Chilton Investment Services

Special Report

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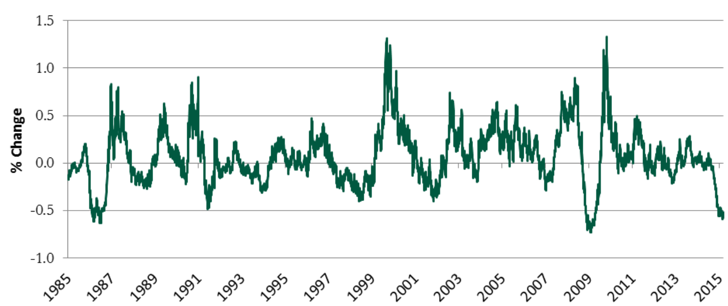
Drilling Down: Cross Sector Analysis of Energy, Texas and Credit Markets

West Texas Intermediate (WTI) oil prices have declined 54% since late June 2014[i]. Natural gas has declined 41%[ii] and auto fuel is down 34%[iii]. We believe the reasons are primarily supply-driven with some easing in global demand likely playing a role as well. Texas is arguably the most impacted state economy and has witnessed declines of a similar magnitude three times in recent decades – 1985-1986, 1990 and 2008-2009 (see Chart 1).

This paper assesses the credit impact of energy price-swings on a broad range of credits in the corporate and municipal debt markets, focusing on Texas-related issuers. However, we believe the fundamental elements of our credit analysis represented herein may be applied broadly to other jurisdictions or companies.

Chart 1: WTI % change over 9 month period



Source: Bloomberg LP

We believe the 1985-1986 price drop is most comparable to the current environment since both involved Saudi Arabia maintaining or increasing production in the face of market share gains from North American producers. The approximately 60% price decline in 1985-1986 ushered in a multi-year period of lower prices. With near term supply curtailment currently not expected from either Saudi Arabia or North America, we believe energy prices could remain lower for longer.

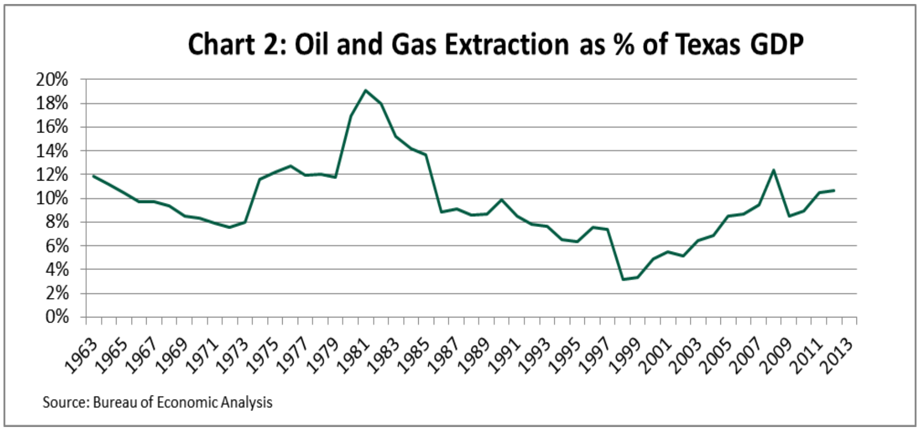
Energy Companies

Exploration and production (E&P) companies are currently shifting production to their highest quality fields which is expected to keep production stable at least through 2015 and possibly longer. However, capital spending on new projects has slowed and operating costs should decline due to a focus on high grade fields and the ability to extract concessions from drillers and service providers. Nevertheless, revenues and cash flow for the sector are down significantly and leverage levels will likely rise for almost every energy company.

Swift adjustment will likely be important in this environment. One example is Anadarko Petroleum (Woodlands, TX) (APC) which entered 2015 projecting a cash flow deficit close to -$5.5 billion. The first step was to cut $3.5 billion in capital expenditures, focusing on U.S. onshore rigs and drilling. In addition, the company has announced $700 million of asset sales year to date, closing the 2015 deficit to -$1.3 billion. Balance sheet resources and available bank credit lines total $12 billion, allowing APC to meet this cash deficit - as well as a $5.1 billion legal settlement – without needing to raise fresh capital.

