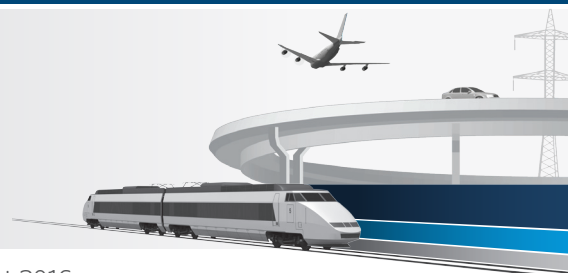


Infrastructure Travel Diary

“I still haven’t found what I’m looking for”¹

Pablo Kohen, Senior Investment Analyst Global Listed Infrastructure | August 2016



Key points

- Freight railroad management teams’ ability to align resources to a weakening volume environment continues to be tested. More positively, the sector’s pricing power remains solid.
- Energy pipeline infrastructure has been supported by the recent oil price recovery. However, management teams have maintained a cautious outlook, given the lack of visibility over future volumes and in the absence of a clear path to leverage the expected recovery in ethane production.
- Both railroads and pipelines face potential regulatory headwinds. Railroads’ current lenient regulatory environment could be tightened over the long term, whereas pipeline companies face challenges to get approvals to build much needed new pipeline capacity, especially in the natural gas segment.
- A Donald Trump administration may have material impacts on US freight railroads and on the US energy industry.

My recent trip took me to Canada and the US, where I attended conferences, met management teams, immersed myself into recent railroad and pipeline trends, and watched endless (and painful) hours of US news networks’ coverage of Donald Trump. From burning hot Houston, to cold Calgary (even in spring!) through sleepy Tulsa and tropical Orlando, please find a summary of my notes below.

Favourite on-the-record quotes from this trip

“The Canadian Pacific (CP)-Norfolk Southern (NSC) merger was doomed from the beginning – too much opposition from shippers.” Railroad Chief Marketing Officer.

“You cannot stimulate demand by lowering rates. Volumes are either there, or they are not.” Railroad senior management.

“If Donald Trump builds a wall, we will build a tunnel into Mexico.” Railroad senior management.

“Some people think that if you put a high WACC², you’ll probably end up right.” Railroad CEO on how to value companies.

“There is mix within mix.” Railroad CFO trying to explain why (sometimes) company results don’t align with qualitative commentary.

“It is a disaster. It makes us (ie. the industry) look like idiots.” Energy pipeline CFO commenting on Energy Transfer-Williams merger saga.

“We have not abandoned our sponsored vehicles. We’ll be prudent and careful but we do recognize a shift in investor sentiment.” Energy pipeline CFO commenting on MLP restructuring options.

“(If elected) Trump will need to build a wall between Canada and the US, to prevent Americans coming to Canada.” Canadian energy pipeline CFO.

¹ From U2’s 1987 album “The Joshua Tree”.

² Weighted Average Cost of Capital.

Railroads

Stuck in a Moment You Can't Get Out Of³

On my trip I met with the management teams of the main listed Class I railroads⁴. Their tone was one of disbelief. No one really seemed to understand what is going on with volumes, which are so sluggish they would imply a recession is under way. However this is not the case; the US economy continues to grow, albeit at a slow pace.

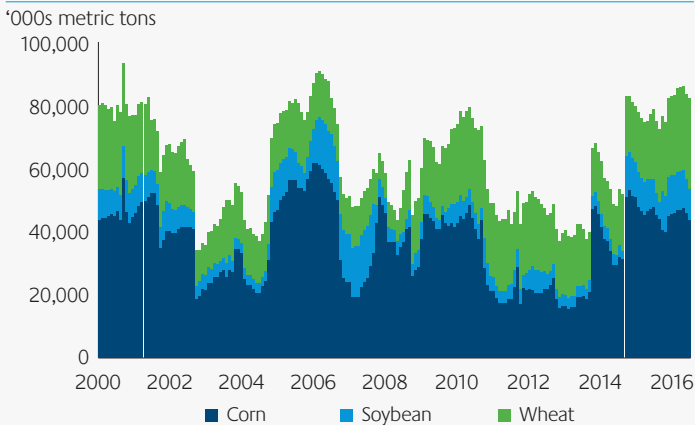
All segments have been weak – or very weak – with the honourable exception of Autos, which have been supported by stellar US auto sales.

We believe that railroad valuations are underpinned by three factors: i) volumes; ii) pricing; and iii) productivity/cost enhancements. When these drivers align, we expect valuation multiples to expand, as in late 2014 when volumes were strong, pricing was solid and productivity was improving.

