North America Refining & Marketing 2017 Outlook

BI Refining & Marketing, North America Dashboard

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1. BI Industry Primer: North America Refining and Marketing

Contributing Analysts Rob Barnett (Government)

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(Bloomberg Intelligence) -- U.S. refiners' margins look set for more pressure in 2017 as oversupply from domestic and global markets continues. Eased federal biofuel-blending requirements are possible under Republican President Donald Trump, which could lower compliance costs, though the biofuels policy remains unclear. Refiners will need to increase exports, and Mexican refinery issues present more opportunities. Accelerated dropdowns to sponsored master limited partnerships will help support near-term cash flows.

The potential relief in biofuel blending could reduce prices for renewable identification numbers, or RINs, credits used for compliance with the Environmental Protection Agency's Renewable Fuel Standard. (03/02/17)

Key Points:

- Margin Outlook Bleak: Heavy Oil Discounts, Export Rise May Help Refiners: 2017 Outlook
- Mexico Exports: Mexico Refinery Issues May Help Refiners' Exports: 2017 Outlook
- Drops Help Cash Flow: Accelerated Dropdowns to Help Refiners' Cash Flow: 2017 Outlook

Performance & Valuation

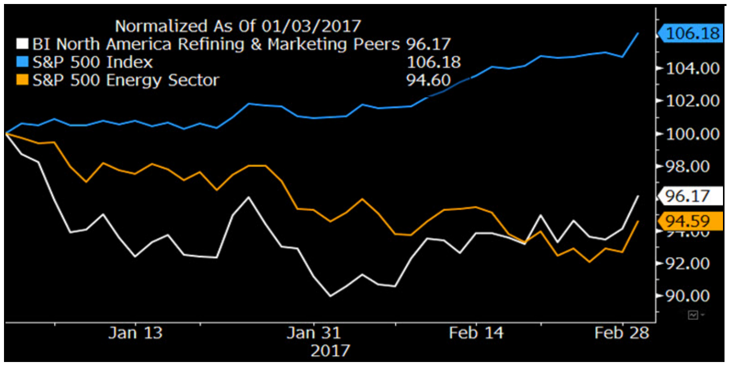
Peer Performance

2. U.S. Refiners Underperforming S&P on Weak Margin Outlook

Contributing Analysts Rob Barnett (Government)

U.S. refiners continue to underperform the benchmark S&P 500 Index in 2017 with continued crack spread weakness. Under Donald Trump's presidential administration, costly biofuels-blending mandates could be eased, a prospect that contributed to a sharp rebound in refiners' share prices. National and global oversupply has weakened margins, with U.S. supply even exceeding record domestic demand. Compliance costs for biofuel-blending requirements surged in 2016 to about $2 billion. (03/02/17)

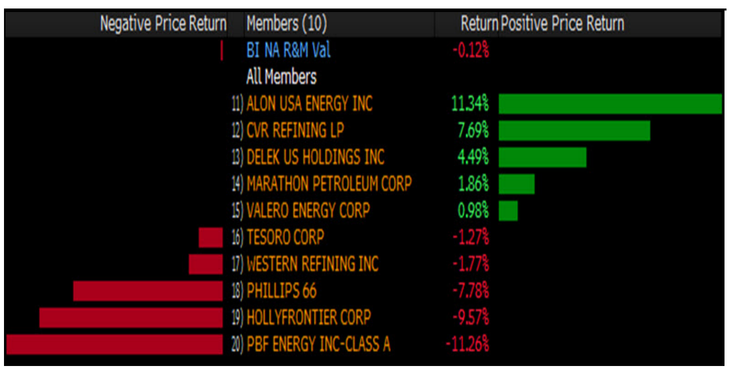
U.S. Refiners' Performance vs. S&P



3. Alon, CVR Lead Refiners' Share Performance on Biofuel Easing

Alon USA and CVR Refining have led refiners' share performance this year, supported by an easing of compliance costs for biofuels blending. Alon USA received a 2016 exemption from the rules due to the economic hardship imposed on its refinery in Krotz Springs, Louisiana. CVR has gained on the possibility that a change in blending rules will alleviate its burden, which totaled $206 million last year. Carl Icahn, whose company owns 58% of CVR, has been named a special adviser to U.S. President Donald Trump. (03/02/17)

