

The Equity Observer

Perspectives on Global Regions, Sectors and Stock Selection Themes

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Outline

Assessing Current Market Environment and Investor Sentiment

- Our Top-Down Country and Sector Views
- Bottom-Up Factor Performance 2015 YTD and last month
 Adjusted for region and sector influences
- Stock Selection Opportunity Assessment
 - Looking within country and sector breakdowns
- Key Issues Facing Equity Investors over the next Year
- Summary Recommendations



Macro-Economic Backdrop

- Slowing global economic growth
 - US remains robust, China is slowing and EM is flat-lining (but with significant across country variation), Japan is falling into recession
- No inflation in sight (except if you are paying college tuition or medical bills)
 - Greatest fear by policymakers is actually deflation
 - Commodity bust and global labor excess supply dampen future price rises (good for corporate margins)
- Loose but divergent monetary policy with the Fed threating to tighten and the BOJ, ECB and Bank of China providing further stimulus
- Currency market turmoil created by a rapidly strengthening USD and sinking EM currencies
 - The floating of the renminbi (within bands) took the market by surprise but has been accepted as a prerequisite for inclusion in the IMF's SDR basket
 - The strength of the USD is exacerbating trade imbalances (hot political topic for 2016)
- Commodity bust causing serious fiscal problems in many emerging markets and tarnishing the emerging market growth story
- Political tension and global security concerns Iran nuclear deal, Russia involvement in Libya, migrant issue in Europe, US elections in 2016, Paris & Beirut bombings
- Investor apathy to risk replaced by hyper sensitivity during the last few months as investors become concerned about asset bubbles



Global Interest Rates

- Current rates are significantly below historical norms both on the short and long-end of the yield curve
- The gap between developed and emerging market interest rates is quite wide and reminiscent of the early days of investor interest in emerging market investing
- It is highly unusual to see negative short-term rates but several European markets are currently living in that scenario.
- The negative rates are reflective of poor growth conditions in the Continent as well as a desire to manage currency valuations





Inflation and GDP

- Deflationary pressures are clearly seen in select European nations
- While global inflation is significantly below historical norms, several emerging market economies are struggling with inflationary pressures
- Several of these emerging markets have experienced severe currency depreciation further exacerbating import price pressures
- Emerging markets such as China and India are growing at above average rates, but investors are skeptical of the sustainability of such growth over the next few years ahead





Investor Risk Aversion

- Our investor risk aversion is currently in the higher end of the <u>Normal Zone</u>
- The current reading places the RAI in the <u>68%</u>, slightly below our Extreme Fear Zone of 75%.
- Investors remain worried about slowing growth and pending rate hikes in the US
- The sharp rebound in global equity markets during the month of October lessened investor fears, but valuations still remain above average for all major asset classes
- While the debacle in commodity prices is clearly detrimental to exporting nations (many in emerging markets) global economic activity in the developed world should benefit from this form of cost reduction
- Global security concerns most likely will push the RAI into the Fearful zone





The Current Technical State of Global Equity Markets

Percentages reflect classification as of November 6, 2015



Technical Stage Migration Patterns

- The greater uncertainty in equity markets is reflected in larger numbers of companies in the <u>Break-Out</u> and <u>Improving</u> categories
- Most of the companies in these uncertain categories migrated down from the <u>Up Trend</u> phase
- Some of the stocks previously in the <u>Down Trend</u> stage have recovered and migrated to the <u>Improving</u> category









Key Asset Class Performance

- After several years of above-average returns, major asset classes remain under some duress in 2015
- Equities as a whole have outperformed fixed income but with significantly greater volatility
- Emerging market equities and commodities have taken the biggest hits YTD
- US bonds have not helped much as rates keep fluctuating without clear direction and YTD returns are barely positive
- Currency losses have exacerbated the poor performance of international assets





Global Regional Performance

- Developed Asia leads the performance pack thus far in 2015. North America is close behind, but in any case all equity markets remain significantly below historical norms
- The world equity market index remains anchored around a flat return for 2015
- Emerging market equities have suffered from slowing growth and a commodity bust that disproportionally affects their economies.
- Latam in particular has been hit by declining growth and currency depreciation. Brazil has been a basket case.
- Emerging Europe has performed well in local currency but currency losses tarnish the picture from the perspective of the US investor





Global Sector Performance

- Natural resource sectors have shown the worst performance thus far in 2015
- Industrials have also done poorly as a significant amount of their business is tied to the oil and gas industry
- Interest rate sensitive sectors have also fared poorly as monetary policy uncertainty has crept into the equation
- More growth oriented sectors such as Tech and Health Care have done much better this year despite less favorable valuations
- Similarly, consumer oriented sectors have benefitted from lower energy costs







Top-Down Region/Country and Economic Sector Views

Top-Down Expected Return Methodology

Conceptual Building Blocks

- Valuation
- Income Generation
- Growth
- Profitability
- Sentiment/Momentum
- 48 individual Countries aggregated into 7 regions
 - Developed: North America, Europe, Asia
 - Emerging: Latin America, Europe, Asia, Africa & Middle East
- 20 individual Global Economic Sectors
 - Factset Sectors, US GICS



Current Valuation, Growth, Income & Momentum Rankings - Global Regions





Higher Values Denote Greater Attractiveness







Global Region Summary Views

- We prefer Developed Markets at the moment due to their more robust growth rate, profitability and lower overall volatility
- North America looks expensive and we recommend a slight underweight
- Japan continues to be one of our most highly rated markets despite falling into recession
- Some EM markets appear cheap but suffer from declining growth and profitability rates

REGIONAL	UNDERWEIGHT	NEUTRAL	OVERWEIGHT	POSITIVES	CONCERNS	MACRO SENSITIVITIES
North America - Developed				Superior Growth and Sentiment	Highest Valuation among regions, low div Yields	Timing of Fed actions, strength of USD
Europe - Developed				Improving Sentiment & Profitability	Rising Valuations & slowing Growth	Effectiveness of ECB, negative yields
Asia - Developed				Reasonable Valuations, improving Sentiment	Low Yields	Lack of significant GDP growth, deflationary forces
Latin America - Emerging				None at the moment	Low Growth and Profitability	Currency depreciation, inflation
Europe - Emerging				Very Inexpensive, attractive Yields	Below par Growth and Profitability	Fragile politics, commodity dependance
Asia - Emerging				Superior Growth	Stretched Valuations, Deteriorating Sentiment	Chinese growth slowdown
Africa & ME - Emerging				Income potential	Low Growth, illiquidity	Oil price dependance, fragile politics



Current Valuation, Growth, Income & Momentum Rankings - Global Sectors



Higher Values Denote Greater Attractiveness





Global Sector Views

- Our top down work now favors, by a slight margin, value oriented sectors
 - Some high growth / high profitability sectors such as Technology Services (mostly Software) exhibit prohibitive valuations resulting in an under-weight recommendation
 - Health Technology (driven by Biotech) suffers from a similar problem
- Sectors benefitting from lower commodity prices merit in our opinion overweight positions
 - Transportation stands out as an attractive option
- Resource oriented sectors rank in our system as clear under-weights, but Energy has recently moved into the Neutral zone
 - While our research will pick up reversals we deem sector calls in the Energy sector as extremely contrarian and in our opinion as still premature

