

Trading Calls

BBTC Long/Buy 23rd January 2019

After giving sharp correction from 2115 level BBTC is spending complex time in triangle and it seems that point "E" has taken support at A-C line with good volume. Momentum oscillator Stochastics is trading in oversold zone and trying to move up. Hence we advise our client to accumulate stock in the range of 1262-1240 and on decline towards 1210-1190 for the price targets of 1320 and 1352 with 1131 as SL.

BEML Long/Buy 23rd January 2019

Scrip seems bottoming out at its lower levels of 865-870 marks from where it formed inverted hammer on daily chart suggesting upswing on up side. Scrip took support from its upward sloping line along with declining histogram in negative territory of MACD and momentum indicator RSI also looking firm on daily chart which are giving cues that scrip can take a turn on positive side. Principal of polarity can provide strong support in coming sessions. Aforementioned rationale suggest buying in the scrip around 880-890 & on decline towards 850-860 for the target of 950 and 970 with the stop loss of 835 marks.

HEROMOTOCO Long/Buy 22nd January 2019

Since 20th Dec 2018 HEROMOTOCO is falling in impulse and it has taken support at 2742 with strong buying, which is 87.50% retracement of just preceding larger impulse from 25th Oct to 20th Dec. Momentum oscillator stochastic is giving sign of strength, Hence we advise our client to buy HEROMOTOCO in the range of 2830-2800 and on decline in the range of 2730-2700 for the price target of 2990/3100 with 2525 as SL.

LUPIN Long/Buy 14th January 2019

After the correction from the high of 986, this counter appears to be stabilizing around 800 levels and positioning itself for rally. Sustainability above Double bottom breakout on weekly chart indicate strength in the prices. Positive crossover in daily MACD is showing upside momentum. The RSI is sustaining around 50 from a bottoming formation which is bullish. Once it manages to push itself above 945, the move on upside can be swift. Hence, positional traders are advised to go long with a stop 785 for the target of 920 and 970 marks.

SBIN Long/Buy 14th January 2019

The stock has given breakout from a consolidation phase at around 287-300 zone for quite some time forming cup & handle pattern where it consolidated again and currently has been trading as symmetrical triangle as a mother pattern on weekly chart which breakout is expected above 307 levels where buying momentum will pick with greater pace. Indicators and oscillators also lending support to its price action. We recommend a buy in this stock for an upside target of 330 and 345 marks keeping a stop loss of 274 marks.

Market	Value	% Change
SGX Nifty (at 8.15 am IST)	10936.00	0.46%

Nifty Key Levels

Support	S1: 10780	S2 : 10740
Resistance	R1 : 10878	R2 : 10950

Market Outlook

Formation of Hammer pattern after two days downswing on the daily chart suggest bearish momentum halts at 10800. The market was able to surpass the open and close in green color as the 21-Day SMA placed at 10838 worked as support. We expect the trend to continue in upside towards 10950 in a short term as long as 10780 holds on the downside.

Institutional Turnover

FII	Buy(cr.)	Sell (cr.)	Net(cr.)
24-Jan-19	4,121	4,216	-94
Jan-19	66,578	70,145	-3,567
DII	Buy(cr.)	Sell (cr.)	Net(cr.)
24-Jan-19	2,813	2,423	390
Jan-19	55,573	52,320	3,253

FII DERIVATIVES POSITION FOR 24-Jan-2019

	Net (Amt. in crs)
INDEX FUTURES	-511
INDEX OPTIONS	924
STOCK FUTURES	571
STOCK OPTIONS	53

Sectoral Performance (%)

	1 Day	1 Week	1 Month	1 Year
Auto Components	(1.09)	(2.32)	(3.85)	(22.02)
Automobiles	(0.70)	(4.15)	(7.68)	(27.11)
Chemicals	(0.49)	(1.78)	0.17	(5.11)
Construction & Engineering	(0.82)	(3.96)	(4.35)	(21.19)
Construction Materials	(0.91)	(1.65)	(2.86)	(23.45)
Diversified Financial Services	0.04	(1.92)	(0.50)	(8.58)
Electrical Equipment	(1.27)	(2.79)	(1.59)	(18.86)
Energy	0.82	5.05	6.78	(3.52)
Financials	0.06	(1.49)	0.75	(6.49)
Health Care	(0.38)	(0.65)	2.21	(8.09)
Household Durables	(0.56)	(1.42)	(0.18)	(19.43)
Household & Personal Products	(0.27)	0.06	(0.58)	16.34
Information Technology	0.64	0.61	3.03	10.15
Metals/Mining/Minerals	(0.24)	(3.16)	(6.33)	(28.22)
Telecom	(1.62)	(7.68)	(2.11)	(34.83)
Utilities	(0.33)	(2.78)	(2.02)	(17.48)

Participant wise Open Interest In Equities Derivative (no. of contracts)