Refiners' Share Performance



Peer Valuation

4. Refiners' Valuations Climb, Even as Shares Fall on Uncertainty

U.S. refiners' valuations, based on enterprise value-to-forward Ebitda multiples, are rising in 2017, though share prices have fallen due to policy uncertainty. While Ebitda estimates for the sector were largely unchanged ahead of the recent earnings season, market capitalization has dropped 5%. The potential border adjustment tax is the biggest policy headwind and crack spreads for most regions remain weak. Alon USA's valuation has improved the most after a refinery received a 2016 exemption from biofuel blending. (03/02/17)

EV/Forward Ebitda Valuation

Topics

Margin Outlook Remains Bleak

5. Heavy Oil Discounts, Export Rise May Help Refiners: 2017 Outlook

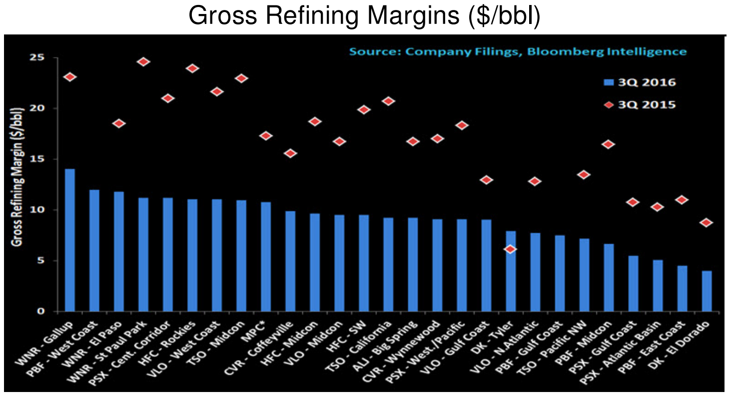
Increasing product exports is key for refiners in 2017 as elevated domestic inventories need to be cleared. U.S. refined product demand was strong in 2016, with gasoline reaching a record 9.6 million barrels a day in summer, yet an increase in capacity more than offset the demand jump. Heavy-oil discounts are expected to grow next year, with much of the increase in crude production coming from heavier oil fields in the Americas.

Margins are still expected to be weak, similar to this year, unless companies cut refinery run rates or uneconomic assets close down, either in the U.S. or competing areas, such as Europe. (11/21/16)

6. U.S. Refining Margin Weakness to Persist as Oversupply Continues

U.S. refining margins have fallen drastically from levels last year, down over 40% for almost every refiner this year. The year began with a gasoline overhang as refineries overproduced winter-grade gas that had to be sold before specifications changed in late March. A similar situation may occur this winter as some refineries switched to producing distillate earlier than usual. Even though product demand is expected to be similar next year, refineries may need to cut run rates. (11/18/16)

Gross Refining Margins ($/bbl)



7. Heavy Oil Differentials May Widen on Americas Production Growth

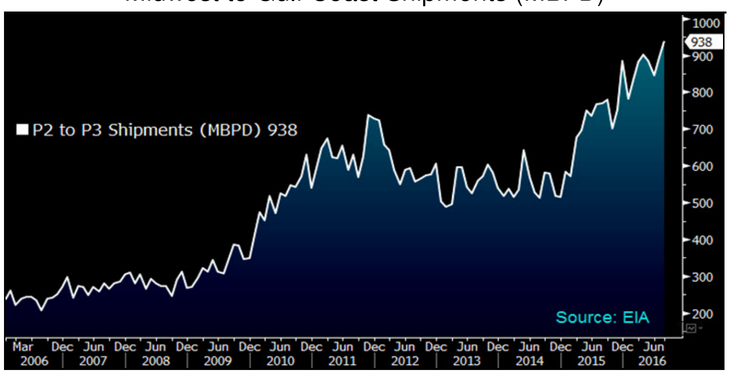
Heavy-oil discounts may increase in 2017 as countries producing those grades lead output growth. Brazil may increase its production from offshore output by another 250,000 barrels per day next year, with Canada up 350,000 bpd. Mexico, similar to other countries in the Americas, may see a slight dip in production though still see an increase in exports as domestic consumption declines. Canadian crude may be discounted by $17 a barrel in 2017 with Mexican Maya prices $6-$7 below Brent. (11/18/16)

Maya Oil Differentials Remain Wide

8. U.S. Refined Product Export Growth May Expand, Easing Oversupply

The glut of refined product in inventory may lead to an increase in U.S. exports. The Gulf Coast may remain the most oversupplied market as shipments to the region from the midwest reached a record 938,000 barrels a day in August. Latin America remains the largest export market, a trend expected to continue in 2017 as Mexican refineries continue to suffer reliability issues. Refinery margins are still likely to suffer though, remaining similar to levels this year unless closures occur. (11/18/16)