GLOBAL SECTORS	UNDERWEIGHT	NEUTRAL	OVERWEIGHT	POSITIVES	CONCERNS	MACRO SENSITIVITIES
Commercial Services				Growth, lower Volatility	Valuation	
Communications				Superior Yield	Low Profitability	Low growth profile, expandinmg m&a activity
Consumer Durables				Inexpensive, positive Sentiment	Lower than average Growth	Auto industry dependant,
Consumer Non-Durables				Favorable Sentiment, Lower Volatility	Valuation is stretched	Secular growth story, less dependant on global growth
Consumer Services				Growth profile	Valuation	Benefits from global consumer resurgence
Distribution Services			A	Low Valuation	Low Profitability	Depends on unit growth as profitability is low, GDP tied
Electronic Technology				Attractive Gowth	Volatile sector	High long-term growth, becoming more dependant on consumer
Energy Minerals				Superior Yield	Poor Sentiment, worst Current Growth profile	Oil glut is expected to remain in place, expect capex and dividend cuts
Finance				Superior Yield, above average Profitability	Spotty Sentiment	Waiting for rising interest rates in the US, poised for above-average growth
Health Services				Growth, top Sector	Yield could be higher	Will continue to benefit from aging population, EM middel class growth
Health Technology				Superior Growth	Expensive	Great engine of growth but under political pressure to cut prices
Industrial Services				Inexpensive, yield	Low Growth	Tied in a significant way to capex oil & gas cutbacks, slowdown in China
Miscellaneous						
Non-Energy Minerals				Superior Yield	Deteriorating Profitability	Commodity meltdown continues, slow global Growth does not help
Process Industries				Superior Profitability	Poor Growth	Cyclical sector suffereing from low growth condistions, excess supply
Producer Manufacturing				Below average in many categories	Low Profitability, poor Sentiment	Slower growth is creating headwinds, conditions of excess supply
Retail Trade				Positive Sentiment, Growth	Low Yield	Benefits from a resurgence of consumer confidence, cyclical sector
Technology Services				Superior Growth	Most over-valued sector	Software is the most over-valued industry, IPO bubble
Transportation				Superior Profitability, below average Valuation		Primary beneficiary of lower energy prices, benefits from modest GDP
Utilities				Yield, low Volatility	Low Growth	Slow regulated growth, benefits from lower energy input costs



Current Valuation, Growth, Income & Momentum Rankings - US Sectors



Higher Values Denote Greater Attractiveness







US Sector Views

- Our top three over-weight sectors are Consumer Discretionary, Finance and Utilities
 - We particularly like Financials especially as the Federal Reserve starts the process of yield curve normalization
- Technology and Health Care have dropped into our Neutral category as valuations have remained on the expensive side
 - Software stocks while showing significant growth and profitability are currently overvalued and are dragging the rest of the sector down in terms of attractiveness
 - Similarly biotech stocks stand out as highly over-valued
- Energy stocks have returned to the bottom of the pile as significantly diminished growth and profitability act as a drag
 - Many Energy stocks appear inexpensive prompting some long-term investors to bottom feed
 - M&A activity will increase as financial distress hurts the more leveraged names in the sector. As a whole we think that the sector will remain volatile and lacks sustained upside

US SECTORS	UNDERWEIGHT	NEUTRAL	OVERWEIGHT	POSITIVES	CONCERNS	MACRO SENSITIVITIES
Consumer Discretionary				Positive sentiment, Profitability	Stretched Valuations	Consumer confidence remains strong, low unemployment
Consumer Staples				Valuations are improving a bit	Diminishing Profitability	Lower input costs are a blessing to the sector
Energy				Inexpensive	Volatile, poor Sentiment, inferior Growth	High leverage of smaller operators, capex cuts, div cuts?
Financials				Valuation, lower volatility		Higher short-term rates should marginally improve profitability
Health Care				Superior Growth, Sentiment	Diminishing Profitability	Presidential cycle in the US provides head winds
Industrials						Dependant on global growth & co capex
Technology				High Growth and Profitability	Valuations are significantly stretched	M&A is increasing, software is very expensive
Materials				Inexpensive Valuations	Low Profitability	Global growth slowdown is hurting profitability
Communications				Attractive Yields	Declining Profitability	Yield starved investors create a natural demand
Utilities	Utilities			Attractive Yields		Yield starved investors create a natural demand





Bottom-Up Factor Performance and Opportunity Assessment

Assessing Bottom-Up Stock Selection Factor Potential

- Stock Selection value add is a function of:
 - Skill: Identifying which factors the market will reward at a particular point in time
 - ► For example, will stocks with lower P/E and P/B outperform in Q4?
 - Strength of Signal: Measuring the normalized value add of the factor
 - For example, the value add of the momentum factor tends to be larger and more persistent, on average, than the value add from a low volatility factor tilt
 - Opportunity: Having enough of a range of factor values to choose from, i.e., enough factor dispersion to discriminate effectively among stock picks
 - For example, there is a lot more dispersion in profitability readings among energy stocks compared to the typically clustered analyst recommendations



Bottom-Up Factor Performance Methodology

- Examines the performance of popular stock selection factors in a universe of 13,000 global equities using YTD and last month <u>equally weighted USD</u> returns
- Each stock is ranked according to its factor value and allotted to a decile
- Returns are presented in <u>raw form</u> as well as <u>adjusted for regional and sector</u> <u>influences</u>
 - We use the Heston & Rouwenhorst (Journal of Financial Economics, 1994) methodology to provide a <u>higher fidelity signal of true factor performance</u>
- Measures of factor performance use robust statistics to minimize the effect of outliers
 - For single factor comparisons:
 - Central Tendency: Medians, Trimmed Means
 - Dispersion: Median Absolute Deviations (MADM), Interquartile Range (IQR)
 - For comparison across factors and time:
 - Quartile Coefficient of Dispersion



Bottom-Up Factor Performance Methodology

- The returns for each of the ten deciles are calculated on an equally weighted basis both in raw and adjusted (region/sector) form
- We take the top 3 deciles (most attractive) and average their returns and do the same for the bottom 3 deciles (least attractive)
 - We then take the difference in returns between the top and bottom 3 deciles and examine whether the factor in question had positive performance
 - If the factor behaves as expected (for example cheaper stocks outperforming expensive stocks) then the portfolio return will be positive
- We also measure the <u>dispersion</u> of factor values in our universe using a standardized measure that adjusts for volatility and scale differences – this measure is called the <u>Coefficient of Dispersion</u>
 - Greater dispersion indicates greater potential value add from stock picking assuming that the factor has a positive expected reward (tends to work on average) and the presence of skill
 - Factors with minimal dispersion do not allow for much potential discrimination in potential future returns



