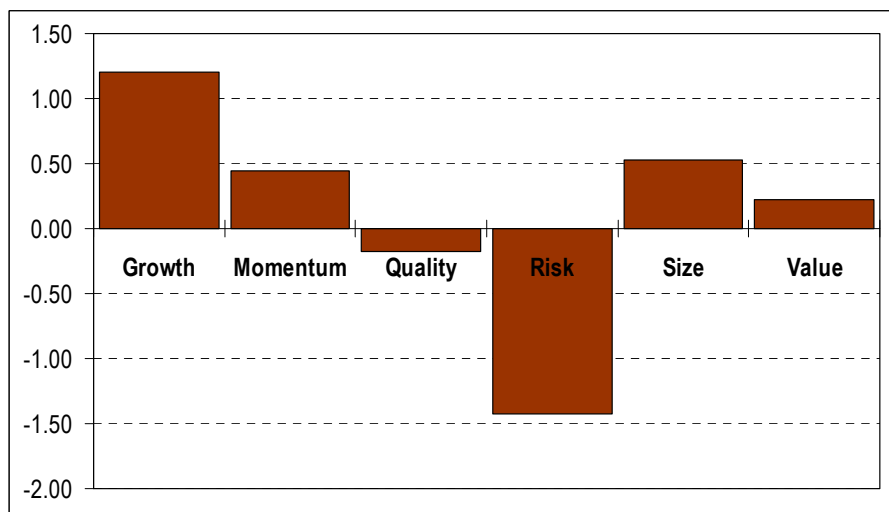
Figure 6. Macro Risk Exposures of Citi QuantIFI Styles



Source: Citi Investment Research and Analysis

Growth and Momentum the standout performers over April

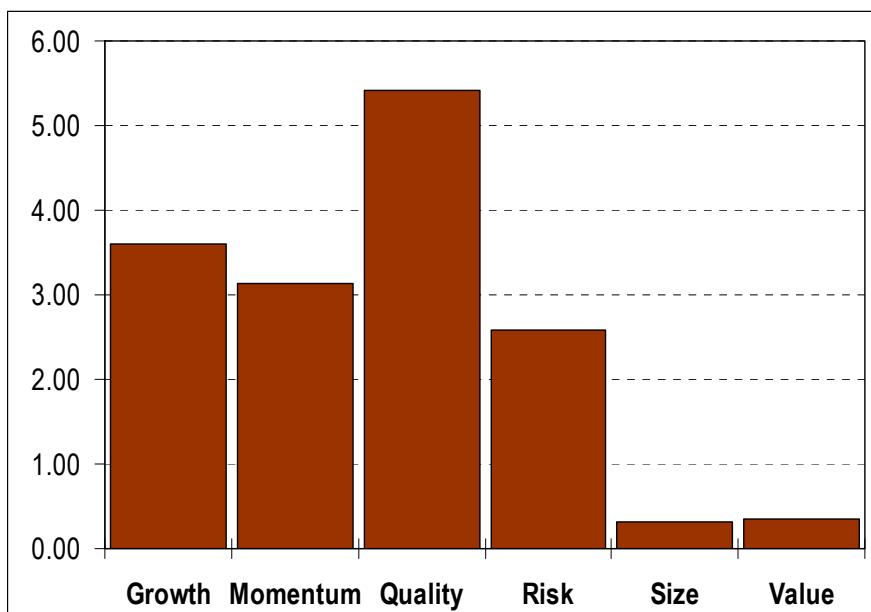
Figure 7. Citi QuantIFI total index returns – rolling 1 month to 30 April, 2011



Source: Citi Investment Research and Analysis

Growth and Momentum remain our preferred investment styles

Figure 8. Citi QuantIFI total index returns – rolling 12 months to 31 March, 2011



Source: Citi Investment Research and Analysis

## 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 bias<sup>2</sup>. 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.

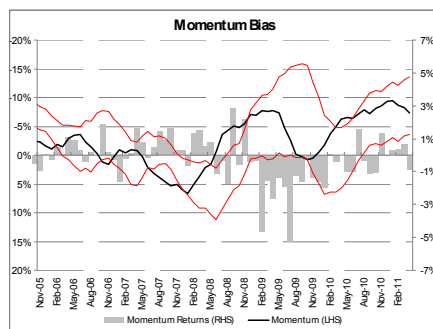
These monitors can help us gauge where future style upside and downside risk lies as analysts seek to move their numbers to long term levels.

In terms of styles, analysts are beginning to be less overweight Momentum (Figure 9) and continue to be underweight Growth (Figure 11). Interestingly they are strongly underweight Value, a sharp turn in May (Figure 10).

On the macro front to sharp changes as analysts position themselves for the near future: a sharp decrease in the Australian dollar bias (See Figure 17) and a sharp increase in bond yield exposure (Figure 16).

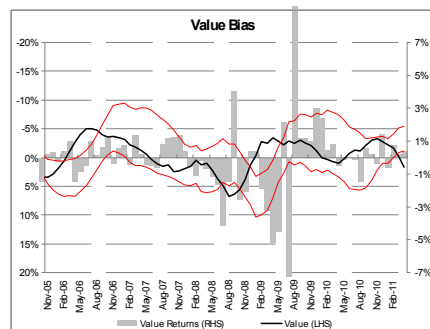
### QuantIFI Analyst Style Bias Monitors

Figure 9. Momentum Monitor



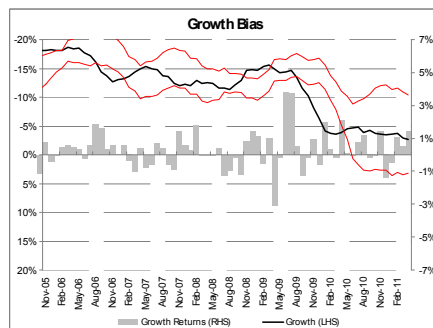
Source: Citi Investment Research and Analysis

Figure 10. Value Monitor



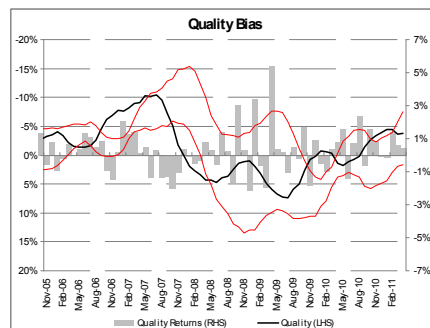
Source: Citi Investment Research and Analysis

Figure 11. Growth Monitor



Source: Citi Investment Research and Analysis

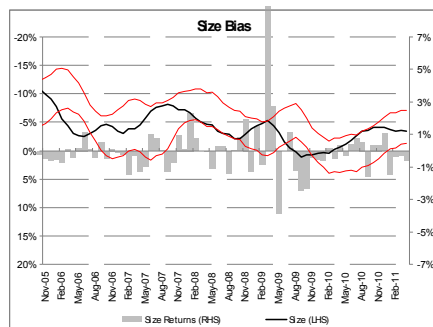
Figure 12. Quality Monitor



Source: Citi Investment Research and Analysis

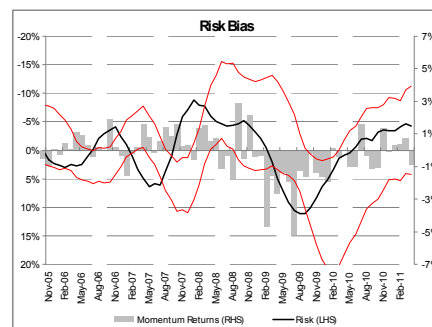
<sup>2</sup> See 'Searching for Alpha – On Forecasting Bias and Factor Conditioning', by Nick Morton, Citi Quantitative Research, March 19<sup>th</sup>, 2010