Long Position				
	DII	FII	Pro	Other
Future Index	58828	216729	23767	174617
Future Stock	24321	881987	175908	885190
Option Index Call	24444	220006	139588	456737
Option Index Put	90793	429209	150250	461595
Option Stock Call	0	48354	63393	389992
Option Stock Put	0	53084	71869	151417

Short Position				
	DII	FII	Pro	Other
Future Index	31441	260559	34892	147049
Future Stock	991920	558171	141451	275864
Option Index Call	0	85448	232630	522697
Option Index Put	0	206063	205684	720100
Option Stock Call	0	51958	173003	276778
Option Stock Put	0	44489	70484	161397

High ES & High PS Stock Maintaining Strength

BSE Code	NSE CODE	1 Month Return %
530813	KRBL	24.5
532541	NIITTECH	16.6
532531	STAR	16.3
500126	MERCK	15.1
500238	WHIRLPOOL	14.3
500325	RELIANCE	14.3
506197	BLISSGVS	13.1
500163	GODFRYPHLP	13.0
500209	INFY	12.9
524804	AUOPHARMA	10.1

High ES & Low PS Stock Showing Strength

BSE Code	NSE CODE	1 Month Return %
512529	SEQUENT	22.7
532648	YESBANK	17.4
533552	RUPA	11.6
532652	KTKBANK	11.5
500135	ESSELPACK	11.2
532772	DCBbank	11.1
533150	GODREJPROP	9.7
532313	MAHLIFE	9.1
532498	SHRIRAMCIT	8.9
500870	CASTROLIND	7.6

Low ES & Low PS Stock Maintaining Weakness

BSE Code	NSE CODE	1 Month Return %
531737	GREENCREST	(34.11)
500645	DEEPAKFERT	(27.11)
532121	DENABANK	(23.74)
532922	EDELWEISS	(17.55)
538562	SKIPPER	(16.72)
532915	RELIGARE	(16.25)
532805	REDINGTON	(14.97)
507717	DHANUKA	(12.68)
511072	DHFL	(11.90)
520056	SUNCLAYLTD	(11.84)

Low ES & High PS Stock Showing Weakness

BSE Code	NSE CODE	1 Month Return %
532144	WELCORP	(23.00)
532953	VGUARD	(12.54)
509820	PAPERPROD	(10.02)
502865	FORBESGOK	(9.92)
512599	ADANIENT	(9.83)
500249	KSBPUMPS	(8.86)
505192	SMLISUZU	(8.60)
500116	IDBI	(8.40)
500031	BAJAJELEC	(8.08)
500510	LT	(7.72)

* ES- Earning Score is average of EM (Earning Momentum defined as relative performance in terms of operating profit growth) and EQ (Earning Quality defined as relative balance sheet strength in terms of debt and working capital)

* PS- Price Score is of a company is relative price performance in multiple time-frame

Analysis shown here is only for companies with market cap more than Rs 1,000 Cr.

STDC / R25 Open Calls for 25-Jan-2019 (10)

STDC (10)									
No	Date	Type	Buy/Sell	Stock	Entry1	Entry2	SL	Tgt 1	Tgt 2
1	23-Jan-19	STDC	BUY	BBTC	1251	1200	1131	1320	1352
2	23-Jan-19	STDC	BUY	BEML	885	855	835	950	970
3	22-Jan-19	STDC	BUY	HEROMOTOCO	2815	2715	2525	2990	3100
4	14-Jan-19	STDC	BUY	LUPIN	832.5	818.5	785	920	970
5	14-Jan-19	STDC	BUY	SBIN	300	288.5	274	330	345
6	10-Jan-19	STDC	BUY	HDFCLIFE	402	382.5	364	450	470
7	08-Jan-19	STDC	BUY	AXISBANK	628.5	607.5	580	675	690
8	04-Jan-19	STDC	BUY	QUESS	720	682.5	628	804	880
9	02-Jan-19	STDC	BUY	TCS	1922	1870	1783	2010	2060
10	27-Dec-18	STDC	BUY	MCDOWELL-N	627	592.5	565	715	640

VIEW

Indices made a smart come back on the back of positive global and domestic cues. Beating earning estimates of Reliance & HUL accompanied lower Inflation data of CPI and WPI created optimism among market participants. Despite these optimism, benchmark indices in no mood to entertain BULLS or BEARS and still awaiting for the clear direction in the market. However, market will take cues from the earning season and news flow on union budget at domestic front along with progress of Sino- US trade war, China's Q-4 GDP growth and US existing home sales data at global front. We expect market undertone will remain bullish and every decline gives opportunity to accumulate long position in the market.