Popular Stock Selection Factors

					RETURN	OPTIMAL TIME
CONCEPT	FACTOR	DESCRIPTION	RATIONALE	IMPLICATION	POTENTIAL	HORIZON
Valuation	PE	Price to Earnings	Lower is better	Cheaper Stocks Outperform	High	Intermediate
Valuation	РВ	Price to Book	Lower is better	"	High	Intermediate
Valuation	PCF	Price to Cash Flow	Lower is better	"	High	Intermediate
Valuation	PS	Price to Sales	Lower is better	"	Medium	Intermediate
Valuation	EV_EBITDA	Enterprise Value to Ebitda	Lower is better	"	Medium	Intermediate
Valuation	EV_SALES	Enterprise Value to Sales	Lower is better	"	Medium	Intermediate
Valuation	PEG	PE to Growth	Lower is better	"	Medium	Intermediate
Capital Structure	DEBT_EBITDA	Debt Coverage	Lower is better	"	Low	Long-term
Capital Structure	SHARES_OUT	Changes in Share Count	Lower is better	Stocks lowering Share counts Outperform	Low	Long-term
Anomaly	VOLAT	Return Volatility	Lower is better	Lower Volatility Stocks Outperform	Low	Intermediate
Anomaly	MKT_CAP	Market Capitalization	Lower is better	Lower Cap Stocks Outperform	High	Intermediate
Profitability	P_MARGIN	Profit Margin	Higher is Better	More Profitable Stocks Outperform	Low	Long-term
Profitability	N_MARGIN	Net Margin	Higher is Better	"	Low	Long-term
Profitability	ROE	Return on Equity	Higher is Better	"	Medium	Long-term
Profitability	ROC	Return on Capital	Higher is Better	"	Medium	Long-term
Income Generation	DY	Dividend Yield	Higher is Better	Higher Yield Stocks Outperform	Medium	Intermediate
Capital Structure	EQ_ASSETS	BS Leverage	Lower is better	Lower Debt Companies Outperform	Low	Short-term
Investor Sentiment	TR1Y_USD	One Year Stock Return	Higher is Better	Stocks with Momentum Outperform	High	Short-term
Analyst Sentiment	REC	Mean Analyst Recommendation	Higher is Better	Highly Recommended Stocks Outperform	Medium	Short-term
Growth	EPS_STAB	EPS Stability	Higher is Better	Stocks with more Stable EPS Outperform	Low	Short-term
Capital Structure	INT GRW	Growth in Interest Expense	Lower is Better	Stocks with less Debt Outperform	Low	Long-term
Growth	CF GRW	Growth in Cash Flow	Higher is Better	Higher Growth Stocks Outperform	High	Long-term
Growth	DIV GRW	Growth in Dividends	Higher is Better	"	High	Long-term
Growth	EPS GRW	Growth in EPS	Higher is Better	"	High	Long-term
Growth	SALES GRW	Growth in Sales	Higher is Better	"	High	Long-term



Factor Performance Summary

- Growth and momentum tilts have worked best thus far in 2015
- Smaller cap stocks have also outperformed (on an equally weighted basis)
- Value strategies have exhibited persevere performance but after adjusting for regional and sector influences the effect is diminished
- Cash flow and EPS growth factors exhibit the highest dispersion indicating high potential for stock picking

OPTIMAL TIME		YTD RAW	YTD RESID	1 MONTH RAW	RESID
HORIZON	FACTOR	USD	USD	USD	USD
Intermediate	Price to Earnings	-10.2	-6.2	-3.6	-2.0
Intermediate	Price to Book	-8.0	-0.9	-2.7	-0.4
Intermediate	Price to Cash Flow	-14.2	-6.3	-3.8	-0.7
Intermediate	Price to Sales	-1.1	-0.3	-2.0	-0.7
Intermediate	Enterprise Value to Ebitda	-3.3	0.1	-0.5	0.8
Intermediate	Enterprise Value to Sales	4.0	4.2	0.1	-0.8
Intermediate	PE to Growth	-0.8	-0.3	1.1	-0.2
Long-term	Debt Coverage	9.3	2.5	2.2	-0.4
Long-term	Changes in Share Count	6.0	9.8	-0.1	0.8
Intermediate	Return Volatility	-9.7	-5.5	-3.2	-1.7
Intermediate	Market Capitalization	19.5	15.8	1.0	-1.2
Long-term	Profit Margin	-1.0	0.6	1.0	0.5
Long-term	Net Margin	-0.9	1.1	1.1	0.6
Long-term	Return on Equity	2.5	-1.3	0.9	-0.4
Long-term	Return on Capital	7.1	1.3	0.7	-1.2
Intermediate	Dividend Yield	-9.5	-3.2	-3.3	-0.8
Short-term	BS Leverage	-3.7	0.8	-0.8	0.4
Short-term	One Year Stock Return	16.0	9.7	6.4	2.4
Short-term	Mean Analyst Recommendation	8.5	4.2	2.6	0.1
Short-term	EPS Stability	4.8	2.0	0.0	-0.3
Long-term	Growth in Interest Expense	4.1	3.4	0.6	0.3
Long-term	Growth in Cash Flow	7.4	5.7	-0.2	-0.6
Long-term	Growth in Dividends	9.5	8.0	-0.4	0.1
Long-term	Growth in EPS	10.7	9.3	0.2	-0.6
Long-term	Growth in Sales	5.8	6.6	-0.1	0.0



YTD Factor Performance

- Growth & momentum factors have worked well this year as have highly recommended stocks
- Valuation factors have had perverse performance with more expensive stocks out-performing
- More volatile stocks have also out-performed as have smaller cap stocks (on an equally weighted basis)
- High dividend yield stocks have underperformed, but dividend growth tilts have been rewarded



Last Month Factor Performance

- The last month proved to be exceptionally rewarding for momentum investors, but a poor one for valuation oriented factors
- Higher volatility, non-dividend stocks also showed significant out-performance
- Growth factors did not seem to have much discrimination power





Factor Dispersion: Valuation & Momentum

- Valuation oriented factors do not possess much dispersion at the moment
 - This is not surprising after a long bull market run
- On the flipside, <u>momentum</u> factors exhibit high levels of factor dispersion
- Peak levels of momentum factor dispersion occur when using a 12 month return lookback
 - The effects of mean reversion are seen when using a 3 and 5 year return window as universe returns become more compressed



Momentum Factors - Std Dispersion



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Factor Dispersion: Growth & Profitability

- <u>Growth</u> factors are currently exhibiting large dispersion coefficients
 - In some cases dispersion is over 2X those of valuation factors
 - Long-term EPS analysts estimates do not have much dispersion
- Profitability factors are also exhibiting attractive dispersion levels, but clearly inferior to those of momentum and growth factors
 - Free cash flow margins offer the widest dispersion among profitability factors







Factor Dispersion: Trading & Sell Side Recommendations

- Trading oriented factors such as beta, volatility and changes in volume do not offer much discrimination at the moment
 - This result is likely to be related to the overall low levels of equity market volatility
- Sell-side analyst factors offer more potential in terms of upgrades-todowngrades but mean recommendation scores remain significantly clustered
 - Tight distributions of recommendation scores are the norm









Equity Portfolio Positioning Implications

Top-Down Regional & Sector Summary Views

- For the global equity investor we recommend overweighting European and Asian developed markets
 - We view the more attractive valuations as key
 - We also do not see a repeat of USD strength in 2016 despite the almost universal expectation of rising relative rates in the US
- For global investors we also recommend under-weight exposures in Emerging Markets particularly Latin America. Emerging Europe is inexpensive but lacks growth
 - The commodity meltdown has had a serious negative effect on emerging market economies which we expect still to be an issue in 2016
- > On an economic sector basis we continue to shy away from commodity exposed industries.
 - Energy stocks for example, appear inexpensive but we still foresee a lack of growth and profitability over the course of 2016
 - We instead favor over-weight positions in beneficiaries of lower energy costs. Consumers for one are direct beneficiaries
 - We also particularly like the Transportation sector especially in an environment of steady (if not spectacular) economic growth
- For US investors the target sector allocation looks similar to the global picture with an underweight to Energy and Basic Materials and target over-weights to Consumer Discretionary, Financials and Utilities
 - We judgmentally like our overweight in Financials as the macro and micro pictures seem to be aligning in a most favorable manner
- Also, worthy of note is the generally Neutral Technology recommendation both in our Global as well as US sector models.
 - Hardware and services seem to be priced fairly, but certain software segments carry sky high valuations bringing back memories of the 2000 bursting of the TMT bubble