Figure 13. Size Monitor



Source: Citi Investment Research and Analysis

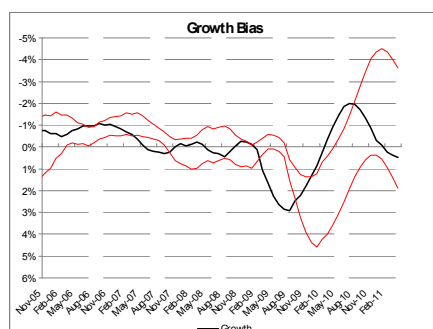
Figure 14. Risk Monitor



Source: Citi Investment Research and Analysis

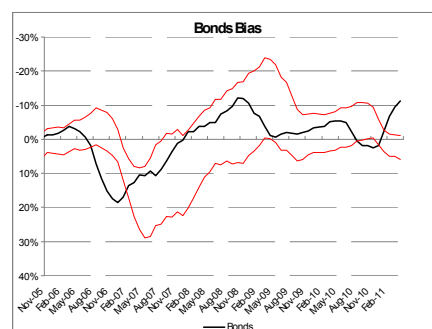
## RAM Analyst Macro Bias Monitors

Figure 15. Economic Growth Monitor



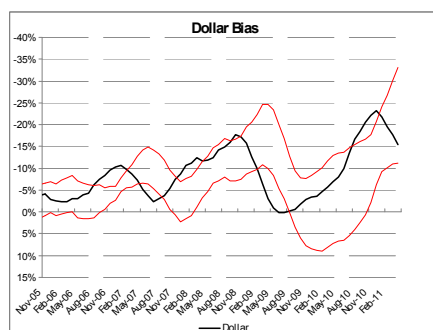
Source: Citi Investment Research and Analysis

Figure 16. Long Term Bond Yields Monitor



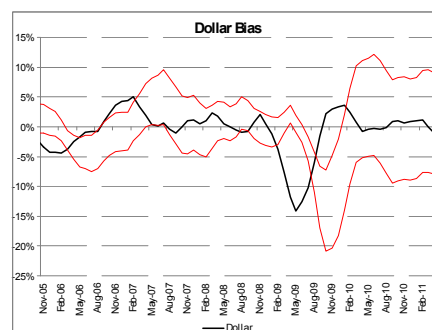
Source: Citi Investment Research and Analysis

Figure 17. Australian Dollar Monitor



Source: Citi Investment Research and Analysis

Figure 18. 3m EPS Change and the Dollar



Source: Citi Investment Research and Analysis

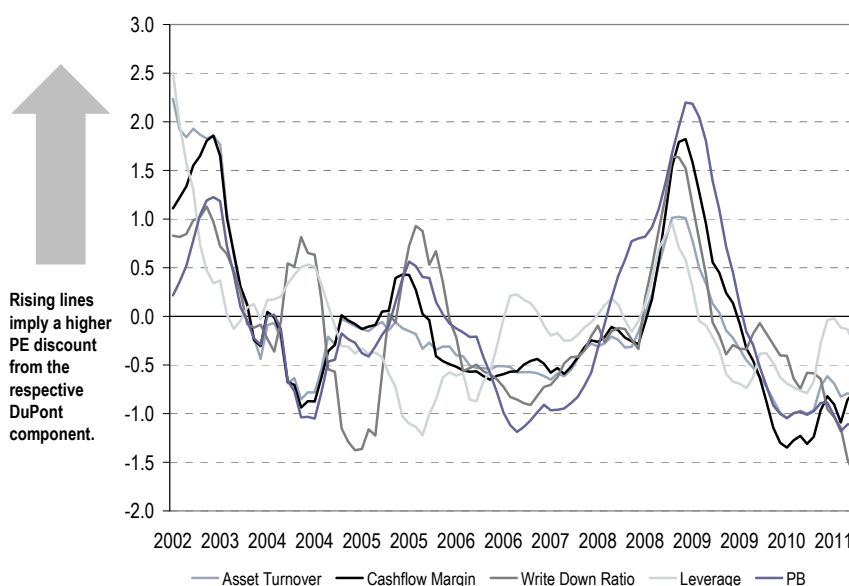
## DuPont Coefficients

We recently introduced DuPont Analysis as a means for decomposing profitability into three components to evaluate the relative value of a stock within broad super-sectors<sup>3</sup>. This decomposition of Leverage x Profit Margin x Asset Turnover has been shown to be a far more robust stock selection methodology than traditional relative ratio analysis in the Financials, Industrial Cyclical and Resources sectors.

Below are the z-scores of the coefficients for the three super-sectors in which DuPont performs particularly well. A rising line indicates a higher PE discount from the respective DuPont component. A line progressively towards the bottom of the chart suggests that investors are re-rating exposure to the particular component.

Continued confidence in Financials post GFC. We also note the write down factor is falling, probably as the market has greater confidence around bad debt levels of these companies.

Figure 19. Financials



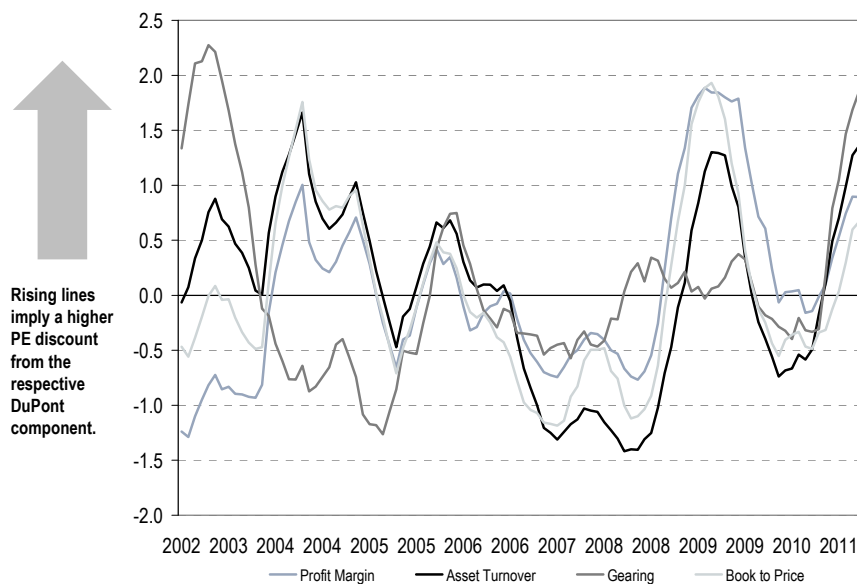
Source: Citi Investment Research and Analysis

<sup>3</sup> See 'On DuPont Analysis for Stock Selection' by Nick Morton, Citi Quantitative Research, 11 August, 2010. (<https://www.citigroupgeo.com/pdf/SAU09403.pdf>).



We still see a systematic de-rating has occurred in Industrial Cyclical names. This looks however to have reached a plateau – suggesting we are close to a point where we might consider exposure to this sector once more

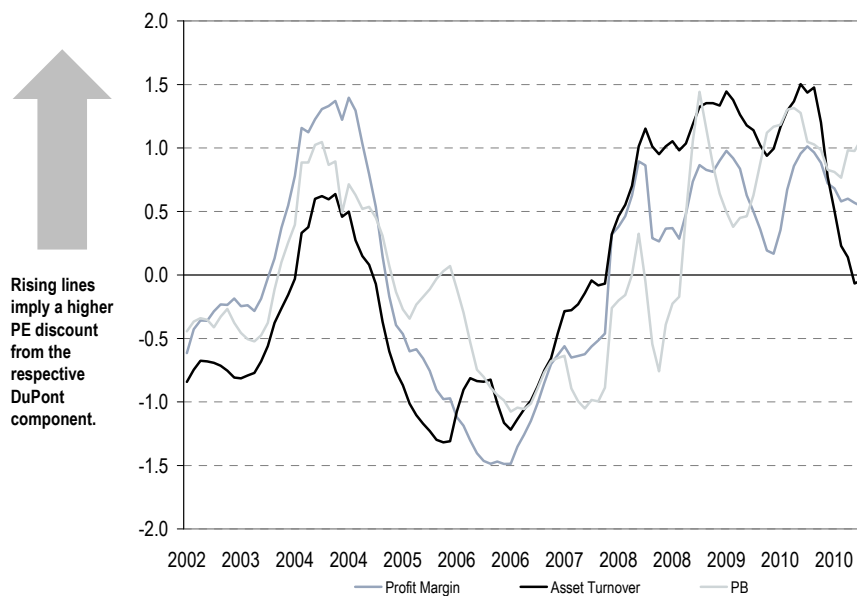
Figure 20. Industrial Cyclical



Source: Citi Investment Research and Analysis

Slight tick up in both PB and Asset Turnover. EM economic data is mixed, and smaller miners have struggled a little of late