NIFTY-

- From last five weeks, it has been consolidating in a range of 450 points. This type of consolidation can be used for buying on dips and sell on rallies, until it breaks from price range.
- Emergence of Hammer on weekly chart indicate bullishness
- On daily chart, it took the form of Ascending triangle implies strength
- Sustainability above 100 DMA also giving cues of upside as this level has been acting as resistance from last few weeks.
- Oscillators suggest bullishness- MACD & ROC continues in buy mode, Stochastic oscillator %k is trading above % d, hence in buy mode. ADX suggest sideways consolidation with no clear trend. OBV continues to make higher top higher bottom. Thus majority of oscillators are suggesting upside momentum.
- A breakout is expected above 10950-10985 zone from where it can extend up to 11100 which is 61.8% retracement of the down leg from all its high to the lows of oct.
- Strong support is seen at the levels of 10690 followed by 10600 levels.

CHART ANALYSIS



NIFTY LEVEL

JUSTIFICATION

Resistance 2	10985	Peak of Diamond Pattern
Resistance 1	10930	Peak sideways range
Close	10906	
Support 1	10690	Current week low
Support 2	10600	Low of previous swing

Banknifty Weekly

21-Jan-19

VIEW

Banknifty gave a range bound and choppy movement throughout last week and after opening with a red session, the index moved in the range of 27182 and 27612. At the end of the week Banknifty closed at 27456.70. It had a garinal gain of 0.01% over its previous week's close.

OBSERVATIONS:

- 1) Bank Nifty is moving in a rising channel since last October 2018.
- 2) Bank Nifty is currently trading above 50, 100 & 200 DMAs
- 3) A 'Hanging man' pattern was formed on daily candlestick chart.

According to the above observations it can be concluded that the short term trend of Bank Nifty is looking positive. However, a formation of a hanging man pattern on daily chart is giving indication of some correction from the current level. As the index is trading in a rising channe , it would be prudent strategy to initiate fresh long position near the lower band of the chanel. Therefore we recommend initiating fresh long position in Banknifty in 26700-26900 zone.

CHART ANALYSIS



SUPPORT & RESISTANCE LEVELS

RESISTANCE/SUPPORT	BANKNIFTY LEVEL
Resistance 2	27880
Resistance 1	27755
Close	27457
Support 1	26907
Support 2	26596

VIEW

Previous week, INR has depreciated on signs of weakening in global as well as domestic economies. Rupee was inefficient to capitalize gain even after in the hike of indian bond yield which usually exist between currency and bond due to intra market relationship. Sustainability of crude oil prices on higher side which again a concern for our domestic currency and weigh higher than other factors affecting it. Meanwhile, on the cross currency front, it was a mixed week where Euro & yen depreciated on weak economic numbers while sterling became stronger on short covering on the back of cessation on Brexit. In coming week, lack of domestic trigger could keep the currency in a range but escalation in crude oil prices could impact our currency negatively.

TECHNICAL FACTORS-

- a) Downward sloping trend line may act as barrier in its upside move.
- b) Failure to cross and sustain above 71.36-71.42 levels, can see a dip towards 70 and 69.76 marks on downside.
- c) However, trendline breakout above 71.72 level can push higher till 71.90 and 72.60 levels.
- d) Indicators are looking mix- RSI facing resistance near 50 and MACD & signal trades in positive territory indicate positive bias.

CHART



STDC : Long / BUY

23-Jan-19

BSE Code	500048
NSE Symbol	BEML
52wk Range H/L	521/1546
Mkt Capital (Rs Cr)	3671.25
Av.Cash Volume(,000)	1446255
Open Interest	NA

Buy Price	880-890 & 850-860
Stop Loss	835
Target Price1	950
Target Price2	970
Upside in Tgt1	11%-18%
Upside in Tgt2	22%-30%

Technical Chart



STDC- BUY BEML @ 880-890 AND ON DIP TOWARDS 850-860 SL-835 (CLOSING BASIS) TGT- 950, 970

Scrip seems bottoming out at its lower levels of 865-870 marks from where it formed inverted hammer on daily chart suggesting upswing on up side. Scrip took support from its upward sloping line along with declining histogram in negative territory of MACD and momentum indicator RSI also looking firm on daily chart which are giving cues that scrip can take a turn on positive side. Principal of polarity can provide strong support in coming sessions. Aforementioned rationale suggest buying in the scrip around 880-890 & on decline towards 850-860 for the target of 950 and 970 with the stop loss of 835 marks.