Bottom-Up Factor Summary Views

- Our research now favors value stocks by a slight margin over growth stocks
 - To some extent our call is tied to our sector views
 - Traditional value-oriented strategies are being dragged down by the deteriorating fundamentals of commodity oriented stocks
- In terms of factor tilts we favor an overweight to growth and profitability factors
 - As global growth vanes, market participants attach a greater premium to those companies growing at above average rates in a profitable manner
 - Growth factors in particular are attractive in terms of the wide dispersion among company characteristics
- We are neutral in terms of momentum tilts as we expect global equity markets to become more volatile and a resumption of risk on/off investor behavior
 - Typically momentum strategies perform best in lower volatility environments but our expectation is that as the Federal Reserve begins normalizing the yield curve the "implied" Fed put will become a distant but fond memory
- We do not see Valuation oriented factors as the best way to capture risk adjusted returns
 - Our asset allocation work currently suggests a tilt toward risky assets for 2016 and while long-term equity returns are highly unlikely to match historical norms we do not expect an equity market meltdown for 2016
 - We view the strategy of tilting toward value stocks as providing insufficient downside protection in the event of a market correction
 - We are also pessimistic about the value add of valuation factors in light of the very tight dispersion among company valuation metrics
- Finally, while the "Low Volatility" anomaly has not worked this year, but we think that next year as market volatility drifts upwards toward historical norms we will see investors drifting toward lower volatility, larger capitalization investments



Key Questions Facing Global Equity Investors

Are non-US equity investments doomed due to the strength of the dollar?

NO, we expect the USD to remain fairly range bound versus the Euro and the Yen during 2016. Emerging market currencies, however, have more downside in our opinion. We view developed market international markets as more attractive than domestic equities.

Will global earnings keep growing?

YES, but slowly and various regions will be impacted differently. A strong USD will dampen the growth of many US domiciled export-driven companies. Energy related sales and EPS numbers still possess some downside, but the worst is probably over.

Is the commodity rout finally over?

- NO. Markets are still saturated with excess supply and slowing global growth is making matters worse. Expect commodity related companies to reluctantly start cutting dividends in 2016.
- Will growth stocks keep out-performing despite their valuations?
 - YES., but more selectively. Sky-high software valuations are a big risk if overall market conditions deteriorate (remember 2000?) Biotech is also at risk especially as you go down in market cap.

Will the trend be your friend in 2016?

YES, but it will be more distant and there will be some hiccups in the relationship. Momentum as a strategy works well in most market conditions but especially in lower volatility/uncertainty environments. We expect a resumption of risk on/off behavior and rising capital market volatility as the Fed raises interest rates in 2016 and we would caution investors to lower their momentum exposure

What sector is most likely to positively surprise in 2016?

FINANCIALS in the US. It is always risky to stick your neck out on one idea but nonetheless our research points to an environment favorable for the sector. Higher short term rates in the US will greatly benefit the sector, but valuations and profitability are also currently attractive

Won't the 2016 Olympics bring about an economic recovery for Brazil?

NOT LIKELY as commodity markets are expected to remain in the doldrums and political unrest seems to be on the rise. The 2014 World Cup did little to lift the spirits of the nation. Our research still rates Brazilian equities toward the bottom of the barrel. Go long Michael Phelps, but stay short the Bovespa!





For further information on our research subscriptions or asset management products please contact us at:

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Equity Market Profile Summary