Figure 21. Resources

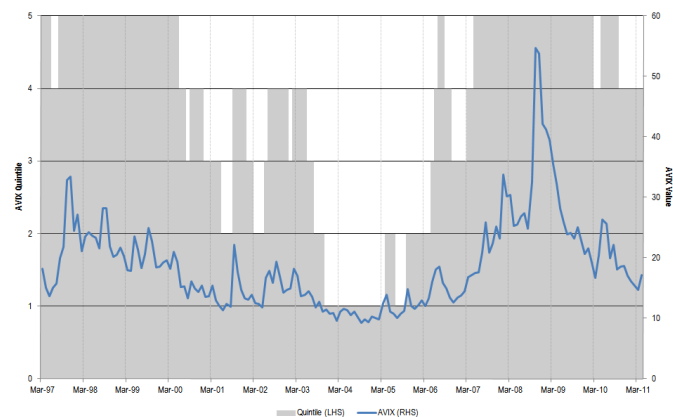


Source: Citi Investment Research and Analysis

# Volatility Environment

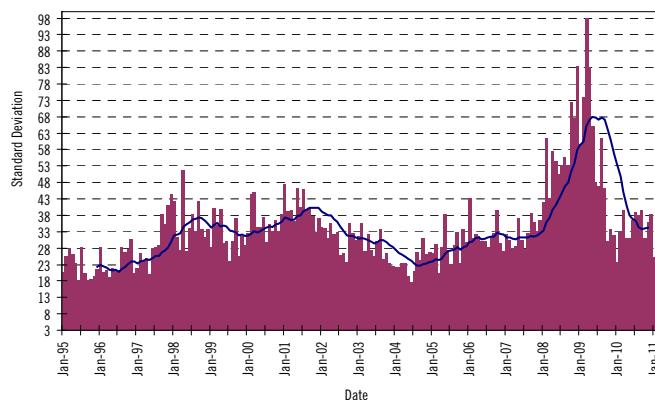
The Australian Volatility index has returned to pre-GFC levels. Additionally, the proportion of cross-sectional dispersion explained by macro is on a consistent downward trend (See Figure 23).

Figure 22. Australian Volatility Index Quintiles



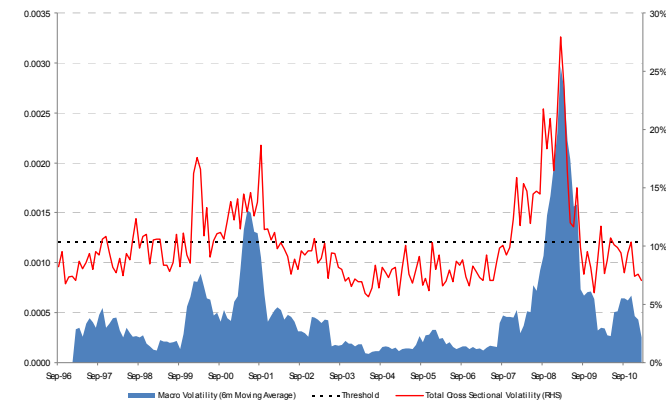
Source: Citi Investment Research and Analysis

Figure 24. Cross Sectional Dispersion S&P BMI Australia



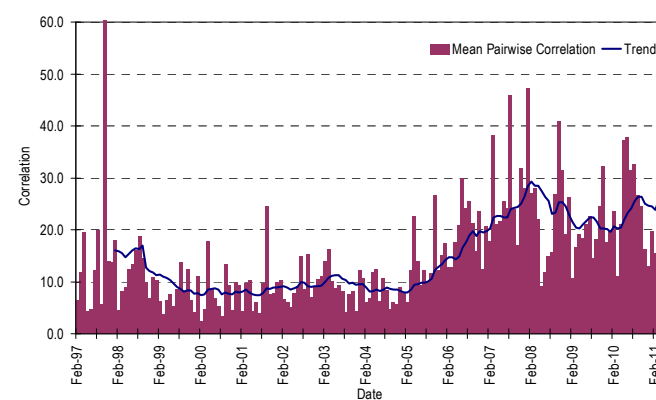
Source: Citi Investment Research and Analysis

Figure 23. Macro Contribution (%) Explaining Cross-Sectional Volatility



Source: Citi Investment Research and Analysis

Figure 25. Mean Pairwise Correlation S&P/ASX 200



Source: Citi Investment Research and Analysis

## Quartile Factor Performance With In-Style

Figure 26 highlights the inter-quartile factor returns for the month of April. 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.

This month, the medium term momentum factors continue to perform strongly along with 1Y EPS Growth. With the exception of Dividend Yield, most of the Value measures had a negative performance over the month.

