



CEE

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ECONOMICS



CEE Analytics - Midstream

BEG/CEE Think Day, 7 June 2013

Conclusions/Concerns

1. Vicious cycle: MLP's need more DCF (distributable cash flow) to pay unit holders thereby requiring more capital to build or buy additional assets to increase DCF.
2. Assets could become overvalued due to increased competition among MLP's to grow DCF through asset purchases, etc.
3. Oil and NGL prices could weaken with the increased production thereby pressuring DCF of the MLP's
4. Credit metrics could weaken or MLP's could become overleveraged in quest for DCF
5. Is a bubble forming?

Implications for CEE research



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RESEARCH OBJECTIVES

Initiation, Realizations

- Original research plan vs where we are – problems, etc.
 - Original premise was to gather and process economics at basin level to identify trends and which companies were active in each basin
 - Problems with lack of data/transparency on MLP volumes, looking at plant level data sets
- Reorganizing around major summary criteria to describe midstream segment, trends and issues
 - From benchmarking MLP's, identifying trends in the midstream business models and implication for upstream and downstream sectors
 - Identify issues and trends with respect to the MLP structure for midstream companies
 - Implications of trends for development of individual basins



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OBSERVATIONS

Trends

- MLP's are the dominant business structure in the midstream and will continue to increase as more companies decide unlock trapped value
- Unique characteristics of MLP's allow companies to unlock value trapped in logistics assets and will drive their financial behavior
- MLP's exhibit moderate to weak financial metrics and credit ratings but apart from the major integrated companies are stronger than their upstream/downstream counterparts

Trends

- Several upstream and downstream companies are pursuing the same strategy- unlock value through MLP structure and pursue US shale production
- MLP's in the midstream are abandoning less profitable basins with more dry or non associated gas and shifting their production/capital to basins with more profitable hydrocarbons such oil and liquids
- Those shale plays richer in crude oil and liquids such as Eagle Ford, Marcellus, and Permian will benefit from this shift

Trends

- **Challenge to MLP's will be to grow distributable cash flow (DCF) while maintaining access to capital to fund CAPEX**
- Expect more M&A activity in the sector to implement growth strategy or to gain entry to a shale play

TAX REFORM FUELS CREATION OF MLPs IN MIDSTREAM

Why the MLP Structure in the Midstream?

- Normally, publicly traded partnerships are taxed as a corporation
- Tax reform in 1986 and 1987 gave rise to Master Limited Partnerships (MLP's) which are limited partnerships traded on a public exchange but taxed as a partnership instead as a corporation
- IRS Code section 7704 (d) provides a natural resource exception to the general rule of being taxed as a corporation as long as the MLP derives 90% or more of its revenue from "qualifying" sources related to the extraction and processing of natural resources and therefore the need for energy related assets

Why the MLP Structure in the Midstream?

- If the MLP maintains 90% or higher qualifying income, it gets partnership treatment for Federal income tax purposes
- If the MLP fails to meet the qualifying income test, it becomes federally taxable for all its income during that year and forever in future years.
- Therefore, qualifying income is of great concern leading to private letter rulings (PLR) being requested to ensure compliance with IRS rule

Why the MLP Structure?

- MLP structure has allowed both upstream and downstream companies to unlock value and monetize logistics or "toll road" type assets by spinning them off into a separate MLP
- Provides cash infusion to the parent company and reduces debt which usually follows the assets
- **MLP's often trade at higher multiple (TPH reported 12x-15x EBITDA but CEE research indicates a wider range of 8x to 14x with cluster in 8x to 10x range)**

Why the MLP Structure?

- **This compares to the downstream sector of pure refining companies which exhibited a range of 3x-5X EBITDA as calculated by CEE**
- **Pure upstream companies exhibited a range of 3x to 7x as calculated by CEE**

Why the MLP Structure?