	NASDAQ							S&P 500														EM			ALL
Global Focus Capital	S&P 500	S&P 400	S&P 600	100	R 2000	R 3000	CD	CS	EN	FN	HC	IN	IT	MA	TC	UT	INTL EQ EAFE	DEV NA	DEV EU	DEV ASIA	EM EQ	LATAM	EM EU	EM ASIA	WORLD
1 WEEK RETURN	-3.6	-3.9	-4.5	-4.3	-4.4	-3.6	-4.6	-2.7	-5.7	-3.3	-3.1	-2.2	-4.6	-2.0	-2.9	0.7	-1.7	-3.6	-2.9	0.5	-3.7	-2.1	-2.7	-3.7	-2.9
1 MO RETURN	8.4	5.6	6.1	11.2	5.6	7.9	9.1	5.8	11.4	6.2	7.8	9.2	10.8	13.5	7.1	1.1	7.8	8.0	7.2	9.1	7.1	6.1	5.6	7.8	7.9
YTD RETURN	0.1	-1.9	-1.6	7.4	-3.8	-0.5	8.9	0.4	-15.3	-1.9	2.7	-2.5	4.6	-7.1	-1.7	-7.5	-0.8	-1.2	-2.4	2.4	-12.0	-25.6	-7.1	-8.4	-2.2
RETURN 2014	13.7	9.8	5.8	36.9	4.9	12.6	9.7	16.0	-7.8	15.2	25.3	9.8	20.1	6.9	3.0	29.0	-4.5	12.6	-5.7	-2.5	-1.8	-12.0	-29.6	5.3	4.7
RETURN 2013	32.4	33.5	41.3	18.4	38.8	33.6	43.1	26.1	25.1	35.6	41.5	40.7	28.4	25.6	11.5	13.2	23.3	30.4	26.0	18.4	-2.3	-13.2	-3.9	2.3	23.4
RETURN 2012	16.0	17.9	16.3	3.7	16.3	16.4	23.9	10.8	4.6	28.8	17.9	15.3	14.8	15.0	18.3	1.3	17.9	15.6	19.9	14.6	18.6	8.9	25.1	21.2	16.8
RETURN 2011	2.1	-1.7	1.0	20.1	-4.2	1.0	6.1	14.0	4.7	-17.1	12.7	-0.6	2.4	-9.8	6.3	19.9	-11.7	0.6	-10.5	-13.6	-18.2	-19.1	-23.3	-17.2	-6.9
RETURN 2010	15.1	26.6	26.3	54.6	26.9	16.9	27.7	14.1	20.5	12.1	2.9	26.7	10.2	22.2	19.0	5.5	8.2	16.0	4.5	16.1	19.2	14.9	17.1	19.4	13.2
CURRENT VOLATILITY	12.0	12.4	13.7	14.9	14.5	12.0	12.6	10.6	20.4	13.4	14.3	14.6	15.3	15.5	13.8	14.4	12.5	12.0	14.1	12.6	15.4	23.8	25.2	14.6	11.6
REL STRENGTH	41.6	38.3	42.1	43.7	42.8	41.3	40.1	32.7	41.3	47.8	44.4	48.9	44.4	50.0	35.3	38.3	48.1	40.8	44.2	56.4	38.3	41.3	41.6	40.9	41.7
TECHNICAL STAGE	IMPROVING	DOWN TREND	DOWN TREND	B REAK OUT	DOWN TREND	MPROVING	UP TREND	DOWN TREND	DOWN TREND	IMPROVING	DOWN TREND	MPROVING	B REAK OUT	IMPROVING	DOWN TREND	DOWN TREND	MPROVING	MPROVING	IMPROVING	G IMPROVING	DOWN TREND	DOWN TREND	DOWN TREND	MPROVING	IMPROVING
INCOME (YIELD)	1.9%	1.6%	1.4%	0.9%	1.5%	1.9%	1.3%	2.5%	3.4%	2.0%	1.5%	2.2%	1.3%	2.2%	4.7%	3.8%	3.0%	2.0%	3.1%	3.1%	2.6%	2.2%	5.8%	2.2%	2.4%
GROWTH IN INCOME 2015	10.3%	7.8%	5.4%	14.6%	10.9%	10.8%	15.3%	13.0%	4.9%	19.4%	10.6%	12.1%	6.6%	0.0%	3.2%	4.7%	1.1%	8.7%	1.4%	1.3%	-6.9%	-26.6%	-4.1%	-4.2%	4.1%
GROWTH IN INCOME 2016	5.9%	3.3%	2.9%	7.2%	1.2%	5.7%	5.1%	4.0%	3.3%	9.1%	8.1%	5.9%	8.0%	2.0%	2.0%	4.7%	5.8%	5.2%	6.1%	6.4%	6.3%	3.5%	10.4%	6.1%	6.1%
GROWTH IN INCOME 2017	7.7%	9.6%	5.8%	3.5%	10.4%	8.2%	8.5%	7.5%	4.4%	12.7%	7.0%	8.5%	4.5%	6.4%	2.3%	5.4%	7.8%	7.1%	8.6%	7.5%	10.3%	18.2%	12.0%	9.7%	7.7%
P/E	17.7	18.6	19.9	19.6	17.9	15.1	17.7	20.1	16.6	13.7	20.4	18.3	18.6	16.5	26.4	17.0	15.5	17.7	17.5	23.1	17.2	14.6	20.0	12.7	12.9
NTM P/E	16.6	17.1	18.0	19.0	18.8	14.7	19.0	19.4	29.1	12.8	16.1	15.8	17.0	15.9	12.4	15.6	15.1	17.2	16.7	30.5	16.1	14.4	17.9	12.5	13.0
P/B	2.7	2.3	2.0	4.5	2.1	2.6	4.6	4.9	1.6	1.2	3.8	3.7	4.1	3.2	3.5	1.7	1.6	2.5	1.8	1.4	1.4	1.5	2.1	1.6	2.1
EV/EBITDA	11.9	10.8	11.1	12.5	13.3	12.0	11.5	12.4	8.0	16.1	13.6	10.4	11.5	9.3	8.6	9.3	13.2	12.2	13.5	11.9	10.1	11.0	11.7	11.2	12.5
PEG RATIO	1.6	1.7	1.6	1.3	1.9	1.7	1.2	2.5	-9.3	1.2	1.6	1.6	1.4	1.9	1.9	3.3	1.9	1.7	1.9	1.8	1.1	1.2	1.2	1.0	1.7
LTG EPS	10.9%	10.7%	12.6%	15.7%	13.4%	11.0%	17.4%	8.2%	-2.9%	11.8%	11.3%	10.2%	12.8%	9.3%	7.0%	4.9%	8.3%	11.1%	8.9%	8.6%	11.1%	12.2%	13.5%	13.5%	9.8%
GROWTH IN EPS 2015	0.0%	0.0%	-0.4%	11.2%	3.6%	0.5%	12.3%	1.1%	-59.9%	14.6%	10.3%	2.1%	3.5%	-5.8%	10.5%	0.8%	0.5%	-0.6%	-0.3%	2.3%	-7.1%	-21.0%	-6.7%	-3.6%	-1.9%
GROWTH IN EPS 2016	8.6%	9.7%	14.5%	11.8%	22.0%	9.5%	15.4%	5.9%	1.3%	8.3%	9.9%	5.2%	9.5%	12.3%	3.0%	3.7%	7.7%	10.7%	8.5%	9.1%	10.6%	23.1%	15.8%	10.8%	9.2%
GROWTH IN EPS 2017	12.1%	12.6%	14.6%	12.7%	20.6%	12.9%	13.8%	8.5%	50.5%	9.6%	11.8%	10.9%	10.0%	15.3%	4.8%	4.2%	10.3%	12.9%	11.9%	8.8%	13.1%	17.4%	15.7%	14.2%	11.4%
GROWTH IN SALES 2015	-2.9%	-0.4%	2.7%	8.4%	6.4%	-2.7%	3.2%	1.4%	-33.0%	-0.1%	8.8%	-4.6%	5.5%	-10.4%	7.6%	-1.2%	-3.8%	-5.6%	-4.6%	-0.8%	-11.0%	-8.6%	-6.5%	5.1%	-8.0%
GROWTH IN SALES 2016	4.8%	5.0%	3.7%	7.8%	6.0%	5.1%	6.3%	4.0%	2.7%	4.2%	7.9%	2.4%	5.7%	2.9%	7.3%	1.2%	3.1%	5.4%	3.1%	3.3%	6.8%	7.2%	9.1%	8.2%	4.3%
GROWTH IN SALES 2017	4.4%	-1.4%	-13.8%	5.2%	-9.1%	2.3%	5.7%	1.8%	10.2%	4.4%	6.3%	2.3%	2.0%	4.7%	1.2%	3.5%	3.4%	1.6%	3.8%	2.2%	7.7%	7.7%	4.2%	8.8%	4.3%
ROE	14.7%	11.2%	8.1%	20.3%	5.8%	13.2%	23.3%	24.5%	7.4%	8.7%	17.6%	20.3%	21.7%	19.5%	13.1%	9.7%	9.9%	12.4%	10.3%	9.0%	11.5%	8.1%	14.6%	13.1%	12.2%
NET MARGIN	9.6%	5.6%	4.2%	13.6%	3.2%	8.4%	8.0%	6.3%	5.4%	14.5%	8.5%	8.1%	18.6%	8.8%	5.6%	9.5%	6.5%	7.9%	6.1%	6.7%	8.8%	5.4%	14.4%	9.6%	8.5%
GROSS MARGIN	31.4%	25.2%	23.8%	42.3%	25.6%	30.2%	31.7%	28.7%	14.0%	14.5%	33.3%	28.2%	49.8%	27.3%	42.4%	25.9%	23.8%	30.1%	22.6%	24.5%	24.0%	27.9%	26.5%	20.9%	27.2%
CHANGE IN GM 2015	0.9%	1.5%	1.0%	-2.5%	1.1%	1.5%	-1.5%	-0.2%	6.3%		-1.9%	1.9%	0.6%	2.3%	-0.4%	1.8%	1.9%	1.8%	2.5%	0.9%	0.1%	-0.4%	-5.7%	0.7%	1.5%
CHANGE IN GM 2016	-0.4%	0.1%	0.6%	0.3%	0.7%	-0.2%	-0.3%	-0.1%	-1.8%		0.7%	-1.8%	0.0%	0.8%	-2.0%	1.3%	0.0%	-0.2%	0.2%	-0.3%	0.0%	0.3%	0.3%	0.1%	-0.2%
CHANGE IN GM 2017	1.0%	-0.8%		3.3%		0.9%	2.5%	1.1%	-3.8%		1.6%	3.2%	1.4%	0.7%		2.9%	0.3%	0.4%	0.5%	-0.1%	-0.1%	0.4%		-0.2%	0.4%
DEBT TO EBITDA	1.1	2.0	2.0	-0.2	2.8	1.4	1.2	1.7	1.5		1.0	1.1	-1.1	1.7	2.5	4.1	1.6	1.6	1.4	2.3	1.4	2.9	1.1	1.4	1.3