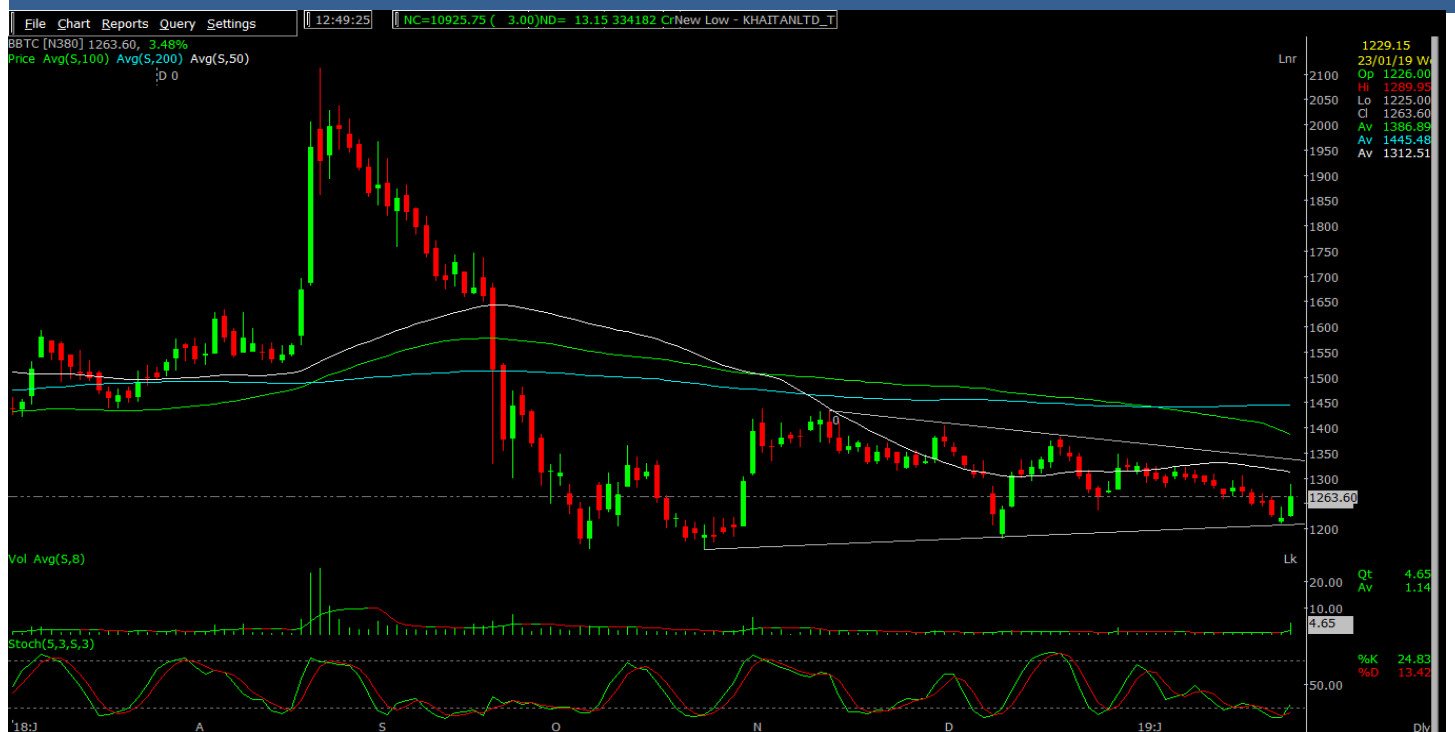
STDC : Long / BUY

23-Jan-19

BSE Code	501425
NSE Symbol	BBTC
52wk Range H/L	2113.85/1082.05
Mkt Capital (Rs Cr)	8,826.00
Av.Cash Volume(,000)	3001
Open Interest	

Buy Price	1262-1240/1210-1190
Stop Loss	1131
Target Price1	1320
Target Price2	1352
Upside in Tgt1	8%
Upside in Tgt2	11%

Technical Chart



STDC- BUY BBTC @ 1262-1240 AND ON DIP TOWARDS 1210-1190 SL- 1131 (CLOSING BASIS) TGT-1320, 1352

After giving sharp correction from 2115 level BBTC is spending complex time in triangle and it seems that point "E" has taken support at A-C line with good volume. Momentum oscillator Stochastics is trading in oversold zone and trying to move up. Hence we advise our client to accumulate stock in the range of 1262-1240 and on decline towards 1210-1190 for the price targets of 1320 and 1352 with 1131 as SL.

STDC : Long / BUY

22-Jan-19

BSE Code	500182
NSE Symbol	HEROMOTOCO
52wk Range H/L	3862/2648.70
Mkt Capital (Rs Cr)	56,520.00
Av.Cash Volume(,000)	36738
Open Interest	

Buy Price	2830-2800/2730-2700
Stop Loss	2525
Target Price1	2990
Target Price2	3100
Upside in Tgt1	8%
Upside in Tgt2	12%

Technical Chart



STDC- BUY HEROMOTOCO @ 2830-2800 AND ON DIP TOWARDS 2730-2700 SL- 2525 (CLOSING BASIS) TGT-2990, 3100

Since 20th Dec 2018 HEROMOTOCO is falling in impulse and it has taken support at 2742 with strong buying, which is 87.50% retracement of just preceding larger impulse from 25th Oct to 20th Dec. Momentum oscillator stochastic is giving sign of strength, Hence we advise our client to buy HEROMOTOCO in the range of 2830-2800 and on decline in the range of 2730-2700 for the price target of 2990/3100 with 2525 as SL.