So far in 2Q16, volumes have continued to deteriorate. The year over year (YoY) fall of 10% is significantly softer than 1Q16's 6% decline. All segments (ex-autos) continued to show YoY volume declines, led by coal, petroleum products and grain.

One potential positive for the second half of 2016 is the agricultural segment. So far, US farmers have stored most of their current crop in the expectation of higher market prices in the future (chart 1). Union Pacific (UNP) pointed out that farmers will need to start hauling volumes soon, as storage volumes are already at all-time highs and room will be needed for the next harvest, in 3Q16.

Chart 1: US agriculture stocks at their highest since 2006 in anticipation of better prices to come.



Source: First State Investments, Bloomberg.

Management teams have pursued productivity enhancements relentlessly in order to offset this soft volume environment. Lower volumes improve operational efficiencies (less equipment and fewer crews are required, while network maintenance needs are reduced); and having fewer carloads boosts performance due to greater velocity and reduced dwell times. Most railroads continue to reduce headcount (chart 2), a key contributor to operational costs.

³ From U2's 2009 album "All That You Can't Leave Behind".

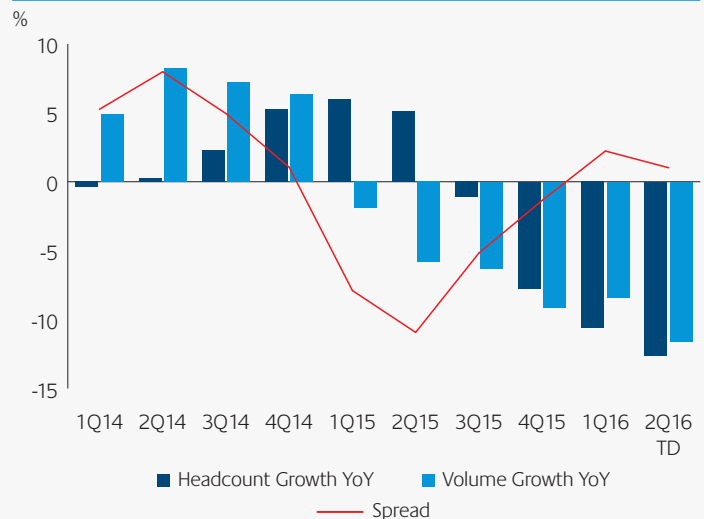
⁴ Class I is the term used to describe the seven largest freight railroads in North America: Canadian Pacific, Canadian National, Union Pacific, Burlington Northern Santa Fe (owned by Berkshire Hathaway), Kansas City Southern, CSX and Norfolk Southern.

⁵ Due to the current volume environment, CP has implemented a "Competitive Pricing" rate scheme. In order to fill partially full trains, CP currently offers additional haulage to existing customers at discounted rates.

Pricing is arguably the most important indicator for railroads' financial performance. Management teams were consistently confident that the pricing environment is solid, albeit with prices growing at a slower rate as rail inflation has fallen. The only railroad that expressed a less firm outlook was Canadian National (CNR).

The company believes that peer Canadian Pacific (CP)'s implementation of "competitive pricing"⁵ could have a negative impact on both companies' ability to push prices higher.

Chart 2: UNP continues to trim headcount to offset a softening volume environment.



Source: First State Investments, Bloomberg.

On the regulatory front, we expect more noise in the second half of 2016. Several proposals are expected from the Surface Transportation Board (the US railroad regulator) on Cost of Capital, Revenue Adequacy, Competitive Switching and Rule on Expedited Rate Cases. However we believe that any new rules would take years to implement, and therefore expect the rails to continue to enjoy their current very lenient regulatory framework.

My trip also included an asset tour of CP's Calgary headquarters. I visited their Operations Control Center and discussed the impact of cost enhancement initiatives put in place by Hunter Harrison (CP's CEO, and doyen of the industry) and Keith Creel (CP's COO, and CEO in-waiting). CP has made extraordinary progress in margin improvement, surprising both the market and myself since Hunter Harrison was brought back from retirement in mid-2012. Its operational ratio has improved from being the worst in the industry at well north of 75% to below 60% currently, putting it head to head with the most efficient North American railroad, CNR. Interestingly, due to US regulations, CP has to maintain two control centres: one in Calgary for its Canadian operations, and another in Minneapolis for its US operations. Once a train crosses the border, one centre transfers operational oversight to the other.

Canadian Pacific's Operations Control Centre in Calgary.
Not as big as UNP's but impressive nonetheless.



Source: First State Investments.