Top Equity Market Profile

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Global Focus Capital	A us tralia	B e lgium	Brazil	Canada	S witze rland	China	Germany	Denmark	Spain	France	Kingdo m	Hong Kong	Ire la nd	India	Italy	Japan	Ko re a	Netherlands	No rwa y	P o rtugal	Russia	S we de n	S ingapo re	Taiwan	States	Africa
1 WEEK RETURN	-1.7	-0.1	-0.3	-3.7	-2.6	1.4	-2.6	-1.6	-3.1	-3.1	-2.4	-2.8	-0.8	-2.3	-2.6	1.9	-5.1	-2.9	-3.5	-6.0	-4.5	-2.6	-3.5	-4.7	-3.7	-5.8
1 MO RETURN	6.2	8.9	5.4	4.6	4.3	17.7	9.8	0.3	7.6	7.6	6.7	8.4	2.1	2.3	4.4	9.1	7.5	8.9	6.1	7.0	6.8	5.4	7.6	6.2	7.7	6.6
YTD RETURN	-13.9	8.1	-36.6	-20.5	1.9	36.3	-0.9	16.7	-5.6	2.9	-3.0	-5.4	7.1	-2.3	10.2	11.9	-2.2	6.3	-9.8	1.0	12.9	1,1	-13.6	-10.0	-1.5	-19.1
RETURN 2014	-3.5	4.0	-14.0	0.7	-0.2	36.8	-9.2	5.6	-5.8	-6.5	-5.0	8.0	-12.0	36.2	-11.0	-2.8	-6.5	-5.6	-16.1	-29.6	-47.4	-5.6	3.1	5.4	11.8	4.8
RETURN 2013	3.3	26.4	-15.6	6.5	28.6	15.2	32.1	36.6	32.4	31.0	22.5	4.4	74.9	-8.6	29.0	28.3	3.7	33.1	14.2	20.5	-1.6	29.3	2.9	14.1	34.2	-6.5
RETURN 2012	21.1	36.8	3.9	9.6	21.0	4.9	30.7	29.1	6.0	22.0	18.1	24.6	4.5	25.3	17.4	7.4	20.0	22.9	19.8	7.7	11.5	24.3	33.3	18.4	16.5	19.9
RETURN 2011	-11.1	-11.3	-18.0	-11.7	-7.1	-27.4	-17.0	-18.2	-9.0	-16.7	-5.7	-17.0	-24.1	-38.0	-21.1	-10.2	-9.4	-12.5	-11.3	-22.8	-24.3	-15.6	-16.4	-21.9	0.7	-14.1
RETURN 2010	18.5	2.6	12.4	27.0	16.4	2.8	11.8	25.9	-17.8	-1.7	12.1	11.0	-5.9	16.8	-13.4	16.5	26.9	7.9	15.6	-12.6	24.3	35.3	24.3	23.1	18.3	34.2
CURRENT VOLATILITY	18.1	13.1	31.6	15.4	11.6	31.6	15.5	14.2	18.6	14.1	14.8	17.7	23.8	19.0	17.2	13.6	16.7	13.9	20.2	22.4	34.6	15.2	12.2	15.7	12,1	21.0
REL STRENGTH	40.1	53.5	49.1	29.9	35.0	65.2	42.8	43.8	33.5	38.1	35.0	44.3	44.1	30.6	34.7	58.3	35.9	41.1	32.5	30.8	38.5	40.1	36.3	38.2	40.6	26.5
TROINICAL STACE	DOWN	PPP- V OUR	BIRDOUDIO	DOWN	DOWN	BARRAUBIA	DOWN	BREAK	DOWN	DOWN	DOWN	BARR OF BLO	DOWN	DOWN	DOWN	DDD: VOUR	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN	DOWN	B/BB OUBLO	DOWN
TECHNICAL STAGE	TREND	BREAK OUT	MPROVING	TREND	TREND	IMPROVING	TREND	DOWN	TREND	TREND	TREND	MPROVING	TREND	TREND	TREND	BREAK OUT	TREND	TREND	TREND	TREND	TREND	TREND	TREND	TREND	IMPROVING	TREND
INCOME (YIELD)	4.8%	2.8%	4.0%	3.1%	2.6%	0.8%	2.4%	1.5%	4.1%	2.7%	3.3%	2.1%	0.8%	1.4%	2.6%	1.7%	1.0%	2.1%	4.5%	3.4%	4.0%	3.1%	3.5%	3.9%	2.0%	3.2%
GROWTH IN INCOME 2015	-6.6%	-2.9%	-34.7%	-4.3%	-2.3%	9.8%	3.5%	27.4%	-47.5%	12.1%	2.8%	-9.3%	-13.4%	-0.3%	9.4%	12.2%	13.3%	37.3%	-11.5%	13.2%	-5.0%	0.8%	-2.3%	16.2%	9.6%	-13.0%
GROWTH IN INCOME 2016	3.5%	21.7%	2.0%	3.2%	7.7%	17.6%	9.3%	12.8%	6.9%	3.9%	4.4%	5.1%	21.1%	9.6%	14.5%	9.3%	9.1%	7.2%	0.3%	1.3%	10.7%	7.1%	4.5%	5.2%	5.6%	10.8%
GROWTH IN INCOME 2017	6.1%	7.8%	18.9%	-3.0%	9.3%		10.8%	12.1%	6.7%	6.1%	10.6%	9.7%	47.6%	16.5%	16.6%	7.8%	5.4%	9.5%	7.8%	6.1%	13.6%	7.1%	10.3%	4.5%	8.3%	11.0%
P/E	14.9	18.4	9.0	16.2	18.5	28.0	14.4	19.1	17.1	16.7	15.7	9.1	22.6	18.8	19.4	15.3	13.8	16.3	12.7	16.5	7.7	16.0	13.3	12.4	17.7	14.7