Midwest to Gulf Coast Shipments (MBPD)



9. RINs Burden May Ease in Trump Presidency Though RFS to Remain

Contributing Analysts Rob Barnett (Government)

Refiners may see compliance costs decrease markedly under the Renewable Fuel Standard under President-elect Donald Trump. The program as a whole may remain, though the burden of blending biofuels into gasoline may shift from operators producing gasoline and diesel to those who are able to actually blend in the biofuels. Compliance costs surged 83% in 2016 for merchant refiners, pushing past $2 billion. Any relief would help CVR Refining and HollyFrontier the most, given their relatively smaller ability to blend.

RINs, or Renewable Identification Numbers, are offset credits that refiners need to purchase should the companies be unable to meet biofuel blending mandates. (11/19/16)

Estimated RFS Compliance Cost

	2016 Cost ($ millions)	2015 Cost ($ millions)
Marathon Petroleum	280	212
Valero Energy	800	440
Tesoro	30	-
PBF Energy	412.5	171.6
HollyFrontier	240	140
Western Refining	70	35.5
Alon USA	43	35.1
Delek US	40	9.1
CVR Refining	217.5	123.9
Total	2,133	1,167

Source: Company Filings, Bloomberg Intelligence Estimates

Mexico Issues Present Opportunity

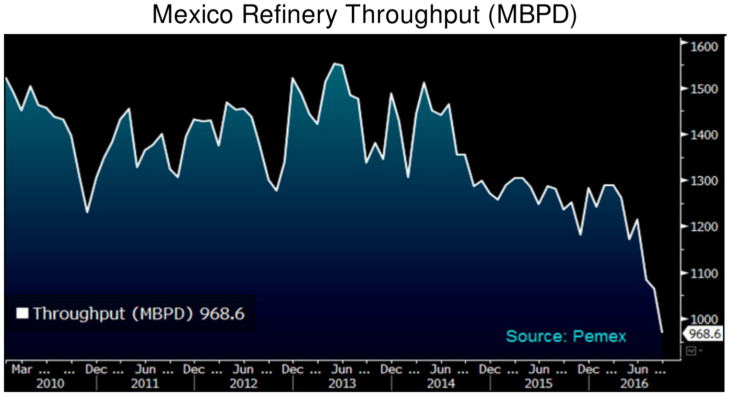
10. Mexico Refinery Issues May Help Refiners' Exports: 2017 Outlook

Mexico continues to have issues at its refineries, which may help increase U.S. refined-product exports to the country. The decrease in processing of heavy crude may also mean U.S. Gulf Coast refineries see slightly larger discounts for processing, further helping margins. A decline in processing at the Cadereyta refinery in northern Mexico may help Western Refining export more refined products by pipeline, though Valero, Marathon Petroleum and PBF Energy also have export ability. (11/23/16)

11. Mexico Refinery Issues May Mean Increased U.S. Product Exports

Mexican refinery throughput continues to fall with processing down to the lowest on record in September. A lack of investment is leading to more refinery outages with throughput more than 300,000 barrels a day below its seasonal average. Mexico remains a large export market for U.S. refined products, and the steady decline in production may mean exports increase in 2017. Western Refining can export 8,000 bpd via pipeline to Mexico, though Valero and Marathon Petroleum can export much more from the Gulf Coast. (11/21/16)

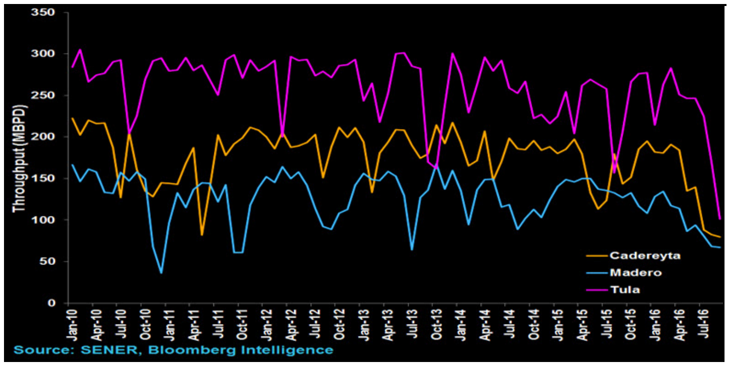
Mexico Refinery Throughput (MBPD)