- Over the last 12 months, the IRS has continued to provide valuable guidance to its interpretation of the scope of activities that generate qualifying income with respect to modern applications of “processing” and refining natural resources... (V&E)
- Without the favorable tax treatment, MLPs would not be as attractive

FINANCIAL DRIVERS OF MLPs IN MIDSTREAM

Financial Drivers of MLP's

Market requirement to distribute operating cash flow (DCF) each quarter which can be accomplished by pursuing several strategies:

- 1) Greater fee based income
- 2) Reduce commodity exposure
- 3) Change hydrocarbon mix

Financial Driver-Fee Income

1) Need to generate greater fee income, i.e. stable, dependable cash flow

-This is accomplished by owning pipelines, processing plants, fractionation plants, terminals, etc. that collect a fee for services

-CEE research on a sample of MLPs indicated a steady increase since 2009 in the percentage of gross margin generated by fee income with an average in 2012 of 62.5%

Financial Drivers-risk profile

2) MLP's can also ensure stable cash flow by reducing commodity exposure which can be accomplished by:

- a) hedging price exposure on non fee income
- b) changing contract terms to shift commodity risk to producer/end user where MLP receives a fee instead of commodity for payment e.g. POP, Keep Whole, etc.

Financial Drivers-hydrocarbon mix

3) Shift to a more profitable hydrocarbon mix such as crude oil and liquids is another method to increase fee income. This was accomplished in several ways:

Financial Driver-hydrocarbon mix

- a) JV with companies already established in the shale play
- b) buy or build assets located in more profitable shale plays such as pipelines, fractionators, processing plants, etc.
- c) make investment in company active in designated shale play

ACCESS TO CAPITAL

Financial Drivers-Capital

- As operating cash is distributed every quarter, MLP's are highly dependent on access to capital to finance their growth
 - need to build or acquire "toll road" type of assets and finance shift to more profitable hydrocarbons
 - financing is provided by variety of sources from banks, affiliated companies or some private equity

Capital

- Currently, access to capital does not appear to be constrained as liquidity is still available from banks and private equity even for lower rated credits
- Low interest rate environment keeps demand strong and costs of capital down for MLP's
- Higher yields attract investors

MLP vs S&P



Capital-Concerns

- Debt financing from banks is more delicate to balance since loan covenants will restrict cash distributions if certain ratios are tripped, i.e. banks will not allow cash to be stripped from debtor leaving inadequate reserves to repay debt
- One company in CEE sample noted that in 2009, it was precluded from making a distribution for this reason

CREDIT QUALITY

S&P Ratings Matrix

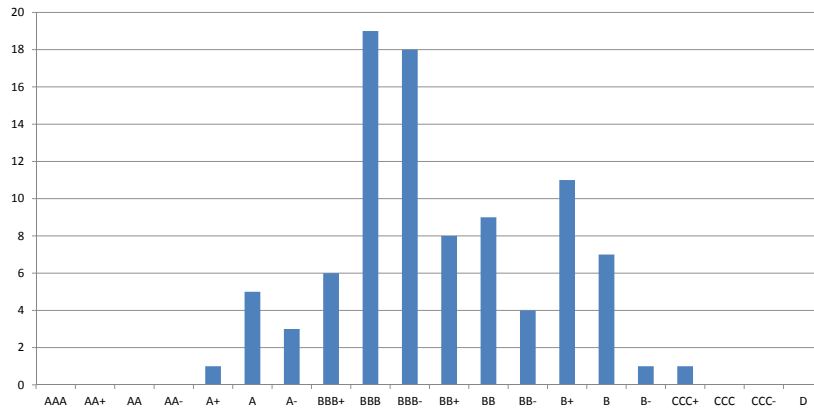
Business Risk Profile	Financial Risk Profile				
	Modest	Intermediate	Significant	Aggressive	Highly Leveraged
Excellent			BBB	BB-	BB-
Strong			BBB	BB-	BB-
Satisfactory	BBB+	BBB	BB+	BB-	B+
Fair	BBB-	BB+	BB	BB-	B
Weak		BB	BB-	B+	B-
Vulnerable			B+	B	B- or below

Credit Quality

- MLP 's in the midstream exhibit moderate to poor credit quality, i.e. little or no "A" rated companies and many are below investment grade
- S&P noted only 55% of midstream ratings are investment grade with about 46% being in the "BBB" category

Credit Quality S&P Ratings

All Midstream Energy Companies



Credit Quality

Why are there so few “A” rated MLP’s?