STDC : Long / BUY

14-Jan-19

BSE Code	500257
NSE Symbol	LUPIN
52wk Range H/L	986/723
Mkt Capital (Rs Cr)	37773
Av.Cash Volume(,000)	3.64
Open Interest	NA

Buy Price	830-835 & 815-820
Stop Loss	785
Target Price1	920
Target Price2	970
Upside in Tgt1	11%-18%
Upside in Tgt2	22%-30%

Technical Chart



STDC- BUY LUPIN @ 830-835 AND ON DIP TOWARDS 815-820 SL- 785 (CLOSING BASIS) TGT-920, 970

After the correction from the high of 986, this counter appears to be stabilizing around 800 levels and positioning itself for rally. Sustainability above Double bottom breakout on weekly chart indicate strength in the prices. Positive crossover in daily MACD is showing upside momentum . The RSI is sustaining around 50 from a bottoming formation which is bullish. Once it manages to push itself above 945, the move on upside can be swift. Hence, positional traders are advised to go long with a stop 785 for the target of 920 and 970 marks

STDC : Long / BUY

14-Jan-19

BSE Code	500112
NSE Symbol	SBIN
52wk Range H/L	334.8/232
Mkt Capital (Rs Cr)	268183
Av.Cash Volume(,000)	47.43
Open Interest	NA

Buy Price	299-301 & 287-290
Stop Loss	274
Target Price1	330
Target Price2	345
Upside in Tgt1	11%-18%
Upside in Tgt2	22%-30%

Technical Chart



STDC- BUY SBIN @ 299-301 AND ON DIP TOWARDS 287-290 SL- 274 (CLOSING BASIS) TGT- 330, 345

The stock has given breakout from a consolidation phase at around 287-300 zone for quite some time forming cup & handle pattern where it consolidated again and currently has been trading as symmetrical triangle as a mother pattern on weekly chart which breakout is expected above 307 levels where buying momentum will pick with greater pace. Indicators and oscillators also lending support to its price action. We recommend a buy in this stock for an upside target of 330 and 345 marks keeping a stop loss of 274 marks

LME Aluminium prices have fallen towards two year low at \$1920 per tonne after the supply tightness eased in the raw material sector and after United States decided to delay the sanctions on Russia, one of the world's largest producer of the metal. Prices have moved below its cost of production in China pressurizing the margins of the producers.

Globally, aluminium production has remained flat as the major producers like China is unable to increase the output as the current prices are unprofitable. While, US on the other side is starting to start its smelters but the outages at Canada, Brazil have offset the rise in production. China contributes almost 56% to the global production. And saying if China slows down its production rate, the world would be in huge shortfall in the coming year.

China Supply Concerns:

China's aluminium production has been falling since last three months despite of no winter output curtailments in place. China's capacity growth rate is slowing as old capacity is been shut down by the local government following strict targets set by China and the rate of new smelter capacity is falling. Although, the key ingredient, bauxite is restricted to produce during winter period on China's environmental crackdown.

Aluminum Corp of China Ltd also known as Chalco, China's largest producer, is cutting output on some of its aluminum production lines in northern China. The company is set to reduce some 470,000 tonnes of production, nearly 12% of company's output. Two smelters in Qinghai province of China of 270,000 tonnes capacity have gone off line in the last couple of weeks. These cuts have been inculcated as prices are trading below cost of production driven by reducing demand and ample of supply, forcing smelters to either partially or fully shut down its production.

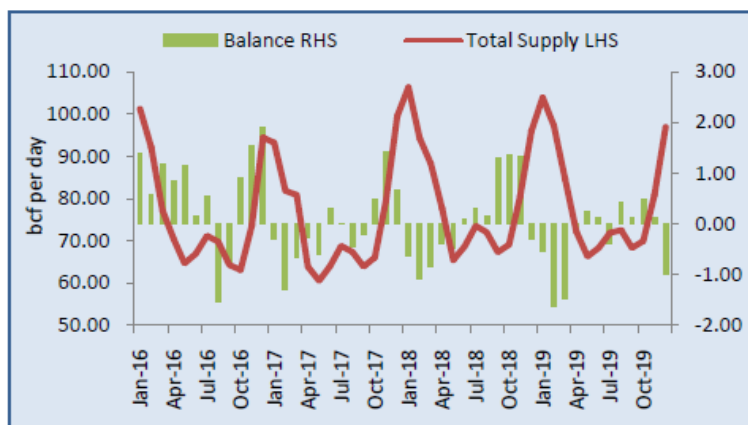
US Sanctions Tensions

US sanctions on Russia will continue add upside volatility in global aluminium prices. The U.S. Treasury Department last month postponed a Dec. 12 deadline for Deripaska to reduce his holdings in the companies, giving the Russian tycoon until Jan. 7.

Outlook

Overall, aluminium prices have declined drastically fell by almost 20% since April 2018 on extension of US sanction on Rusal and easeness in raw material supply. But we believe still some tightness in alumina market persists, as the Alunorte refinery is partially shut. Furthermore, Chinese production is expected to come down on smelters shutdown due to lower prices. However, demand weakness due to trade duties can provide some selling pressure. but prices will remain supported at lower levels. We expect MCX Aluminium prices will take support of 127-125 levels and move higher towards Rs 150-155 per kg in the short term.