12. Lack of Pemex Investment Means Refinery Improvements Unlikely

Pemex has announced more interest in joint ventures for its downstream business in order to secure much-needed investment. The company recently announced that $120 million would be spent at its refineries by the end of 2016, helping lead to an increase in production to around 940,000 barrels a day. However, even if this target is met, it is unlikely to be a long-term solution after several years of under-investment. Tula, in the south, has led declines, with the refinery processing mostly heavy oil. (11/21/16)

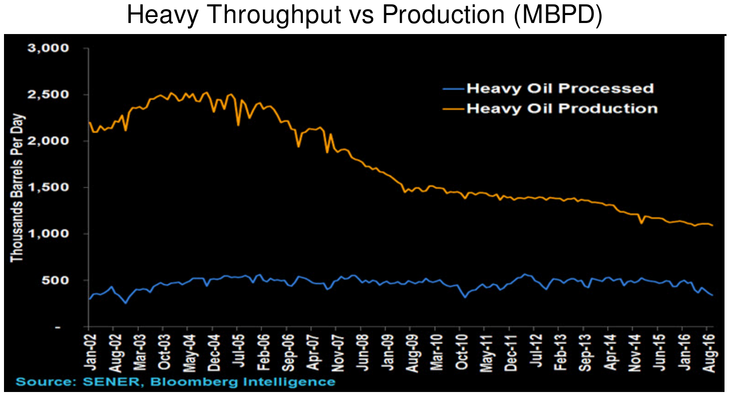
Three Refineries Lead Pemex Declines



13. Reduced Heavy-Oil Consumption May Lead to Greater Mexico Exports

Mexican heavy-oil production has been falling rapidly since 2004 although the pace has slowed since 2014. Throughput at the country's refineries is falling at a faster rate though, especially due to coker unit issues at the Tula refinery, which is leading to greater heavy-oil exports. With Canadian oil production also set to gain around 350,000 barrels a day next year, the resulting pressure on heavy-oil prices is likely to lead to wider differentials, compared to Brent, than in 2016. (11/21/16)

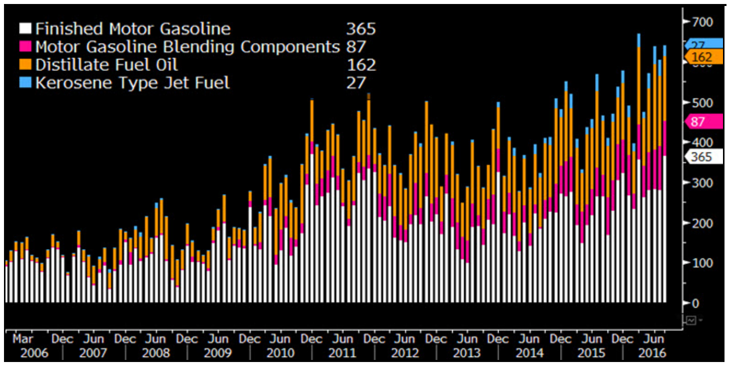
Heavy Throughput vs Production (MBPD)



14. U.S. Refined-Product Exports to Mexico Likely to Grow in 2017

U.S. refined-product exports to Mexico reached a record 940,000 barrels a day in August. This growth is likely to continue into 2017 and shipments may top one million bpd as ongoing refinery issues reduce local supply while low pump prices help stimulate demand. With U.S. exports to other markets falling due to greater competition, Mexico may remain a bright spot for refiners. The falling value of the peso though, is a headwind for local demand if retail-price gains are demand-destructive. (11/21/16)

U.S. Clean-Product Exports to Mexico



Dropdowns to Support Cash Flow

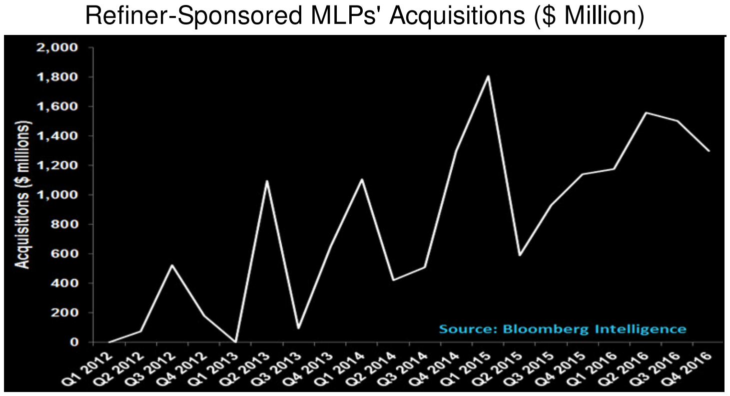
15. Accelerated Dropdowns to Help Refiners' Cash Flow: 2017 Outlook