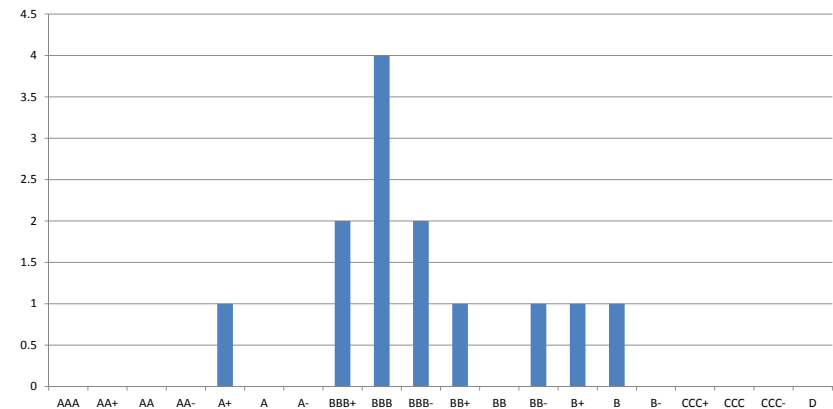
- i. Need to distribute cash (DCF) on increasing basis
- ii. Commodity price exposure
- iii. Higher debt burden to support CAPEX requirements to increase and maintain assets
- iv. Greater interest expense to service debt

Comparison of Credit Quality

- However compared to the Upstream and Downstream sectors, Midstream compared better as measured by S&P ratings
- S&P notes that for refining ratings, 35% are investment grade with about 24% in the “BB” grade and 41% in the “B” grade