Demand Supply Scenario:



Source: Narnolia Research, U.S. EIA

US Natural gas market normally shifts into deficit during the November to February period i.e. winter season in US. During this high period of demand, natural gas should be well-supplied or else supply tightness worry will emerge and prices will start to rally higher.

US Dry gas production

US Dry natural gas production is rising this year and is estimated to be at 82.2 bcf per day in August, up by 0.7 bcf/day in July, almost 7.4 bcf per day higher than last year. In 2018, US Dry gas production has increased by almost 10% on an average as compared to last year. Furthermore, EIA expects the dry natural gas production to keep rising on an average of 84.7 bcf per day in the coming year. Due to significant natural gas production increase in 2018, NYMEX natural gas prices have been unable to breach \$3 per MMBtu for the most of the summer.

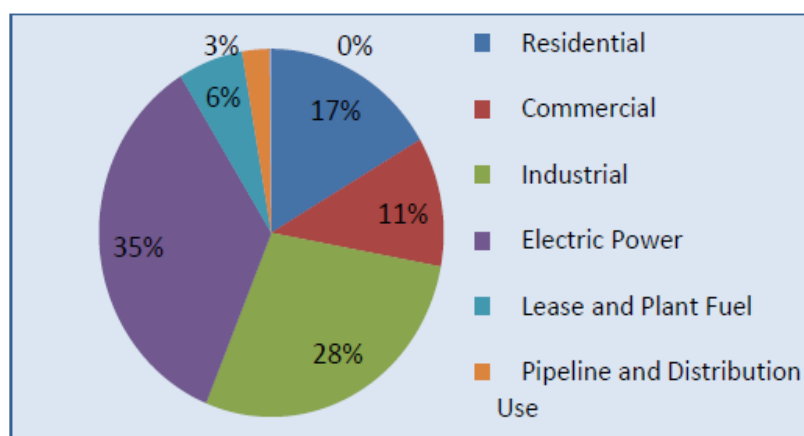
US Gas consumption

US Natural gas consumption has increased by 7% this year standing at 79.86 bcf per day. This increase in consumption is due to higher demand from the residential and industrial sector along with higher exports as compared to last year levels. Higher consumption of natural gas has been one of the reason for the lowest storage injection this October since the year 2005.

There are two demand driving season for natural gas – Winter and Summer. During winter, demand is measured by number of heating degree days and during summer, natural gas demand is measured by the number of cooling degree days.

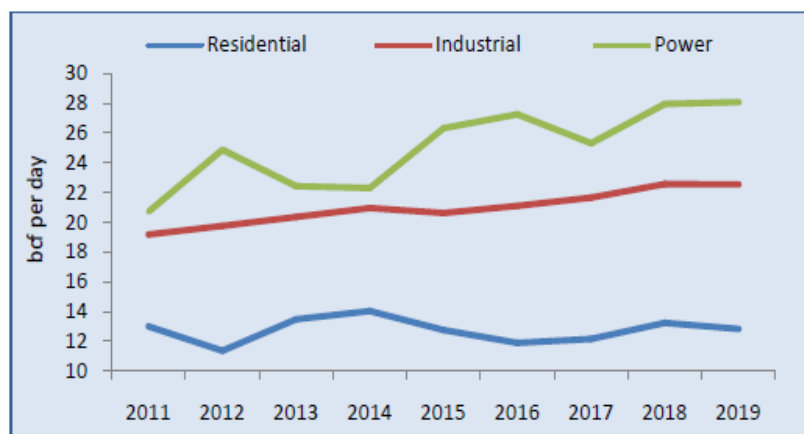
Cooling degree days (CDD) reflects the amount of energy required to cool a residence, industrial or a business. In 2018, CDD stood 18% higher than the previous year and averaged 25% above normal on hottest summer leading to strong air conditioning demand in the summer season. Warmer than normal temperatures extended into the month of September and provided further firmness to the natural gas prices.

Sector wise: Natural Gas Consumption Demand



Source: Narnolia Research, Bloomberg

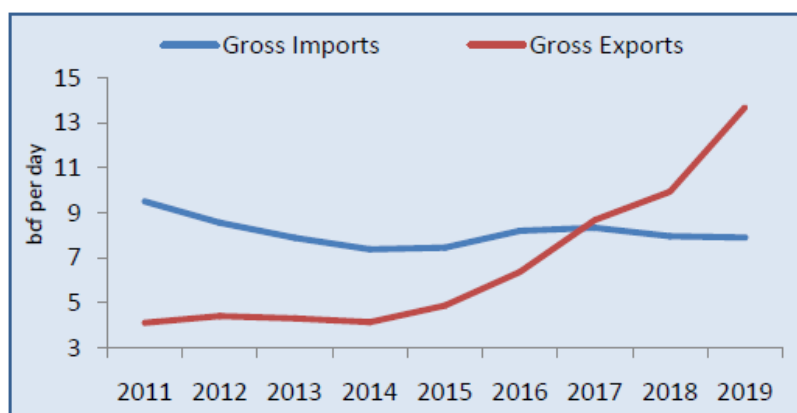
From the above figure, we can conclude that the major consuming sectors of natural gas are Electric Power, Industrial and Residential sector. With Electric power being the major consumer of natural gas comprising 35% of the total natural gas consumption followed by Industrial and Residential sector.