In my June 2015 Travel Diary 'Mind the Gap', I predicted that the next step for further operational efficiencies in the sector would be driven by consolidation. Since then, CP has made (and subsequently withdrawn) an attempt to merge with Norfolk Southern (NSC). The CP proposal faced strong pushback from other Class I railroads and from shippers, who revealed themselves to be unprepared to face the fact that railroads, on a long term basis, are becoming more and more congested, with track networks that cannot be expanded further (especially in densely populated urban areas). As one executive mentioned "We are just one tough winter (in Chicago) away from disaster". I still believe that consolidation is inevitable, but will take longer than I previously thought.

Portfolio implications

Our strategy has an overweight position in railroads, holding positions in UNP, CSX and Kansas City Southern (KSU). UNP has consistently demonstrated a robust focus on pricing discipline and successful cost-out initiatives. Together with KSU it has the most exposure to the expected uptick in agricultural volumes. KSU's management team has begun to improve its operational performance. CSX, along with fellow east coast operator NSC, has the worst operational performance, and therefore the most room to improve from an operational point of view. Railroads are extraordinary franchises, operating in a soft-handed regulatory framework with solid pricing power. However, we do not anticipate raising the strategy's exposure to the sector from current levels until we identify evidence of volume stabilisation.

Energy Pipelines Until the End of the World⁶

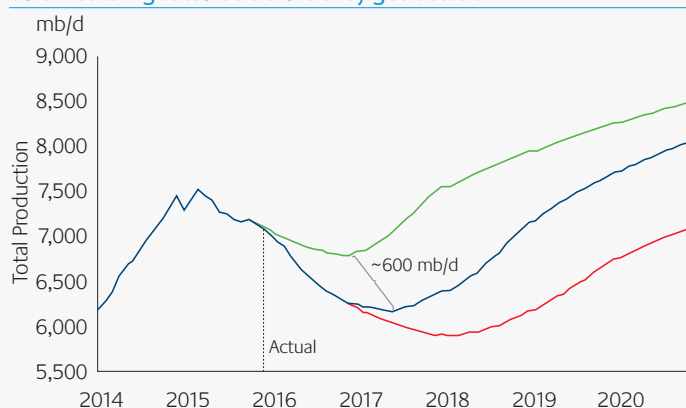
Since the collapse of oil prices at the beginning of the year to a low of \$33/bbl, prices have recovered to close to \$50/bbl level, leading share prices higher across the energy pipeline space as well.

Lower oil prices at the start of 2016, the reduction in capex plans by oil and natural gas exploration and production companies (E&Ps) and the tightening of capital markets, drove the energy pipeline space to a state of turmoil. This proved problematic for an industry which had previously relied on extremely bullish capex plans (resulting in excess infrastructure capacity), while promising unsustainable distribution growth to justify high valuation multiples.

The lower oil price environment led to a reduction in capex programs, the funding of distributions using internal cash flow generation, and less dependence on third party capital (either debt or equity). Distribution cuts were implemented in order to increase coverage ratios (the most infamous one being Kinder Morgan's 75% dividend cut in December 2015). Balance sheet repair took centre stage.

Pipeline management teams on this trip were still cautious about their distribution growth profiles and the outlook going forward. While crude oil volumes have started to trend downwards due to cuts in capex and rigs, I expect further weakness in the short term before the oil market rebalances (see chart 3). E&Ps would like to see a "sustainable" oil price above \$50/bbl before they add rigs, complete 'Drilled But Uncompleted' wells, and increase production levels again.

Chart 3: Plains All American Pipeline's US oil production outlook. Volumes will get worse before they get better.

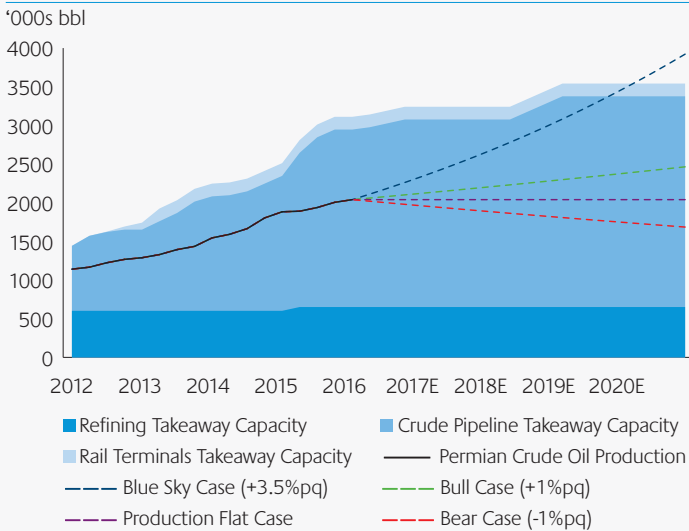


Source: Plains All American Pipelines.