NTM P/E	15.3	19.2	9.8	15.6	17.5	20.1	14.2	17.2	15.6	15.5	15.6	9.4	19.1	15.9	16.3	14.9	11.6	15.9	13.2	14.5	5.9	15.8	13.2	12.8	17.3	15.0
P/B	1.7	2.1	1.0	1.6	2.8	3.2	1.7	2.9	1.5	1.6	1.8	1.1	2.6	2.5	1.3	1.4	1.2	2.1	1.3	1.3	0.8	2.4	1.3	1.6	2.6	2.2
EV/EBITDA PEG RATIO	12.5 2.0	20.0	12.3 1.2	12.7	18.7 2.5	22.9	11.3	13.2	20.6	14.6 1.6	12.3 2.9	11.5	18.3 0.9	14.8 1.1	16.4 1.4	14.5	9.9 1.0	11.9	7.9	13.1	6.4 0.4	22.1	13.6	9.0 2.0	12.2	11.1
			_											_						-						
LTG EPS	8.2%	6.1%	9.6%	9.8%	7.7%		11.6%	12.7%	11.6%	10.5%	5.5%	7.9%	25.5%	16.9%	14.2%	10.6%	13.4%	13.8%	3.9%	10.7%	14.6%	12.2%	7.4%	6.8%	11.1%	12.9%
GROWTH IN EPS 2015	-13.3%	11.2%	-29.8%	-16.5%	-1.1%	14.0%	8.3%	19.1%	13.3%	11.6%	-11.8%	-4.9%	23.8%	1.8%	43.8%	11.3%	13.6%	23.3%	-12.8%	42.3%	-28.2%	15.5%	-4.7%	-0.5%	0.5%	-13.8%
GROWTH IN EPS 2016 GROWTH IN EPS 2017	6.9%	4.5%	21.7% 22.7%	20.1%	9.6%	20.7%	11.6% 10.2%	12.9%	8.7% 12.0%	9.5% 11.5%	6.8% 14.0%	6.9% 12.0%	12.3%	22.2%	18.4% 16.0%	11.0% 8.5%	13.2% 10.8%	10.6%	5.6% 10.3%	16.4% 11.3%	13.3% 21.5%	9.8% 8.7%	8.5% 9.7%	5.3% 9.6%	9.9% 13.3%	14.0% 14.7%
GROWTH IN EFS 2017	9.4%	0.770	22.170	8.4%	10.5%	22.270	10.270	12.370	12.070	11.370	14.070	12.070	10.470	10.770	10.070	0.370	10.070	14.370	10.370	11.370	21.370	0.770	9.170	9.070	13.370	14./ 70
GROWTH IN SALES 2015	-12.4%	5.1%	-18.7%	-12.4%	-7.3%	9.4%	3.3%	0.3%	1.7%	-0.9%	-11.3%	-0.4%	8.5%	-3.2%	-4.0%	1.2%	-20.7%	6.7%	-17.5%	-7.5%	-29.3%	9.0%	3.6%	-3.1%	-5.1%	-8.5%
GROWTH IN SALES 2016	3.3%	3.7%	9.9%	6.5%	3.2%	13.6%	2.5%	3.8%	3.4%	2.9%	3.7%	8.1%	9.5%	11.6%	2.5%	3.3%	4.6%	4.5%	3.7%	3.6%	6.0%	3.4%	5.7%	1.6%	5.3%	8.6%
GROWTH IN SALES 2017	4.2%	1.6%	8.0%	-12.6%	3.4%	6.0%	2.6%	2.8%	4.2%	2.6%	3.2%	8.1%	0.5%	0.2%	3.9%	1.3%	4.1%	1.0%	1.1%	8.1%	11.1%	2.9%	1.3%	-2.9%	2.5%	4.1%
ROE	10.7%	10.7%	7.3%	7.9%	9.5%	9.7%	11,4%	13.7%	8.2%	8.4%	9.7%	11.1%	10.0%	12.0%	3.7%	8.6%	7.3%	11.6%	9.4%	4.1%	9.4%	14.6%	8.8%	12.1%	12.9%	14.8%
NET MARGIN	9.5%	9.3%	5.3%	7.2%	7.5%	6.5%	5.3%	9.8%	6.7%	4.7%	5.9%	10.2%	7.0%	6.6%	2.1%	5.1%	4.2%	5.2%	7.7%	2.2%	8.8%	9.5%	11.0%	6.6%	8.0%	9.9%
GROSS MARGIN	23.3%	32.3%	24.9%	22.9%	39.3%	18.9%	22.9%	38.1%	23.8%	21.9%	19.8%	21.6%	21.8%	22.8%	15.6%	24.1%	18.7%	22.6%	19.8%	10.9%	40.2%	27.8%	20.9%	14.4%	30.4%	25.0%
CHANGE IN GM 2015	0.0%	-1.4%	-1.1%	-0.8%	0.3%	0.0%	0.4%	-0.1%	10.4%	8.7%	-0.6%	-1.1%	0.0%	5.7%	4.2%	1.8%	1.9%	1.7%	4.8%	4.6%	-1.1%	0.0%	6.5%	0.0%	2.0%	-8.1%
CHANGE IN GM 2016	0.5%	-0.4%	0.6%	0.1%	0.4%	0.0%	0.6%	0.5%	0.1%	0.2%	0.0%	-0.1%	0.0%	0.4%	0.6%	-0.5%	0.7%	0.0%	-1.6%	0.5%	-1.4%	0.6%	1.1%	-0.3%	-0.2%	-0.3%
CHANGE IN GM 2017	0.0%	-0.8%	0.0%	0.0%	2.0%	0.0%	1.0%	1.6%	-2.0%	-1.5%	0.4%	-0.1%	0.0%	-1.6%	1.2%	0.2%	0.3%	-1.3%	-2.1%	-0.7%	0.0%	0.4%	-1.9%	0.5%	0.4%	1.0%
DEBT TO EBITDA	2.0	2.0	3.3	2.7	0.9		0.9	0.7	2.9	1.6	1.5	1.9	0.9	1.8	1.9	2.1	1.5	1.9	1.4	3.2	1.1	1.7	3.0	0.2	1.6	1.0