Figure 26. 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	
<b>Growth</b>																				
1Y EPS Growth	2.6%	(9)	2.1%	(15)	-11.6%	(37)	-21.3%	(42)	6.1%	(14)	2.8%	(21)	-2.6%	(36)	0.5%	(19)	-1.7	(38)	0.2	(14)
EPS Trend Growth (3+2)	2.0%	(13)	5.0%	(6)	12.9%	(3)	13.2%	(10)	13.3%	(9)	0.9%	(26)	5.7%	(2)	0.9%	(11)	1.5	(4)	0.2	(11)
Historical EPS Growth	-4.3%	(47)	-3.4%	(37)	-11.4%	(36)	5.3%	(16)	16.4%	(6)	-18.3%	(46)	-3.1%	(39)	0.0%	(35)	-1.2	(33)	0.3	(6)
Long Term PEG Ratio	-1.4%	(36)	-0.2%	(26)	2.2%	(15)	24.3%	(2)	15.0%	(7)	15.9%	(5)	-1.5%	(30)	-1.3%	(45)	0.3	(15)	0.3	(7)
PEG Ratio	-2.3%	(42)	-1.2%	(29)	-7.1%	(30)	-8.2%	(29)	-25.7%	(38)	12.3%	(10)	1.0%	(19)	2.2%	(3)	-1.0	(31)	-0.4	(41)
<b>Liquidity</b>																				
260D Trading Value	2.5%	(10)	1.8%	(16)	0.0%	(19)	-4.7%	(24)	0.9%	(18)	7.7%	(15)	0.3%	(22)	1.2%	(9)	0.0	(19)	0.1	(19)
30 Days to 260 Days Trading Value	-0.4%	(28)	0.0%	(23)	10.7%	(7)	-16.5%	(37)	-18.6%	(30)	-15.0%	(44)	1.0%	(20)	0.0%	(32)	1.3	(5)	-0.1	(28)
<b>Momentum</b>																				
Dividends Revision Ratio	-0.5%	(30)	3.1%	(12)	1.5%	(16)	0.3%	(18)	-1.6%	(21)	2.5%	(23)	3.3%	(9)	0.1%	(30)	0.2	(16)	0.0	(23)
Earnings Revisions Ratio	2.2%	(11)	6.9%	(1)	0.8%	(18)	-8.9%	(30)	-21.0%	(35)	9.8%	(12)	1.2%	(16)	0.0%	(34)	0.1	(18)	-0.3	(36)
% Earnings Momentum (6M)	1.6%	(15)	2.5%	(14)	8.2%	(10)	2.0%	(17)	2.0%	(16)	5.4%	(18)	1.9%	(13)	0.3%	(24)	2.4	(1)	0.2	(13)
% Price Change (12M)	1.6%	(16)	6.7%	(2)	9.3%	(9)	-27.5%	(46)	-15.2%	(25)	-3.6%	(35)	4.2%	(5)	0.6%	(16)	0.9	(11)	0.0	(21)
% Price Change (1M)	4.5%	(1)	3.6%	(10)	4.7%	(13)	26.9%	(1)	74.5%	(2)	16.7%	(4)	-2.3%	(33)	2.5%	(2)	0.5	(13)	0.7	(2)
% Price Change (3M)	1.9%	(14)	3.4%	(11)	11.2%	(6)	7.3%	(14)	81.2%	(1)	9.1%	(13)	5.3%	(3)	3.6%	(1)	1.1	(8)	0.7	(1)
% Price Change (6M)	3.2%	(7)	6.0%	(4)	12.4%	(5)	16.4%	(7)	11.4%	(11)	-1.4%	(31)	3.2%	(10)	1.8%	(7)	1.3	(7)	0.2	(10)
% Price Change (9M)	1.4%	(17)	3.7%	(9)	12.8%	(4)	-33.8%	(48)	-17.6%	(28)	-7.0%	(41)	3.9%	(7)	0.3%	(22)	1.0	(10)	0.0	(24)
First 11 of Last 12M	1.2%	(18)	6.2%	(3)	7.8%	(12)	-29.1%	(47)	-21.7%	(36)	-7.6%	(42)	4.5%	(4)	0.3%	(20)	0.8	(12)	0.0	(26)
First 5 of Last 6M	2.0%	(12)	4.5%	(7)	8.2%	(11)	-0.3%	(20)	-19.8%	(34)	-6.1%	(37)	2.3%	(12)	0.6%	(18)	1.0	(9)	-0.1	(27)
<b>Profitability</b>																				
EBIT Margin	3.0%	(8)	2.6%	(13)	-6.1%	(28)	0.3%	(19)	-28.0%	(39)	13.6%	(8)	1.0%	(18)	-0.7%	(43)	-0.6	(28)	-0.5	(43)
Forecast Net Margin	3.5%	(4)	5.5%	(5)	18.6%	(2)	18.0%	(5)	-16.2%	(26)	6.6%	(17)	7.2%	(1)	-0.5%	(40)	1.9	(2)	-0.2	(32)
Forecast ROE	0.2%	(24)	1.4%	(18)	-4.2%	(26)	-16.0%	(36)	6.2%	(13)	0.2%	(29)	1.8%	(14)	2.1%	(4)	-0.5	(27)	0.2	(15)
Reported Net Margin	0.2%	(23)	0.9%	(19)	-9.4%	(33)	-14.7%	(34)	-14.7%	(24)	8.5%	(14)	-0.8%	(29)	-0.4%	(38)	-1.3	(35)	-0.8	(47)
Reported ROE	-0.6%	(31)	-1.9%	(31)	-16.6%	(42)	-15.3%	(35)	4.3%	(15)	-1.7%	(32)	-1.8%	(32)	1.9%	(5)	-1.9	(42)	0.1	(16)
<b>Quality</b>																				
Dividends Estimate Dispersion FY1	-6.9%	(48)	-7.7%	(48)	-3.6%	(25)	8.4%	(13)	21.9%	(5)	-29.1%	(48)	-2.6%	(37)	-0.1%	(36)	-0.3	(24)	0.3	(5)
Asset Turnover Ratio	-3.2%	(45)	-3.8%	(40)	-14.8%	(41)	-19.0%	(40)	-19.0%	(33)	-9.7%	(43)	-5.3%	(46)	-1.4%	(46)	-1.7	(39)	-0.9	(48)
Financial Leverage	0.5%	(22)	-0.9%	(27)	-18.1%	(46)	-24.8%	(45)	-37.8%	(42)	14.8%	(7)	-4.1%	(44)	0.1%	(26)	-1.8	(40)	-0.5	(44)
Gearing Ratio	-0.2%	(26)	-0.1%	(25)	18.9%	(1)	22.1%	(4)	42.2%	(3)	11.6%	(11)	-4.1%	(43)	-0.3%	(37)	1.7	(3)	0.5	(4)
Interest Cover	-1.9%	(38)	-3.4%	(36)	-11.1%	(35)	-6.5%	(27)	7.8%	(12)	-6.7%	(40)	-2.3%	(34)	1.8%	(6)	-1.3	(36)	0.2	(12)
Tax Cover	3.4%	(5)	0.7%	(20)	-2.4%	(24)	-3.8%	(22)	-30.5%	(40)	16.8%	(3)	0.1%	(23)	-1.2%	(44)	-0.4	(26)	-0.4	(42)
Cashflow to Earnings	-1.3%	(34)	-2.6%	(34)	-10.8%	(34)	-12.3%	(33)	32.3%	(4)	-2.3%	(33)	-3.9%	(41)	1.5%	(8)	-2.4	(46)	0.6	(3)
Earnings Estimate Dispersion FY1	1.1%	(19)	0.0%	(22)	-9.2%	(32)	-21.9%	(43)	-18.4%	(29)	-2.3%	(34)	3.9%	(6)	0.3%	(23)	-1.3	(34)	-0.2	(33)
Earnings Estimate Variability (Hist)	4.2%	(2)	4.5%	(8)	-1.9%	(23)	-1.2%	(21)	-1.2%	(20)	-20.6%	(47)	0.0%	(24)	-0.4%	(39)	-0.1	(23)	0.0	(25)
<b>Risk</b>																				
260D Volatility - LC	-0.4%	(28)	0.0%	(23)	10.7%	(7)	-16.5%	(37)	-18.6%	(30)	-15.0%	(44)	1.0%	(20)	0.0%	(32)	1.3	(5)	-0.1	(28)
<b>Valuation</b>																				
Book Yield	-0.3%	(27)	-3.8%	(39)	-1.1%	(22)	14.6%	(8)	-31.4%	(41)	7.6%	(16)	-0.7%	(27)	-1.7%	(47)	-0.1	(22)	-0.3	(35)
Book Yield FY1	1.0%	(20)	-1.7%	(30)	-1.1%	(21)	13.3%	(9)	-40.0%	(44)	15.1%	(6)	-0.5%	(26)	-2.1%	(48)	0.0	(21)	-0.3	(37)
Cashflow Yield	-1.4%	(35)	-2.1%	(33)	-14.6%	(40)	6.3%	(15)	-4.0%	(22)	3.0%	(20)	-1.7%	(31)	1.0%	(10)	-1.9	(41)	0.0	(22)
Cashflow Yield FY1	-0.9%	(32)	-2.0%	(32)	-6.2%	(29)	11.8%	(12)	-16.8%	(27)	0.7%	(27)	-0.8%	(28)	-0.5%	(41)	-0.6	(29)	-0.1	(30)
Dividend Yield	3.7%	(3)	1.6%	(17)	-5.3%	(27)	-4.0%	(23)	-41.7%	(45)	26.2%	(2)	1.2%	(17)	0.7%	(14)	-0.3	(25)	-0.4	(39)
Dividend Yield FY1	3.4%	(6)	0.5%	(21)	-9.2%	(31)	-6.6%	(28)	-56.3%	(48)	31.0%	(1)	-0.2%	(25)	0.2%	(25)	-0.7	(30)	-0.6	(45)
Earnings Yield (12m Forward)	-1.2%	(33)	-4.2%	(41)	1.2%	(17)	11.8%	(11)	-42.8%	(46)	2.6%	(22)	2.8%	(11)	-0.7%	(42)	0.2	(17)	-0.4	(40)
Earnings Yield (Trailing)	0.0%	(25)	-2.7%	(35)	-17.0%	(44)	-18.6%	(39)	-43.5%	(47)	4.6%	(19)	-2.5%	(35)	0.1%	(27)	-2.0	(43)	-0.8	(46)
Earnings Yield FY1	0.5%	(21)	-1.0%	(28)	2.7%	(14)	16.7%	(6)	-39.2%	(43)	12.9%	(9)	3.8%	(8)	0.1%	(28)	0.3	(14)	-0.4	(38)
Earnings Yield FY2	-2.6%	(43)	-6.1%	(46)	-0.9%	(20)	23.1%	(3)	-24.6%	(37)	-1.0%	(30)	1.3%	(15)	0.0%	(31)	0.0	(20)	-0.1	(31)
EBIT to EV	-2.2%	(40)	-4.7%	(44)	-18.1%	(47)	-11.5%	(32)	-19.0%	(32)	0.9%	(25)	-3.2%	(40)	0.3%	(21)	-2.6	(47)	-0.3	(34)
EBITDA to Enterprise Value	-2.2%	(41)	-4.5%	(43)	-14.0%	(39)	-4.9%	(25)	12.6%	(10)	-4.8%	(36)	-2.7%	(38)	0.8%	(13)	-2.2	(44)	0.2	(8)
Free Cashflow Yield	-2.0%	(39)	-3.5%	(38)	-17.4%	(45)	-20.8%	(41)	1.7%	(17)	0.4%	(28)	-5.2%	(45)	0.6%	(17)	-4.0	(48)	0.1	(18)
Sales to Enterprise Value	-3.2%	(46)	-6.3%	(47)	-21.7%	(48)	-24.0%	(44)	13.4%	(8)	-6.6%	(39)	-7.3%	(48)	0.7%	(15)	-2.2	(45)	0.2	(9)
Sales Yield	-1.6%	(37)	-4.5%	(42)	-16.6%	(43)	-11.3%	(31)	-5.1%	(23)	1.8%	(24)	-5.5%	(47)	0.9%	(12)	-1.5	(37)	0.1	(20)
Sales Yield FY1	-3.0%	(44)	-5.5%	(45)	-12.5%	(38)	-6.0%	(26)	-0.1%	(19)	-6.4%	(38)	-3.9%	(42)	0.1%	(29)	-1.1	(32)	0.1	(17)