Production basins have experienced an overbuild of pipeline infrastructure capacity in recent years, driven by the fracking boom. As a result, many crude oil pipelines remain under-utilised and it is likely to take time before these achieve better returns (as illustrated in chart 4) or a need arises for additional capacity. This environment also poses some risk for the operators of long haul pipelines that are fully contracted today, but may not get re-contracted if the subdued volume environment persists.

⁶ From U2's album 1991 "Achtung Baby", one of my favourites.

Chart 4: Permian Basin takeaway capacity vs oil production. Infrastructure overbuild.



Source: First State Investments, Bloomberg.

More positively, infrastructure overbuild is not yet evident in the natural gas space. Additional capacity is needed to bring volumes to end markets, especially from the huge and prolific Marcellus/ Utica basin in the Northeastern US. Natural gas demand growth is being driven by power generators which are replacing coal-fired power plants with gas; energy distribution companies that need to meet additional demand; exports to “gas hungry” Mexico; and upcoming LNG liquefaction facilities being developed in the US.

Another interesting theme discussed during my trip was the expected recovery in ethane volumes. The substantial increase in wet gas production has driven ethane volumes higher, depressing its price. Eventually it became cheaper to leave the ethane in the natural gas stream (a process known as ethane rejection) than to isolate it and sell it separately. Interestingly, pipeline companies have started to indicate lower ethane rejection levels, due to an expected recovery in demand driven by export terminals and petrochemical facilities being developed in the Gulf Coast area. However, I remain cautious on this potential upside, as pipeline companies have yet to sign long term, take-or-pay contracts with credible counterparties.

Did you know?

Located just one hour west of Tulsa (Oklahoma), Cushing is the US’ most important crude oil hub, with nearly 90 million bbls of storage capacity. It is the (physical) delivery point for West Texas Intermediate (WTI) crude oil, the US crude oil benchmark.

Portfolio implications

We have preferred natural gas-focused pipeline companies that have strong distribution coverage, healthy balance sheets and expansion plans that rely on end-customers (demand-pull) rather than on producers (supply-push) including Spectra Energy, TransCanada and Columbia Pipelines Group. We are developing a strategy at the moment to get exposure to the ethane recovery theme, without adding commodity risk to the portfolio.

Donald Trump Numb⁷

I never thought I would write a section with this heading but now I must, given that Mr. Trump has secured the presidential nomination for the Republican Party. Based on recent speeches outlining his energy policy, a Trump administration could be positive for oil-related energy pipeline companies, as he would encourage more oil production. Conversely, it would be a negative for the natural gas energy pipeline sector as a “stronger” coal industry and less environmental regulations would be likely to represent headwinds to natural gas demand.

Trump’s anti-trade and anti-NAFTA views may pose headwinds for railroads, an industry that relies heavily on commerce with Canada and Mexico.

Magellan Midstream Partners’ crude oil tank farm in Cushing, OK. Magellan has the 3rd largest storage capacity in the area with 14 million barrels in three different tank farm locations.



Source: First State Investments.

⁷ From U2’s 1993 album “Zooropa”, arguably their most revolutionary work.

Trip Highlights

- Railroad management teams' relentless focus on pricing.
- Site visit to Cushing oil storage hub. Crude oil tank farms can be strangely compelling.
- Attending my first baseball game in Houston, where I watched the Houston Astros beat the Baltimore Orioles 4-3. For the record, it was part of Plains All America Pipeline's Analyst Day. Nothing beats football.

Trip Lowlights

- Lack of recovery in freight railways volumes.
- Ethane recovery becoming a consensus call, supported by bullish commentary from each and every energy pipeline player. However, no one was able to quantify in detail the potential impact on earnings as no contracts have been signed (yet).
- 5½ hour flight being delayed in Houston en route to Tulsa due to thunder storms, arriving in Tulsa at a closed airport (even the shutters were down!) and checking in at the hotel at 1.30am. For an 8am start.

Favourite Travel Reading

"The Big Short" by Michael Lewis. Long overdue reading.

Favourite Travel Viewing

- "The Borgias". A TV series starring Jeremy Irons and created, written and directed by Neil Jordan (do you remember "The Crying Game"?).
- The show narrates the saga of the infamous Borgia family as they rise to power in the Roman Catholic Church until Rodrigo becomes Pope Alexander VI in 1492.



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