Source: Narnolia Research, Bloomberg

As you can see in the above figure, natural gas demand from largest contributing sector – power and industrial has been rising since the year 2011. Electric Power demand has risen from 20.7 bcf per day in 2011 to 28.07 bcf per day in 2018. Industrial demand of natural gas has increased on a slower rate as compared to electric power however, overall demand from this sector has shown a rising trend.

US Attention towards Exports

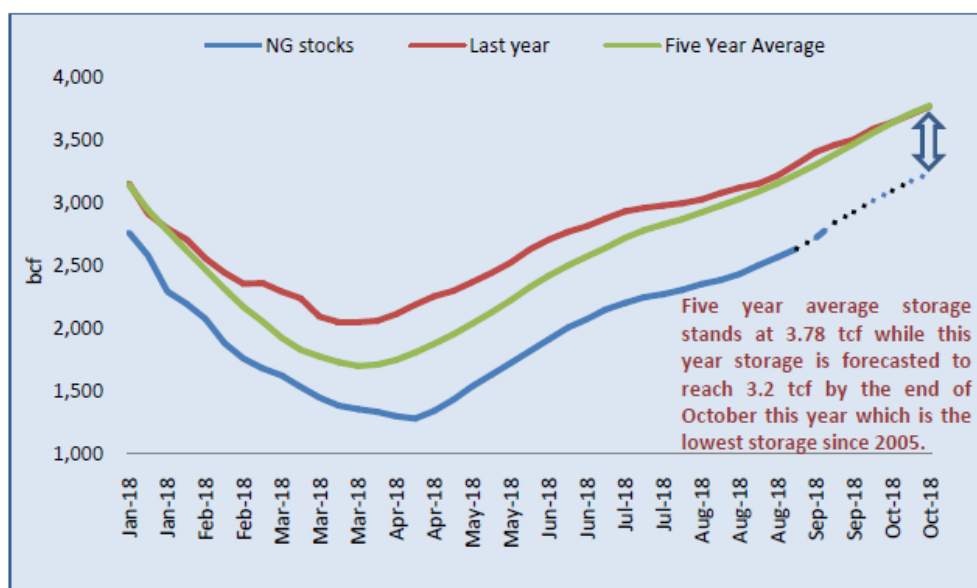


Source: Narnolia Research, EIA Short-Term Energy Outlook

United States had been a net importer while a time ago but after the shale gas revolution in the US, the nation has shifted from net importer to evolving natural gas exporter.

US exports have risen tremendously from 5 bcf per day in 2014 to almost 9 bcf per day in 2018, an increment of 80%. Furthermore, there are expectations of US exports to reach 13 bcf per day in 2019. US Exports accounts for 12% of the total natural gas consumption. US LNG exports have started to rise from last year after the US removed ban on US gas exports. As of now, only few US companies have been allowed to export natural gas to other countries. Moreover, more permission will be granted to other companies to exports this year. We expect US LNG exports to rise by threefold by 2020.

Storage Levels



Source: Narnolia Research, Bloomberg

As per our calculation, we expect U.S. natural gas inventories will total 3.2 trillion cubic feet (Tcf) at the end of October 2018 which will be way below the five year average of 3.781 tcf. At present, natural gas inventories are at 2.722 tcf, natural gas inventories are 586 bcf or 20% below than the last year level and 672 bcf or 17.5% below the five-year average.

The inventory level is at the lowest level for that time of year since 2005 on high air conditioning demand this summer causing power generators to burn more gas than usual and leaving less gas available to go into storage. U.S. gas inventories will start the winter heating season at the lowest level since 2005, leaving the market vulnerable to winter price spikes.

Winter season forecast – Natural gas prices are unlikely to give a steep fall ahead of winter season forecast. If the weather forecast shows a cold winter ahead, prices would immediately get the support on future rise in demand for natural gas.

Outlook

After taking all the factors into consideration, we expect Natural Gas prices are likely to remain strong this winter season. With low stockpiles heading into the winter demand season, robust domestic consumption and higher natural gas exports from US are propping up prices, which are expected to average \$3.10/MMBtu this year and \$3.25/MMBtu in 2019. The only factor keeping the prices closer towards \$3/MMBtu is the record high production of natural gas in the United States. However, tightness in inventory during the winter season will overshadow the worries of record high production which will drive prices higher. **We expect MCX Natural gas prices to test 245-250 levels** in the coming six months time frame. **Therefore, any downside until the end of October towards Rs 205-210 in MCX should be used as the buying opportunity.**

Narnolia Financial Advisors Ltd. is a SEBI registered Research Analyst having SEBI Registration No. INH300006500. The Company/Analyst (s) does/do not have any holding in the stocks discussed but these stocks may have been recommended to clients in the past. Clients of Narnolia Financial Advisors Ltd. may be holding aforesaid stocks.