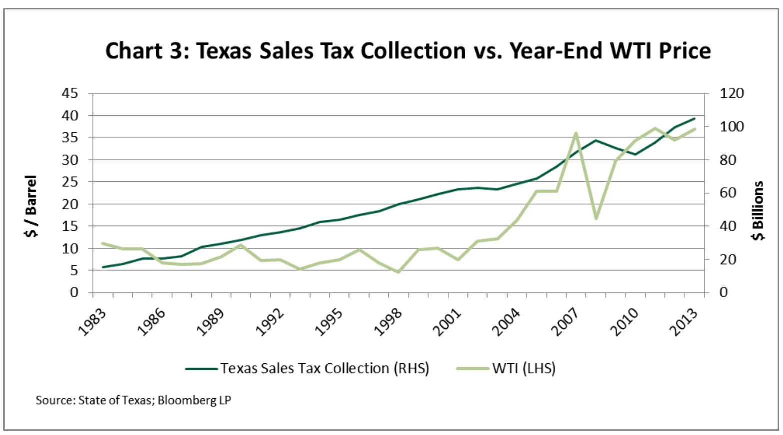
However, many companies will need to access the capital markets and year-to-date debt issuance is running 25% ahead of last year's pace[iv]. Financing costs are adjusting to reflect the new reality as credit spreads on the Citigroup Energy Investment Grade bond index have risen 85% since WTI peaked[v]. **We believe that for energy credit analysis, access to cost effective financing is of paramount importance over the near term. As such, we are closely monitoring conditions in funding markets.** While Chilton generally limits its holdings to investment grade-quality bonds, last week's high yield Whiting Petroleum (Ba1/BB+) new issue serves as a market litmus test. Co-manager JP Morgan reports the deal priced at the high end of the expected yield range although the 6.27% yield and roughly 440 basis point spread to the Treasury was reportedly not cheap enough for some portfolio managers according to trading commentary from one large European broker-dealer. Nonetheless, per JP Morgan, orders for the deal totaled $1.36 billion versus $750MM offered bonds. This issuance indicates that the market remains accessible albeit at rising yield levels.

State Governments



We expect the State of Texas to readily manage the downturn in oil prices, even if price levels remain suppressed. Texas has diversified its economy since the 1986 oil price plunge and oil and gas extraction has fallen from a peak 19% of GDP in 1981 to 11% in 2012[vi] (see Chart 2). While we expect oil related revenues to continue to decline (oil production tax revenues were down 21.2% and 41.2% in January and February, respectively), we also expect sales tax revenues to increase in line with greater consumer purchasing power. Sales tax revenues were up 11.2% and 11.7% in January and February, respectively. **Given that sales tax revenues are a much larger portion of total revenues than oil production revenues (55% vs 10%[vii]) we expect the State's finances to remain stable or improve.**

Consumer Companies

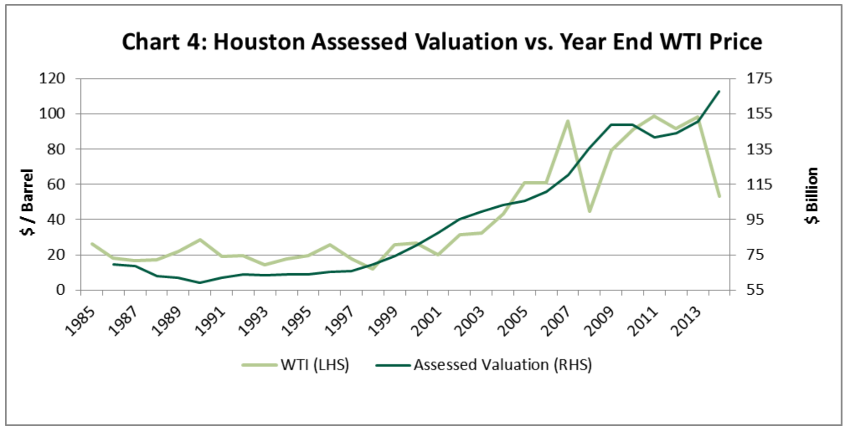


With the energy component of CPI declining 19% over the past year[viii] and the national average price of motor fuel declining 34%[ix], consumers will enjoy an increase in discretionary income, supporting retail and consumer goods companies as well as boosting sales tax (see Chart 3). **US retail sales growth in the second half of 2014 was notably stronger than the prior year and weakness early in 2015 is attributed to winter weather, not unlike early 2014.** Auto sales could well exceed expectations in 2015 based partly on lower fuel prices and increased demand for more profitable trucks and sport utility vehicles. Operating expenses for consumer-related companies will also benefit from lower packaging costs. Plano-based Dr. Pepper Snapple Group estimates that packaging and ingredient cost reductions will reduce cost of goods sold by 1% in 2015. Kimberley-Clark (Dallas) expects lower oil and other raw material costs to boost the bottom line by an estimated 2 percentage points.