Source: Citi Investment Research and Analysis

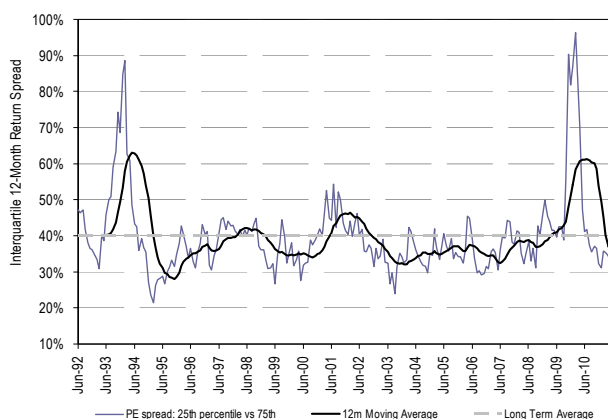
## Quantitative Market Health Check

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

### The Opportunity Set

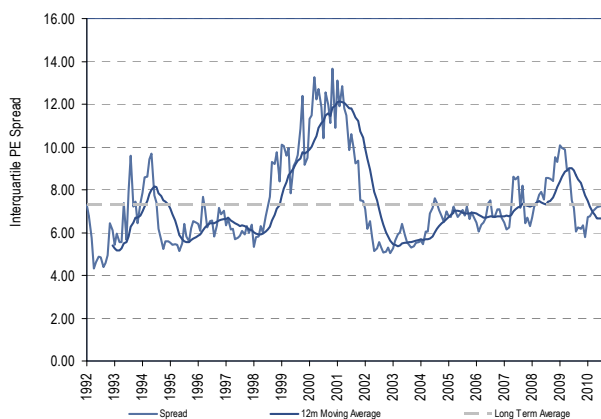
The 12-month S&P/ASX 200 return spread remains at below long term levels. Early signs are evident that the PE spread is rising, although we note that it is still in line with the long term average.

Figure 27. 12-Month Return Spread – S&P/ASX 200, Quartile 4 less Quartile 1



Source: Citi Investment Research and Analysis, IBES

Figure 28. 12-Month Forward PE Spread – Quartile 4 less Quartile 1



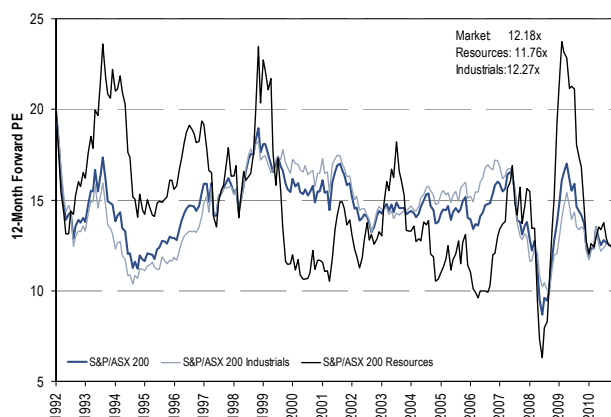
Source: Citi Investment Research and Analysis, IBES

## Market Valuation

Valuations within Australia are still compelling. The market continues to look cheap at just over 12.18x – this is just below the long term average of 15x. In a market where Growth is expected to outperform, Resources valuation is especially compelling at 11.76x. 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.

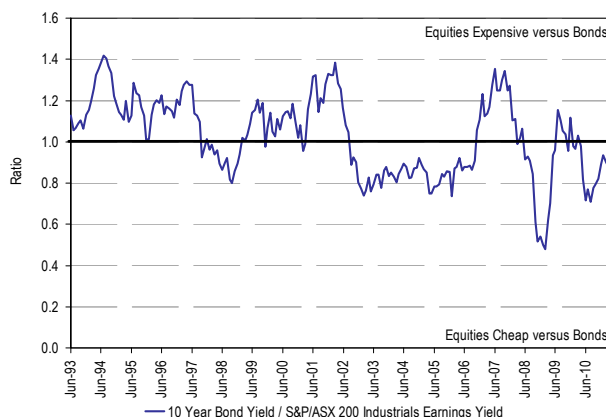
Implied ROE and Price to Book ratios are in line with long-term averages. The Fed Model (Figure 30) shows that equities remain cheaper than bonds at present, however there may be greater pressure exerted on the bond market as we start to see a tightening in monetary policy.

Figure 29. 12 Month Forward PEs – S&P/ASX 200



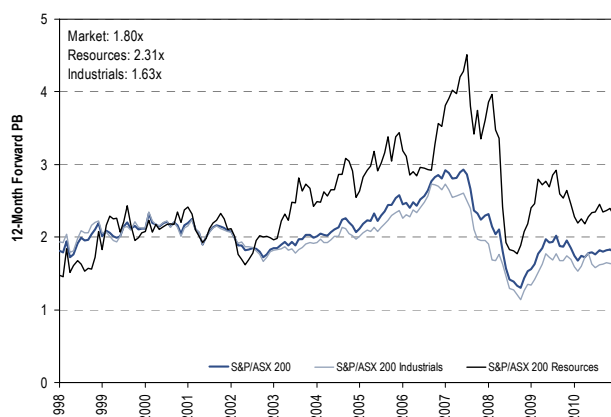
Source: Citi Investment Research and Analysis, IBES

Figure 30. 10 Year Bond Yield versus 10 Year Earnings Yield



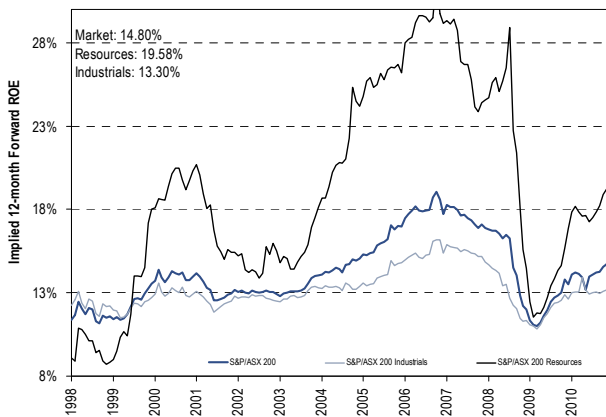
Source: Citi Investment Research and Analysis, IBES

Figure 31. 12 Month Forward PBs – S&P/ASX 200



Source: Citi Investment Research and Analysis, IBES

Figure 32. Implied ROE – S&P/ASX 200

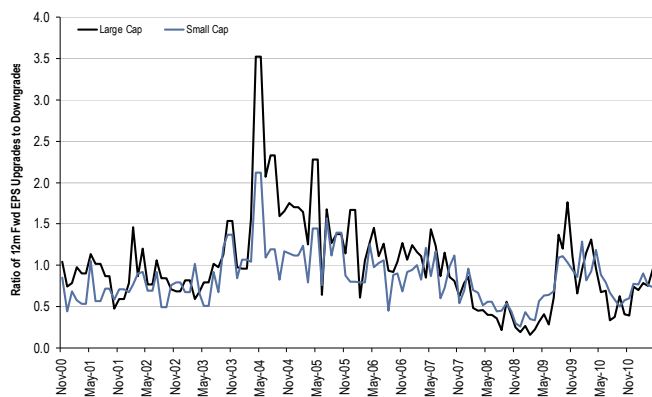


Source: Citi Investment Research and Analysis, IBES

## Earnings Revisions Update

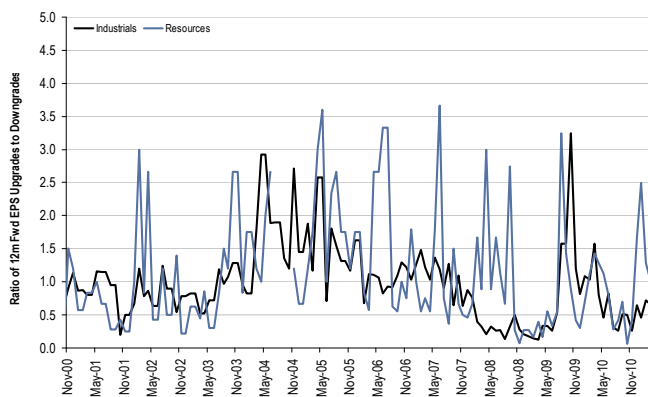
We continue to see downgrades within the Resources as analysts revise down commodity prices. However, we still see strong earnings momentum in the Industrials sector, and more generally in Large Cap names.