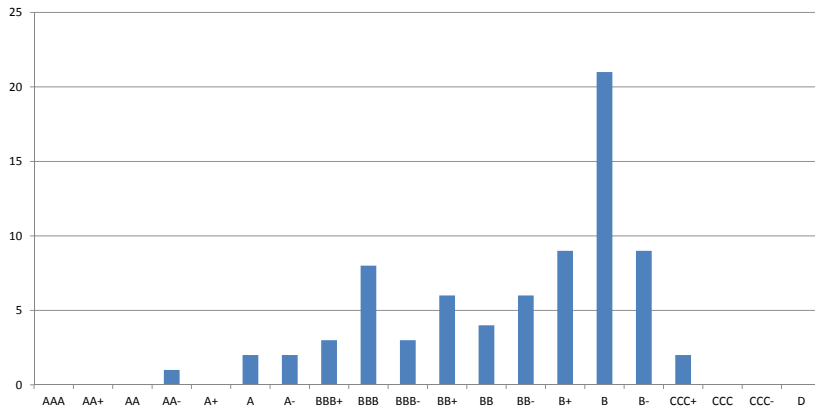
Downstream Companies

Refining Companies



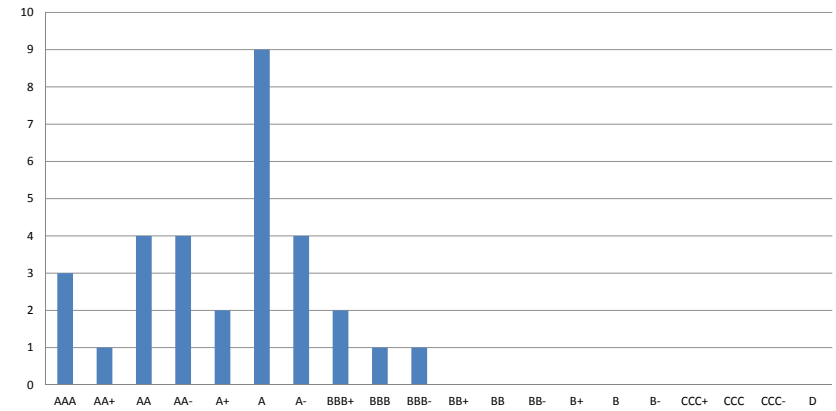
Upstream Companies

E&P Companies



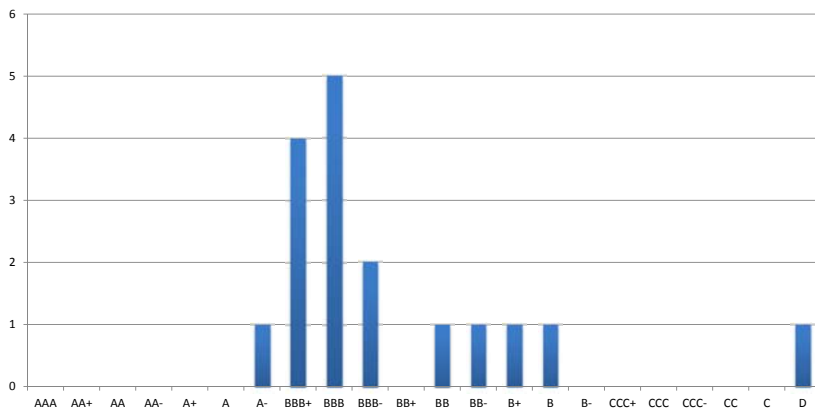
Dow Jones Industrial Companies

Dow Jones Companies



Merchant Generators

Merchant Generators



Rating Agency Update

- We are committed to achieving consistent improvement in the metrics that drive credit ratings
- As a result of our financial performance and based on our future outlook, our objective is to reach investment grade

	Non-Investment Grade						Investment Grade															
Fitch	DDD	DD	D	CCC	CC	C	B+	B	B-	BB+	BB	BB-	BBB+	BBB	BBB-	A+	A	A-	AA+	AA	AA-	AAA
Moody's	Ca	C		Caa1	Caa2	Caa3	B1	B2	B3	Ba1	Ba2	Ba3	Baa1	Baa2	Baa3	A1	A2	A3	Aa1	Aa2	Aa3	Aaa
S&P	CC	C	D	CCC+	CCC	CCC-	B+	B	B-	BB+	BB	BB-	BBB+	BBB	BBB-	A+	A	A-	AA+	AA	AA-	AAA

Current Senior Notes rating

AREAS OF ACTIVITY

Areas of Activity

Both upstream and midstream companies have reacted to current energy prices (low natural gas prices and higher oil prices) in a similar manner by shifting their focus to more oil and liquid rich shale plays

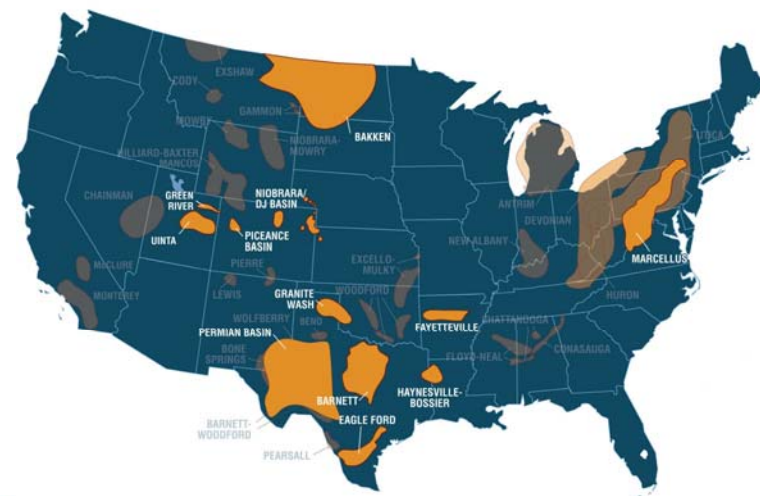
Areas of Activity

According to Credit Suisse the shale plays with the highest rate of return are:

1. Granite Wash (60%)
2. Eagle Ford (59%)
3. Marcellus (50%)
4. Bakken (40%)

- MLPs will shift their efforts to these plays which produce more oil and NGL's and more profitable.
- Both upstream and downstream companies express interest in these areas.
- For upstream companies the higher priced oil and NGL's are more profitable and for the downstream it renders lower cost crude versus Brent.

U.S. Shale Plays



Areas of Activity

Upstream companies sampled by CEE:

40% did not indicate a change in focus

60% indicated a shift to either Permian,

Bakken or Eagle Ford with more focus on oil
and liquids production

Thank you.

Discussion – Going Forward