Local Governments

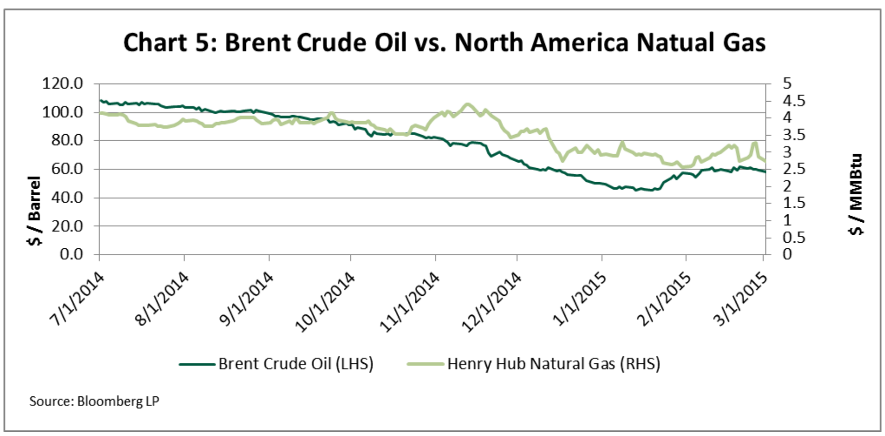
For cities and school districts, the impact will vary. **Areas that depend disproportionally on oil production**

will face pressure while diversified economies are likely to benefit from lower oil prices. For oil-dependent areas, one immediate impact will be seen from reduced property tax collections on oil and gas properties. One such area is Plains Independent School District whose assessed valuation is 80% comprised of oil and gas properties. Additionally, housing values could suffer which may lead to property tax revenue reductions. The City of Houston saw four consecutive years of assessed value declines in the mid 80's and was downgraded by credit rating agencies during that period (see Chart 4).



But Houston today boasts a more diversified economy and an increase in sales tax revenues could offset property tax weakness. We expect the property tax impact to be more pronounced for school districts as this tax typically accounts for around two thirds of school district revenues versus about 40% for cities.[x] Offsetting this risk, school districts benefit from the credit-enhancement provided by the Texas State Permanent School Fund (PSF). PSF only derives 13% of its revenue from oil and gas royalties[xi] and coverage of PSF guaranteed obligations is strong, currently 4.9x.[xii]

Chemical and Industrial companies



Lower oil and gas prices provide mixed benefits to chemical and industrial companies. We believe chemical company margins will see some near term relief though the impact will be mitigated as additional capacity is brought online. Overseas oil-based production will become more cost competitive relative to North American natural-gas based assets (see Chart 5).

Financial performance is expected to vary based on the degree of product specialization. One of the state's largest petrochemical employers, Dow Chemical, expects lower revenue from oil and gas feedstock production but believes lower energy prices represent an overall tailwind given the company's vertical integration and transition toward a focus on advanced plastic products which benefit from lower feedstock prices. The recent spin-off of the chlor-alkali unit to Olin Corp. represents the latest step in this process.

Likewise, the impact is expected to be mixed for industrial firms which will lose revenue from energy customers but gain sales in industries with significant energy costs, not to mention saving on their own energy expenses. General Electric reported a 10% decline in energy new orders in 4Q14 which was offset by 15% growth in aviation orders and 62% growth in transportation. Waste Management (Houston) reports fuel costs declined 8% in 2014, though part of this decline was linked to lower overall volumes. These fuel cost savings will help the firm manage top-line pressures as pricing for recycled products (paper, aluminum, glass) remains weak.

Municipal Transportation

We expect transportation credits to benefit from decreased gas prices, particularly airport, toll-road and highway credits. While the price elasticity of motor fuel demand is minimal in the short term, this effect becomes more significant in the medium term. Gas taxes for state-highway programs will benefit as greater miles traveled leads to more gallons of gasoline purchased. Year-to-date, North Texas Tollway Authority (Plano, TX) continues to exceed projected traffic volume levels, perhaps indicative of some resilience in the less oil-dependent Dallas-Fort Worth economy. To the extent that airlines pass along cost savings associated with lower fuel costs (and there is currently little evidence of this), we expect air travel to increase modestly. As airports depend on airlines for 32% of revenue[xiii], higher airline margins reduces counterparty risk to airports. American Airlines (Fort Worth, TX) (AAL) stands to benefit disproportionately from lower oil prices at it does not hedge fuel costs, somewhat uniquely among major airlines. This continues to support our favorable credit outlook on Dallas-Fort Worth International Airport, for which AAL represents 82% of enplanements[xiv]. Finally, more travelers are likely to increase airport concessions and other retail revenues. Currently, most major Texas airports continue to report year-over-year enplanement growth.