Figure 33. Consensus EPS Revisions – Large Caps versus Small Caps



Source: Datastream, IBES, S&P

Figure 34. Consensus EPS Revisions – Resources versus Industrials



Source: Datastream, IBES, MSCI

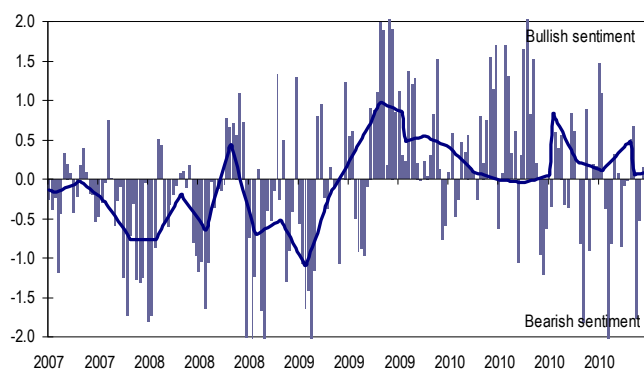
## RAM Monitors: What is the Market Pricing?

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.<sup>4</sup> Note the RAM betas and covariance matrix have been re-estimated as at the 31<sup>st</sup> of March, 2010.

### What have the RAM Monitors been saying?

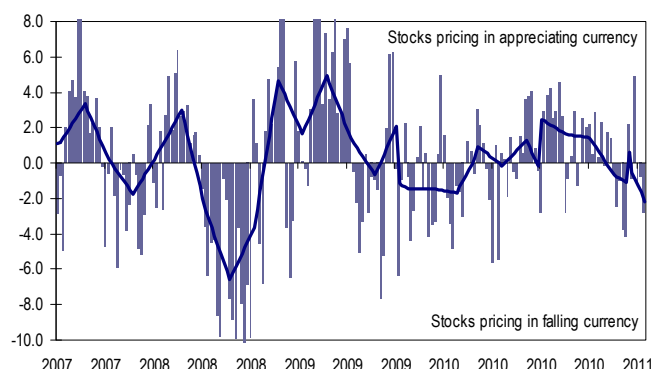
The Currency Monitor (see Figure 36) is showing that investors are anticipating a fall in the Australian dollar. The drift monitor is neutral suggesting that investors are struggling to find conviction in this market. Additionally, small caps are expected to outperform and stocks are pricing in falling bond yields.

Figure 35. Drift or “Sentiment” Monitor



Source: Citi Investment Research and Analysis

Figure 36. Currency (\$A/\$USD) Monitor



Source: Citi Investment Research and Analysis

<sup>4</sup> For further details of the RAM model see: *Risk Attribute Model (RAM): Re-introducing Australian RAM*, Citi Investment Research, 20 November 2006.



Figure 37. Drift or "Sentiment" Monitor

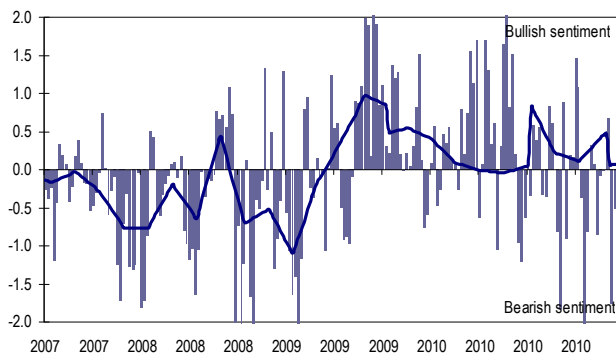


Figure 38. Economic Growth (Leading Indicator) Monitor

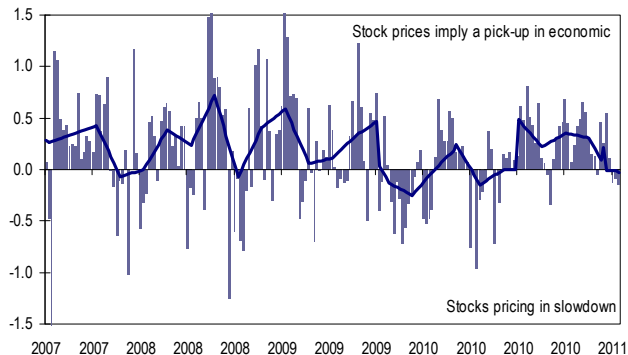


Figure 39. Bond Yield Monitor

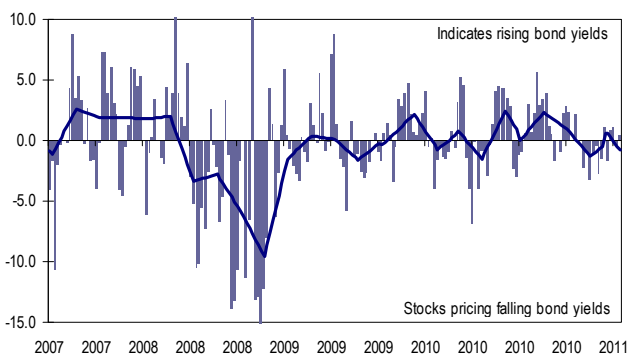


Figure 40. Currency (\$A/\$USD) Monitor

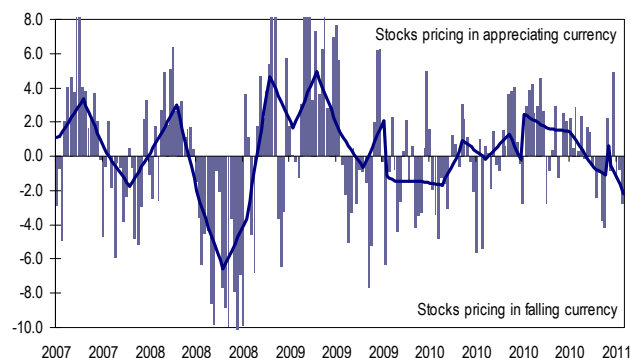


Figure 41. S&P 500 Monitor

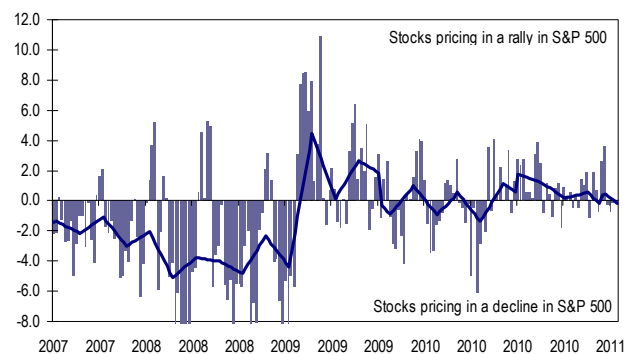


Figure 42. Market (Residual) Monitor

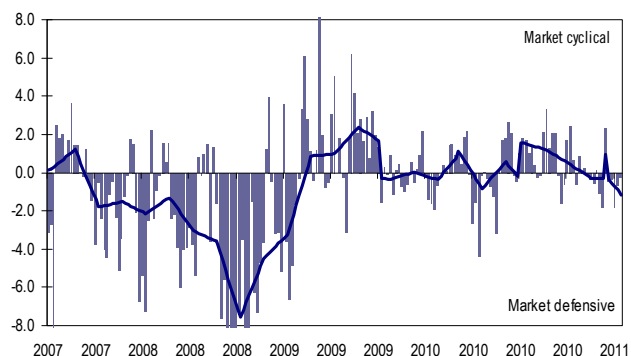
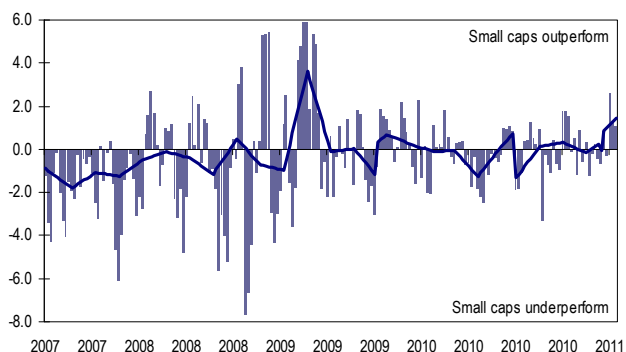