The stocks recommended are based on our analysis which is based on information obtained from public sources and sources believed to be reliable, but no independent verification has been made nor is its accuracy or completeness guaranteed.

Disclosures: Narnolia Financial Advisors Ltd. (NFAL) (Formerly Microsec Capital Ltd.) is a SEBI Registered Research Analyst having registration no. INH300006500. NFAL is engaged in the business of providing Stock Broking, Depository Participant, Merchant Banking, Portfolio Management & distribution of various financial products. Details of associate entities of NFAL is available on the website at www.narnolia.com

No penalties have been levied on NFAL by any Regulatory/Statutory authority. NFAL, its associates, Research Analyst or their relative may have financial interest in the subject company. NFAL and/or its associates and/or Research Analyst may have beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report. NFAL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of NFAL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report. Research Analyst may have served as director/officer, etc. in the subject company in the last 12 month period. NFAL and/or its associates may have received compensation from the subject company in the past 12 months. In the last 12 months period ending on the last day of the month immediately preceding the date of publication of this research report, NFAL or any of its associates may have: a) managed or co-managed public offering of securities from subject company of this research report, b) received compensation for investment banking or merchant banking or brokerage services from subject company of this research report, c) received compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company of this research report. d) Subject Company may have been a client of NFAL or its associates during 12 months preceding the date of distribution of the research report. NFAL and its associates have not received any compensation or other benefits from the Subject Company or third party in connection with the research report. NFAL and / or its affiliates may do and seek to do business including Investment Banking with companies covered in the research reports. As a result, the recipients of this report should be aware that NFAL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific Merchant Banking, Investment Banking or Brokerage service transactions. Research Analyst's views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of NFAL or its associates maintains arm's length distance with Research Team as all the activities are segregated from NFAL research activity and therefore it can have an independent view with regards to subject company for which Research Team have expressed their views.

Analyst Certification The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

Disclosure of Interest Statement-

Analyst's ownership of the stocks mentioned in the Report	NIL
---	-----

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com.

Correspondence Office Address: Arch Waterfront, 5th Floor, Block GP, Saltlake, Sector 5, Kolkata 700 091; Tel No.: 033-40541700; www.narnolia.com.

Registered Office Address: Marble Arch, Office 201, 2nd Floor, 236B, AJC Bose Road, Kolkata 700 020; Tel No.: 033-4050 1500; www.narnolia.com

Compliance Officer: Manish Kr Agarwal, Email Id: mkagarwal@narnolia.com, Contact No.:033-40541700.

Registration details of Company: Narnolia Financial Advisors Ltd. (NFAL): SEBI Stock Broker Registration: INZ000166737 (NSE/BSE/MSEI); NSDL/CDSL: IN-DP-380-2018; Research Analyst: INH300006500, Merchant Banking: (Registration No.: INM000010791), PMS: (Registration No.: INP000002304), AMFI Registered Mutual Fund distributor: ARN 3087

Registration Details of Group entities: G. Raj & Company Consultants Ltd (G RAJ)-BSE Broker INZ260010731; NSDL DP: IN-DP-NSDL-371-2014 || Narnolia Commerce Limited (Formerly Microsec Commerce Ltd.)-MCX/NCDEX Commodities Broker: INZ000051636 || NarnoliaVelox Advisory Ltd.- SEBI Registered PMS: INP000005109 || Eastwind Capital Advisors Pvt Ltd. (EASTWIND)-SEBI Registered Investment Adviser: INA300005439 || Narnolia Insurance Brokers Limited (Formerly Microsec Insurance Brokers Ltd.)-IRDA Licensed Direct Insurance Broker (Life & Non-Life) Certificate No. 134, License No. DB046/02 || Narnolia Securities Ltd. (NSL)-AMFI Registered Mutual Fund distributor: ARN 20558, PFRDA NPS POP: 27092018 || Narnolia Capital Advisors Pvt. Ltd. - RBI Registered NBFC:B.05.02568.

Disclaimer:

This report has been prepared by Narnolia Financial Advisors Ltd. (NFAL) and is meant for sole use by the recipient and not for public circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of NFAL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult his/her/its own advisors to determine the merits and risks of such an investment. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. NFAL will not treat recipients as customers by virtue of their receiving this report. Neither the Company, nor its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits or lost opportunities that may arise from or in connection with the use of the information/report. The person accessing this information specifically agrees to exempt NFAL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold NFAL or any of its affiliates or employees responsible for any such misuse and further agrees to hold NFAL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject NFAL & its group companies to registration or licensing requirements within such jurisdictions.