Municipal Utilities

Texas municipal power utilities are not directly impacted by changes in oil prices which represents less than 1% of total generating capacity. Natural gas is much more important, representing half of Texas power generation. While gas prices have not declined as much as oil, Henry Hub spot prices are down 41% over the past 9 months[xv]. This will lead to cost savings for municipal power utilities, especially those with self-owned generating facilities as fuel cost is a larger component of their budget. However, this benefit may be diluted as generating facilities usually enter into long-term, fixed-price natural gas purchase contracts. In addition, utility systems with a variable fuel cost charge in their price structure are likely to adjust prices down as gas prices fall. For example, Lower Colorado River Authority (Austin) bills customers monthly based on the Authority's fuel purchasing prices[xvi]. **In general, we expect a net benefit for utilities as a result of lower natural gas price.**

Conclusions

Short term swings are inherent in fixed income markets. Our belief is that the recent trend of low energy prices is a supply-driven, medium term phenomenon with events such as the crisis in Yemen adding short term volatility. **Naturally, the short term effects on credit quality are muted.** Over the medium term, we conclude the following:

- Upstream energy companies face the most challenging environment and defaults on high yield bonds will undoubtedly increase. However, for the investment grade energy space, effects are likely to be more modest. Following the 1985-1986 downturn, Anadarko Petroleum was downgraded one notch by Moody's but was unchanged by Standard & Poor's. Three years later, Moody's upgraded the rating.
- Impact will be mixed in sectors such as Chemicals and Industrials which will weigh top line pressure against input cost reductions. Similar to Anadarko, Dow Chemical was downgraded one notch by Moody's in 1986 but upgraded soon thereafter. Local governments also face mixed conditions given the tradeoff between energy sector job losses versus potential gains in sales tax revenues. As mentioned previously, the City of Houston suffered modest downgrades in the 1980's but maintains strong double-A credit ratings.
- State governments, consumer goods companies, airports, utilities and highway credits should benefit from lower energy prices.

On balance lower energy costs are positive for credit markets and make it easier for most municipal and corporate credits to absorb the effects of slower global growth and the potential for higher U.S. interest rates later in the year. Certain sectors bear increased scrutiny and our credit evaluation of energy companies will focus on capital market access. For local governments, we will focus on housing activity versus retail sales. And for Industrial and Chemical companies, quarterly results in energy versus non-energy related divisions represent the best barometer of credit directionality.

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[i] Bloomberg West Texas Intermediate (WTI) Cushing Crude Oil Spot Price. Retrieved from Bloomberg LP on 30 March 2015.

[ii] Henry Hub Natural Gas Sport Price. Retrieved from Bloomberg LP on 30 March 2015.

[iii] Daily National Average Gasoline Prices Regular Unleaded. American Automobile Association. Retrieved from Bloomberg LP on 30 March 2015

[iv] Etienne, Elisabeth. "Oil & Gas DCM at YTD Record High". Dealogic Ltd. 23 March 2015

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[vii] State of Texas 2016-2017 Biennial Revenue Estimate for Fiscal Year 2015

[viii] Percent changes in CPI for All Urban Consumers (CPI-U): U.S. city average. *Consumer Price Index – February 2015.* Bureau of Labor Statistics, U.S. Department of Labor. 24 March 2015. Retrieved from: http://www.bls.gov/news.release/pdf/cpi.pdf

[ix] Daily National Average Gasoline Prices Regular Unleaded. American Automobile Association. Retrieved from Bloomberg LP on 30 March 2015

[x] Chilton Investment Services internal analysis of our Texas city and school district holdings

[xi] Texas Permanent School Fund Comprehensive Annual Financial Report, Fiscal Year 2014

[xii] Nichols, John & McGuire, Gera. "Fund Exposed to Oil Slowdown but Retains Strong Ability to Cover Calls on Guarantee". Moody's Investors Service. 4 February 2015

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[xiv] Continuing Disclosure Statements for the Fiscal Year ended September 30, 2014. Dallas-Fort Worth International Airport. Retrieved from emma.msrb.org.

[xv] Henry Hub Natural Gas Sport Price. Retrieved from Bloomberg LP on 30 March 2015.

[xvi] Lower Colorado Authority Series 2015AB Refunding Revenue Bonds Preliminary Official Statement, dated 15 March 2015