Figure 43. Size Monitor



Source: Citi Investment Research and Analysis

## RAM Betas

Figure 44. Stocks With a High or Positive Sensitivity to Each Economic Factor

Beta to Economic Growth		Beta to Bond Yields		Beta to Aust. Dollar		Beta to S&P500		Beta to Aus. Market	
Code	Beta	Code	Beta	Code	Beta	Code	Beta	Code	Beta
BLY	12.64	AGO	1.45	LYC	2.74	AIO	2.28	EQN	2.38
AIO	8.07	MCC	0.90	OZL	1.56	NWS	1.52	WOR	2.19
GMG	6.64	IPL	0.85	EQN	1.36	GMG	1.49	OZL	2.10
MQG	6.19	RIV	0.74	BLY	1.25	QAN	1.21	JBH	1.93
LEI	5.96	EQN	0.73	AQP	1.20	BLY	1.19	BLY	1.90
MCC	5.96	OZL	0.71	BSL	1.18	HVN	1.18	GMG	1.85
OST	5.73	BSL	0.70	CGF	1.18	LLC	1.14	AGO	1.78
MGR	5.69	RIO	0.54	AGO	1.13	PPT	1.08	WPL	1.77
IPL	5.66	BLY	0.54	AIO	1.11	FXJ	1.08	OST	1.77
AMP	5.58	NWS	0.50	MCC	1.10	CQO	1.05	AIO	1.72
RIV	5.57	WOR	0.49	RIV	1.01	BBG	1.03	BBG	1.71
CQO	5.56	ORI	0.46	LEI	0.94	DJS	1.00	TSE	1.70
BBG	5.55	AWC	0.45	WAN	0.91	MQG	1.00	CGF	1.68
WDC	5.27	OSH	0.42	FXJ	0.87	MAP	1.00	CSL	1.64
CSL	4.90	GFF	0.41	AWC	0.87	CGF	0.99	AWC	1.60
AWC	4.79	BHP	0.38	SGM	0.83	CWN	0.98	CWN	1.59
UGL	4.66	SGM	0.35	SEK	0.81	TSE	0.97	LEI	1.56
WAN	4.58	SEK	0.34	HVN	0.80	CPU	0.97	MCC	1.55
BEN	4.51	WES	0.33	GMG	0.75	BLD	0.96	HVN	1.49
CGF	4.49	TLS	0.29	MQG	0.74	MGR	0.96	UGL	1.45

Note: The Stocks above are drawn from the S&P/ASX 100 constituents with an estimated r-squared rank of either 1 or 2. Rank refers to the quintile ranking of stocks based on how well the model explains price performance.

Source: Citi Investment Research and Analysis

Figure 45. Stocks With a Low or Negative Sensitivity to Each Economic Factor

Beta to Economic Growth		Beta to Bond Yields		Beta to Aust. Dollar		Beta to S&P500		Beta to Aus. Market	
Code	Beta	Code	Beta	Code	Beta	Code	Beta	Code	Beta
AGO	-0.53	GMG	-0.50	RMD	-0.81	SGM	0.12	TLS	0.05
EQN	-0.30	JBH	-0.32	CSL	-0.42	STO	0.13	DUE	0.26
GFF	0.12	SGP	-0.29	COH	-0.37	IPL	0.14	RMD	0.29
CSR	0.43	GPT	-0.23	GFF	-0.29	OSH	0.18	AGK	0.30
AQP	0.47	CFX	-0.22	FGL	-0.23	TLS	0.22	CFX	0.34
CWN	1.05	BEN	-0.19	WDC	-0.17	WOW	0.26	WDC	0.43
MAP	1.15	MGR	-0.15	WOW	-0.12	OZL	0.28	NWS	0.43
TLS	1.24	BLD	-0.14	TLS	-0.07	WPL	0.30	FGL	0.49
OZL	1.44	AGK	-0.12	CFX	0.01	JBH	0.32	IPL	0.57
STO	1.50	CGF	-0.11	BXB	0.05	BSL	0.34	RIV	0.62
NAB	1.53	AIO	-0.11	QBE	0.05	WES	0.35	TOL	0.63
DJS	1.55	APA	-0.10	AGK	0.15	EQN	0.36	BXB	0.63
CFX	1.61	SUN	-0.08	BEN	0.15	RIV	0.38	APA	0.72
DUE	1.81	QBE	-0.08	AMP	0.22	FGL	0.38	WES	0.75
TOL	1.83	MAP	-0.07	BBG	0.22	AGK	0.41	GPT	0.76
LYC	1.83	WOW	-0.07	NWS	0.24	CSL	0.43	SUN	0.83
AGK	2.06	HVN	-0.05	DUE	0.25	AGO	0.46	MYR	0.84
SGP	2.17	CQO	-0.04	APA	0.25	ANZ	0.48	BSL	0.84
FGL	2.21	PPT	-0.04	CBA	0.30	ORI	0.49	NAB	0.86
OSH	2.25	LEI	-0.02	SGP	0.31	WBC	0.49	SGP	0.88

Note: The Stocks above are drawn from the S&P/ASX 100 constituents with an estimated r-squared rank of either 1 or 2. Rank refers to the quintile ranking of stocks based on how well the model explains price performance.

Source: Citi Investment Research and Analysis

## QuantIFI Loadings

The two tables below are the normalized scores or loadings of stocks in the S&P/ASX 100 to each of 4 Citi QuantIFI styles.

Figure 46. Stocks with Highest QuantIFI Loading to each Style

Growth		Momentum		Quality		Risk		Size		Value	
Code	Loading	Code	Loading	Code	Loading	Code	Loading	Code	Loading	Code	Loading
CEU	3.0109	ILU	3.282	LYC	2.6125	LYC	2.7187	CBA	3.0209	GFF	1.8548
FMG	3.0109	OSH	1.9166	OZL	2.6125	PNA	2.1703	BHP	3.0017	OST	1.7878
AWC	2.7357	QRN	1.8727	AGO	2.1606	AGO	1.9151	WBC	2.9474	DOW	1.506
QRN	2.725	BHP	1.8275	JBH	1.6877	EQN	1.8689	ANZ	2.8237	QAN	1.3813
AGO	2.0705	RHC	1.8255	PNA	1.0236	PDN	1.531	NAB	2.82	CTX	1.3709
PNA	1.4349	TAH	1.8131	BHP	0.9577	FMG	1.34	RIO	2.2662	OZL	1.1762
TCL	1.3476	STO	1.7674	CSL	0.807	AQP	1.1612	WES	2.1637	TAH	1.1522
SKI	1.1764	JBH	1.4141	COH	0.7314	OZL	0.9943	TLS	2.0628	RMD	1.1268
IAG	1.1488	BLY	1.3368	RIO	0.6843	BSL	0.834	WOW	1.9483	DUE	1.1177
AIO	1.0675	WPL	1.2878	NCM	0.5713	AWC	0.7698	WPL	1.8743	TLS	1.0912
BLY	1.0496	WOR	1.2529	MCC	0.5656	BLY	0.6601	NCM	1.7842	BEN	1.0887
ILU	0.9308	APA	1.2303	RMD	0.5363	ILU	0.5417	QBE	1.7752	FXJ	1.0514
CWN	0.8854	CQO	1.2266	SWM	0.5305	IPL	0.4168	AMP	1.7418	MYR	0.997
BHP	0.6925	QBE	1.2113	FMG	0.5212	MCC	0.3636	WDC	1.738	TTS	0.9761
SEK	0.6752	ORG	0.9631	EQN	0.5131	CTX	0.2504	MQG	1.6668	CGF	0.9444
WOW	0.6709	GMG	0.9364	AMP	0.4595	OST	0.2426	ORG	1.6078	MTS	0.9421
BXB	0.6603	LLC	0.9244	DJS	0.444	SGM	0.1737	SUN	1.5269	RIO	0.9371
LYC	0.6576	CEU	0.8912	PPT	0.4283	LEI	0.1456	CSL	1.4604	SWM	0.9032
WES	0.6218	UGL	0.8059	SEK	0.3923	SEK	0.1402	STO	1.3841	SKI	0.8518
NCM	0.6189	AMC	0.8021	QBE	0.3756	DOW	0.1337	NWS	1.2815	NAB	0.7896