Global Economic Sector Profile

Global Focus Capital	Commercial Services	Comm Services	Consumer Durables	Consumer Non- Durables	Consumer Services	Dis tributio n Services	Ele c tro nic Te c hno lo gy	Energy Minerals	Finance	Health Services	Health Technology	Indus trial Services	Non-Energy Minerals	Process Industries	P ro duc e r Manuf	Retail Trade	Technology Services	Trans port	Utilitie s
1 WEEK RETURN	-1.9	-2.0	-1.9	-1.5	-2.4	-1.8	-3.4	-5.2	-2.2	-3.1	-2.1	-4.0	-3.7	-0.9	-1.2	-4.1	-2.9	-1.8	-1.5
1 MO RETURN	6.0	5.7	10.7	7.1	9.2	7.1	9.6	10.5	6.9	2.3	6.8	8.4	8.6	11.8	11.2	5.0	11.5	6.9	5.4
YTD RETURN	5.8	0.4	3.3	6.9	2.3	1.1	2.1	-16.0	-3.4	5.2	6.9	-14.4	-20.4	6.6	3.7	3.7	13.8	-1.7	-7.0
RETURN 2014	1.4	1.5	0.1	5.8	3.2	5.3	18.3	-15.7	7.2	22.3	17.7	-2.4	-6.3	3.4	4.2	2.8	5.5	15.8	13.2
RETURN 2013	37.8	17.5	24.3	16.6	42.0	18.5	30.5	5.3	18.6	32.7	37.4	18.4	-15.8	15.0	27.3	23.1	42.2	26.8	9.8
RETURN 2012	20.7	9.8	25.2	19.0	24.7	10.7	14.3	5.1	28.7	16.8	20.2	13.2	6.5	14.8	17.2	19.8	15.7	14.7	3.6
RETURN 2011	-9.0	1.5	-17.3	6.0	-1.5	-11.6	-11.1	-5.7	-19.2	11.4	3.8	-10.9	-29.7	-14.6	-19.1	-1.1	-4.1	-14.1	-9.5
RETURN 2010	17.4	12.1	24.6	21.1	25.4	18.0	15.6	12.4	8.1	12.8	7.4	22.4	22.5	28.1	30.8	21.4	15.3	17.8	0.7
CURRENT VOLATILITY	11.4	10.9	13.0	9.8	12.1	11.6	14.8	20.1	12.0	12.1	12.6	16.2	17.5	13.7	14.3	10.7	14.5	11.8	10.9
REL STRENGTH	42.3	36.1	45.3	42.3	43.9	42.4	46.4	37.0	44.0	36.7	46.2	33.1	33.3	57.5	56.3	33.4	53.0	42.8	35.3
TECHNICAL STAGE	MPROVING	DOWN TREND	IMPROVING	IMPROVING	MP ROVING	MPROVING	IMP ROVIN G	DOWN TREND	MPROVING	DOWN TREND	MPROVING	DOWN TREND	DOWN TREND	IMP ROVING	MPROVING	DOWN TREND	BREAK OUT	IMPROVING	DOWN TREND
INCOME (YIELD)	1.7%	3.7%	1.7%	2.1%	1.6%	2.1%	1.8%	3.5%	2.7%	0.9%	1.6%	3.1%	3.0%	1.9%	1.7%	1.6%	1.0%	1.8%	3.4%
GROWTH IN INCOME 2015	3.3%	5.5%	7.5%	5.8%	0.0%	9.6%	12.5%	-14.8%	1.9%	14.4%	11.7%	-1.6%	-17.6%	11.6%	11.7%	10.2%	9.3%	13.7%	-14.5%
GROWTH IN INCOME 2016	6.1%	2.5%	13.1%	7.4%	7.2%	5.2%	8.5%	2.2%	7.7%	9.2%	5.3%	7.7%	0.1%	6.9%	7.7%	2.3%	9.1%	8.3%	4.9%
GROWTH IN INCOME 2017	12.2%	5.5%	13.0%	8.6%	7.5%	8.7%	9.2%	8.3%	8.8%	6.4%	9.1%	10.8%	21.0%	8.9%	11.2%	10.1%	11.9%	10.2%	6.4%
P/E	22.1	18.3	12.9	21.9	20.7	15.6	16.5	13.2	11.4	21.0	23.5	16.6	15.0	18.0	18.5	19.6	24.2	15.2	14.6
NTM P/E	18.3	16.1	11.6	21.3	20.7	13.5	15.1	16.2	10.9	18.4	20.5	18.0	17.2	15.2	16.2	20.6	21.5	14.1	13.9
P/B	3.5	2.1	1.7	4.2	3.4	1.6	2.9	1.1	1.2	3.3	4.1	1.7	1.1	2.3	2.1	3.4	4.7	2.1	1.4
EV/EBITDA	12.6	7.1	8.9	14.2	11.9	11.8	9.9	6.9	21.2	11.4	17.7	10.5	8.4	11.1	11.8	12.0	15.4	9.6	9.5
PEG RATIO	1.7	2.4	1.2	2.6	1.7		1.4	52.1	1.2	1.2	1.9	2.6	1.5	1.5	1.7	1.4	1.6	1.2	2.7
LTG EPS	12.4%	7.2%	10.8%	9.0%	13.7%	10.0%	12.0%	0.3%	10.1%	17.0%	11.8%	7.4%	14.5%	11.8%	11.2%	15.9%	14.8%	13.8%	5.3%
GROWTH IN EPS 2015	9.5%	7.6%	5.4%	2.2%	6.4%	12.0%	7.4%	-47.0%	7.7%	11.3%	8.6%	-21.0%	-35.8%	13.2%	2.3%	4.7%	3.9%	28.8%	2.6%
GROWTH IN EPS 2016	12.7%	8.1%	15.8%	9.2%	17.4%	12.2%	10.2%	14.6%	7.0%	15.5%	12.8%	11.9%	33.9%	13.5%	16.8%	12.3%	13.4%	10.5%	1.8%
GROWTH IN EPS 2017	12.6%	10.0%	12.1%	9.9%	14.1%	11.2%	11.5%	36.6%	9.9%	13.5%	15.2%	16.3%	34.0%	12.3%	14.0%	13.6%	14.8%	10.3%	6.8%
	0.70/	0 =0/	4.00/	0.00/	2.00/	7 40/	0.00/	20.0%	2.49/	40.40/	2.5%	0.00/	10.49/	2.50/	= 00/	1.00/	- (0)	0.5%	2 (9)
GROWTH IN SALES 2015	0.5% 5.7%	0.7% 4.7%	4.3%	0.9%	-3.9% 6.7%	-5.4% 5.7%	2.3% 4.9%	-29.9% 4.9%	3.4% 5.7%	10.1% 9.2%	3.7%	-8.8% 4.6%	-10.4% 4.3%	-3.7% 5.1%	-7.0% 5.1%	1.3% 5.5%	7.6%	-2.7%	-2.6% 2.3%
GROWTH IN SALES 2016 GROWTH IN SALES 2017	-2.9%	4.7%	3.4%	0.2%	-0.8%	0.8%	4.9% 0.0%	4.9% 9.8%	2.0%	9.2%	6.1%	4.0%	4.5%	0.5%	2.2%	4.0%	2.4%	3.3%	1.1%
			-			-									-			-	
ROE NET MARGIN	13.8% 5.5%	10.2% 7.0%	12.4% 5.7%	18.4% 9.4%	14.7% 9.4%	10.0%	16.2% 8.5%	6.0% 3.7%	9.6% 12.2%	14.4% 4.2%	14.0% 14.6%	8.5% 3.9%	4.4%	10.9% 5.5%	10.1%	14.1% 3.1%	17.0% 12.2%	12.5% 6.3%	8.6% 6.3%
NET MARGIN	5.5%	7.0%	5./%	9.4%	9.4%	2.0%	8.5%	3./%	12.2%	4.2%	14.0%	5.9%	3.1%	5.5%	5.5%	3.1%	12.270	0.3%	0.3%
GROSS MARGIN	26.3%	35.7%	22.9%	39.4%	36.4%	10.8%	26.9%	13.7%		22.7%	60.0%	13.8%	15.6%	21.0%	22.7%	24.9%	44.2%	18.6%	19.5%
CHANGE IN GM 2015	20.3%	0.7%	0.6%	0.4%	-1.2%	0.5%	0.1%	1.8%		1.2%	-0.3%	2.4%	-0.6%	3.0%	-0.3%	0.4%	1.0%	3.2%	3.4%
CHANGE IN GM 2015	0.1%	-0.6%	0.4%	0.0%	-0.5%	-0.2%	0.1%	-0.9%		2.0%	0.0%	-0.4%	0.8%	0.2%	0.5%	0.4%	0.6%	-1.5%	0.0%
CHANGE IN GM 2017	1.0%	1.5%	0.0%	1.4%	0.070	0.1%	0.3%	-1.1%			1.4%	-0.8%	1.1%	1.5%	0.7%	0.1%	2.1%	1070	-1.9%
DEBT TO EBITDA	1.3	1.7	0.4	1.4	1.9	3.3	-0.5	1.6		2.3	0.7	3.0	2.4	1.7	1.2	1.0	-0.4	2.2	3.9