U.S. refiners have struggled with free cash-flow generation in 2016, as refining margins narrowed. Because the industry is capital intensive, companies may be unable to reduce spending much further next year and instead could accelerate dropdowns to their sponsored master limited partnerships to help near-term cash flow. MLP acquisitions may increase again in 2017, after a 24% jump this year, as companies mature and are able to buy larger assets. (11/23/16)

16. Acquisitions by U.S. Refiners' MLPs Surge 24% to $5.5 Billion

U.S. refiner-sponsored MLPs have bought over $5.5 billion of assets in 2016, an increase of 24% from 2015 as the companies mature. As an MLP grows, so does its capacity to purchase larger assets. There are indications that refiners seek to accelerate their MLPs' distribution growth by being more aggressive with dropdowns, or sales of assets to the partnerships. This helps support refiners' near-term cash flow, which is being reduced by weakening refining margins, and supports continued share buybacks. (11/29/16)

Refiner-Sponsored MLPs' Acquisitions ($ Million)



17. Dropdowns by U.S. Refiners May Rise, Supporting 2017 Cash Flows

U.S. refiners may relay on larger asset dropdowns to their MLPs after poor industry refining margins weakened free cash flow in 2016. Delek may be the only member of the Bloomberg Intelligence refining peer group to report improved free cash flow this year, largely due to a drop in capital spending as it finished refinery maintenance. In 2017, all refiners may report improved cash flow, based on consensus, though weak refining margins may limit the improvement for some companies.

Refiners were able to reduce capital spending in 2016 by cutting midstream expenses. The industry needs high levels of spending to support its refineries, so a significant reduction in 2017 is unlikely. (11/29/16)

Free-Cash-Flow Estimates

	Capex ($ millions)			Free Cash Flow ($ millions)		
	2015	2016E	2017E	2015	2016E	2017E
Sum of U.S. Refiners	1,244	1,055	1,136	1,040	(375)	329
Phillips 66	5,764	2,975	2,910	(51)	(179)	702
Marathon Petroleum Corp	1,998	2,994	2,513	2,063	404	727
Valero Energy Corp	1,618	1,651	1,947	3,993	1,986	1,845
Tesoro Corp	1,030	877	1,287	1,101	338	305
HollyFrontier Corp	676	523	412	303	90	303
Western Refining Inc	291	298	280	552	(26)	219
PBF Energy Inc	408	504	546	153	(384)	(49)
Delek US Holdings Inc	214	51	79	(34)	53	66
CVR Refining LP	195	120	135	279	11	50
Alon USA Energy Inc	137	83	96	90	(30)	44

Source: Bloomberg Intelligence

18. Marathon, Tesoro Lead Peers in Aggressive MLP Dropdown Strategy

Marathon Petroleum has led refiners in saying dropdowns for its MLP will accelerate, with assets generating over $1 billion in annual Ebitda expected to be sold during the next few years. Tesoro, at its most recent analyst day, also provided a dropdown strategy aimed at helping its MLP reach $1 billion in annual earnings by the end of 2017, an increase of 25%. As MLPs expand, they require ever-larger projects to generate growth and support cash flows. (11/29/16)

TLLP's Growth Forecast ($ Million)

	2015E	2016E	2017E	2018E
Gathering	240-250	275-290	305-335	350-390
Processing	155-160	155-170	165-185	180-200
Terminal and Transportation	300-305	365-375	380-405	400-425
Total Organic Growth	695-715	795-835	850-925	930-1,015
Dropdowns from Tesoro	N/A	60-70	165-175	220-240
Total Ebitda	650-660	815-855	970-1,050	1,100-1,200

Source: Tesoro

19. Variable-Rate Refining MLPs Face Extinction as Distributions End

The variable-rate master limited partnership model faces challenges. Two of the three that remain ended distribution payments in 2016; the fourth member of the group was acquired. Because refining is a cyclical industry, refining MLPs are unable to issue steady distributions, so instead vary the payments depending on quarterly earnings. Calumet and CVR Refining were both forced to cut distributions to zero in early 2016, with CVR Refining burdened by biofuel blending costs.

Northern Tier, which had refining margins consistently above peers, was taken over by Western Refining in June. Alon USA Partners is the only refining MLP with a quarterly distribution. Its sponsor, Alon USA, is being acquired by Delek. (11/29/16)

Refining MLPs' Performance vs. BI Peer Group