Source: Citi Investment Research and Analysis

Figure 47. Stocks with Lowest QuantIFI Loading to each Style

Growth		Momentum		Quality		Risk		Size		Value	
Code	Loading	Code	Loading	Code	Loading	Code	Loading	Code	Loading	Code	Loading
SGP	-0.7075	BOQ	-0.7225	TTS	-0.7103	ORI	-0.9744	AQP	-0.0536	WOR	-0.4832
DJS	-0.7327	FXJ	-0.733	GMG	-0.7505	RHC	-0.9783	MYR	-0.0636	BSL	-0.5097
UGL	-0.7622	SGM	-0.7503	DXS	-0.7654	DJS	-0.9992	CSR	-0.0687	ILU	-0.5105
BBG	-0.8271	ALL	-0.8082	PRY	-0.7691	WDC	-1.0115	PRY	-0.0729	ALL	-0.5306
SHL	-0.93	CFX	-0.8276	GFF	-0.7706	APA	-1.0367	HVN	-0.076	AWC	-0.5549
WDC	-0.9478	DOW	-0.8541	CFX	-0.805	SKI	-1.0658	DOW	-0.0904	WPL	-0.5738
CTX	-0.9591	BSL	-0.8902	SHL	-0.8311	TTS	-1.0853	ANN	-0.1127	STO	-0.593
LEI	-1.0088	PRY	-0.9288	WRT	-1.0132	AGK	-1.2096	CQO	-0.1133	SEK	-0.6499
SUN	-1.0261	HVN	-0.9839	SKI	-1.0267	TLS	-1.2236	AGO	-0.12	QRN	-0.6578
AMP	-1.0421	JHX	-0.9911	CQO	-1.1437	TCL	-1.231	SEK	-0.1258	NCM	-0.6861
GPT	-1.0501	RMD	-1.0803	AIO	-1.1691	TAH	-1.279	TSE	-0.1347	COH	-0.6953
PRY	-1.0509	SWM	-1.2297	MQG	-1.17	COH	-1.3032	MCC	-0.1403	AIO	-0.8174
PPT	-1.0532	WDC	-1.2785	CGF	-1.1805	CSL	-1.3271	JBH	-0.1407	CSR	-0.8305
MQG	-1.0691	MQG	-1.3307	MAP	-1.1989	CCL	-1.3453	GFF	-0.1468	TCL	-1.0447
MGR	-1.1724	PDN	-1.3619	WDC	-1.2013	ANN	-1.4478	PNA	-0.1838	WRT	-1.0768
CQO	-1.2431	LEI	-1.5772	TCL	-1.4386	CFX	-1.4547	SKI	-0.1844	JHX	-1.0977
TTS	-1.2573	CSR	-1.7573	PDN	-1.4404	FGL	-1.4698	BBG	-0.2018	OSH	-1.2663
TAH	-1.2736	OST	-1.7932	APA	-1.7212	WOW	-1.544	PPT	-0.3006	CEU	-1.5022
TLS	-1.3185	BBG	-2.3629	JHX	-1.7254	MTS	-1.5718	ALL	-0.5131	PDN	-1.5068
CSR	-1.3452	QAN	-2.3889	DUE	-2.038	RMD	-1.5748	SWM	-0.7321	LYC	-1.9048

Source: Citi Investment Research and Analysis

## Global Quantitative Research Team

### Global Quantitative Research Director

Keith L. Miller	New York	+1-212-816-2285	<a href="mailto:keith.l.miller@citi.com">keith.l.miller@citi.com</a>
-----------------	----------	-----------------	--

### Asia-Pacific

Paul Chanin	Singapore	+65-6432-1153	<a href="mailto:paul.chanin@citi.com">paul.chanin@citi.com</a>
Puneet Singh	Singapore	+65-6432-1172	<a href="mailto:puneet.singh@citi.com">puneet.singh@citi.com</a>
Nachiket Garde	Tokyo	+81 (3) 6270-4883	<a href="mailto:nachiket.garde@citi.com">nachiket.garde@citi.com</a>
Tushar Mandal	Singapore	+65-6432-1154	<a href="mailto:Tushar.mandal@citi.com">Tushar.mandal@citi.com</a>
Anmol Sethy	Singapore	+65 6432-1175	<a href="mailto:anmol.sethy@citi.com">anmol.sethy@citi.com</a>
Aditya Shah	Mumbai	+91 (22) 6641-8959	<a href="mailto:aditya.b.shah@citi.com">aditya.b.shah@citi.com</a>
Tan Si An	Singapore	+65-6432-1163	<a href="mailto:si.an.tan@citi.com">si.an.tan@citi.com</a>

### Australia/New Zealand

Nick Morton	Sydney	+61-2-8225-4810	<a href="mailto:nick.morton@citi.com">nick.morton@citi.com</a>
Zee Yusuf	Sydney	+61-2-8225-4895	<a href="mailto:zee.yusuf@citi.com">zee.yusuf@citi.com</a>

### Europe

Chris Montagu	London	+44-20-7986-3958	<a href="mailto:chris.montagu@citi.com">chris.montagu@citi.com</a>
Helen Krause	London	+44-20-7986-8653	<a href="mailto:helen.krause@citi.com">helen.krause@citi.com</a>
Matthew Burgess	London	+44-20-7986-8325	<a href="mailto:matt.burgess@citi.com">matt.burgess@citi.com</a>
Rahul Jalan	London	+44-20-7986-4075	<a href="mailto:rahul.jalan@citi.com">rahul.jalan@citi.com</a>
Lingjuan Ma	London	+44-20-7986-4104	<a href="mailto:lingjuan.ma@citi.com">lingjuan.ma@citi.com</a>
David Chew	London	+44-20-7986-7698	<a href="mailto:david.chew@citi.com">david.chew@citi.com</a>

### North America

Keith L. Miller	New York	+1-212-816-2285	<a href="mailto:keith.l.miller@citi.com">keith.l.miller@citi.com</a>
Jonathan Barden	New York	+1-212-816-6033	<a href="mailto:jonathan.barden@citi.com">jonathan.barden@citi.com</a>
Emily Jing Jia	New York	+1-212-816-1867	<a href="mailto:emily.jing.jia@citi.com">emily.jing.jia@citi.com</a>
Dading Li	New York	+1-212-816-1824	<a href="mailto:dading.li@citi.com">dading.li@citi.com</a>
Hong Li	New York	+1-212-816-1844	<a href="mailto:hong.li@citi.com">hong.li@citi.com</a>
Chee K. Ooi	New York	+1-212-816-5812	<a href="mailto:chee.k.ooi@citi.com">chee.k.ooi@citi.com</a>
John Rowe	New York	+1-212-816-6054	<a href="mailto:john.rowe@citi.com">john.rowe@citi.com</a>
Richard Schlatter	New York	+1-212-816 6279	<a href="mailto:richard.w.schlatter@citi.com">richard.w.schlatter@citi.com</a>
Aline Sun	New York	+1-212-816-7083	<a href="mailto:aline.sun@citi.com">aline.sun@citi.com</a>
Tiffany Zhou	New York	+1-212-816-4659	<a href="mailto:tiffany.zhou@citi.com">tiffany.zhou@citi.com</a>
Peter Lo	New York	+1-212-816-0379	<a href="mailto:Peter.lo@citi.com">Peter.lo@citi.com</a>

## Notes

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## Appendix A-1

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% of companies in each rating category that are investment banking clients	56%	0%	44%			
Citi Investment Research & Analysis Asia Quantitative Radar Screen Model Coverage	20%	60%	20%			
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