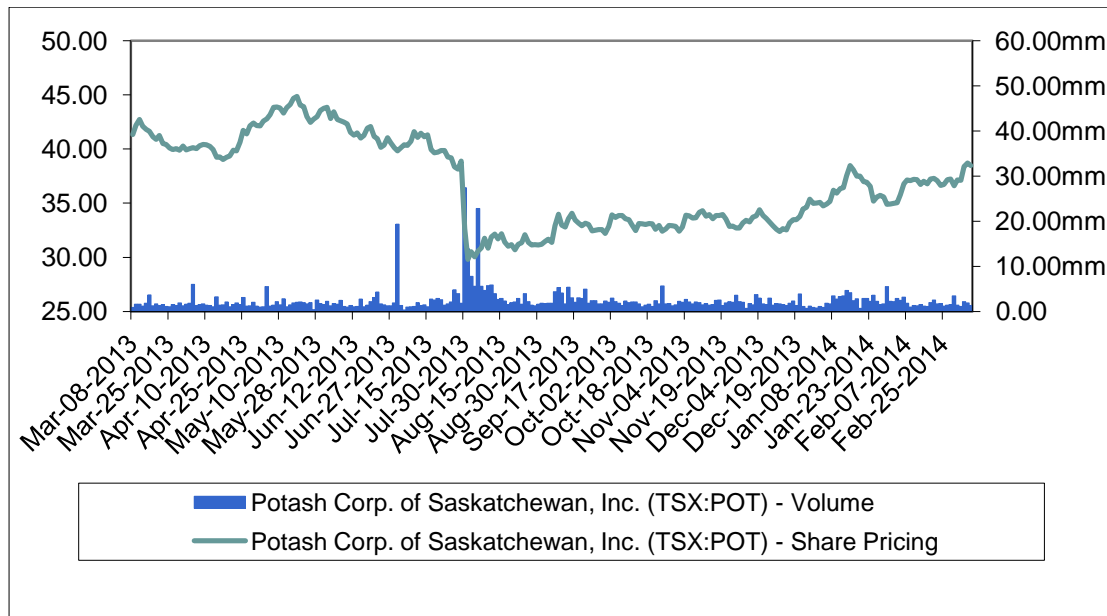


# Potash Corp of Saskatchewan Inc

## Snapshot

### Price and Volume chart



Source: CapitalIQ

### Financial Data

	FY 2010	FY 2011	FY 2012	FY 2013	LTM
<b>Revenue (\$ mn)</b>	\$6,051	\$8,219	\$7,433	\$6,733	\$6,733
<b>EPS (\$)</b>	\$2.00	\$3.60	\$2.42	\$2.06	\$2.06
<b>EBIT/(Net Fixed Assets + Working Capital)</b>	30.7	40.9	24.7	20.7	20.7
<b>P/E</b>	29.04	12.23	15.39	15.13	17.76
<b>EV/EBIT</b>	22.89	9.72	10.86	11.94	13.84

Source: CapitalIQ

### Recommendation

I recommend going long Potash Corp of Saskatchewan Inc (POT), a fertilizer company which delivers 15% of global potash production and 19% of the capacity. I believe the market have severely underestimated POT and has substantially undervalued it. The market has overemphasized on lower grain prices, in which potash is highly cyclical to, and oversupply, a result of an irrational volume over price strategy by the Russian potash company, Uralkali.

Catalysts that could increase its share price includes a Russian embargo, higher grain prices and efforts to remedy the previously irrational strategy by Uralkali .

Key investment risks include the resumption of falling grain prices and the continuation of Uralkali's irrational strategy.

## Fertilizers Industry Overview

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### 1. Global population growth

With global population increasing while arable land remains limited, the declining Arable Land/Capita ratio will continue to add stress on food producer's need to improve productivity. The only viable way right now would be to utilize fertilizers to improve crop yield.

### 2. Dietary Shift

As the emerging economies continue to get wealthy, more and more middle-class people will emerge, shifting their diet to include more protein (meat and fish). Correspondingly, this dietary shift will increase the demand of animal feed needed to rear animals.<sup>1</sup> To meet this demand, grain productivity through fertilizer use would be more urgent than ever.

### 3. Developing nations fertilization practices severely lag behind those of developed nations.

While the majority of food demand growth is expected to come from emerging economies, their farming practices have lagged behind their developed nations counterparts. This is both a need and an opportunity to such farmers to improve their fertilization practices in order to keep up with the global demand.

### 4. Crop yield growth dependent on fertilizers

It is estimated that about 80% of yield growth to meet demand would come from the use of fertilizers, with the rest coming from better cropping techniques and land expansion.

As such, the stage is set for the fertilizer industry to play a bigger role in the future. Both rising demand - Huge future demand for grains due to global population growth and rising affluence of the middle-class, and limited supply – Arable Land/Capita limitation would mean that fertilizers would will be key beneficiary.

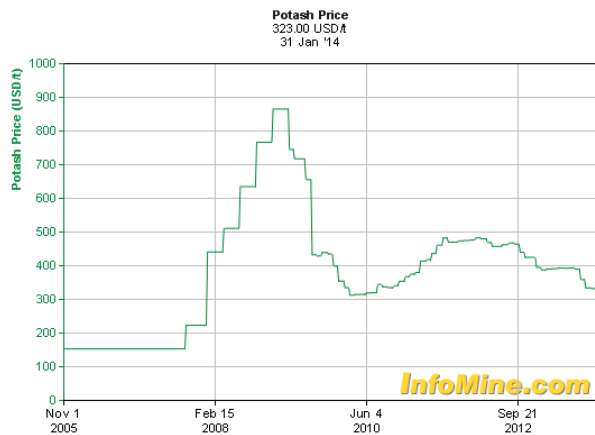
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<sup>1</sup> According to an estimate by the BBC in 2008, "Cow and sheep need 8kg of grain for every 1kg of meat they produce, pigs about 4kg. The most efficient poultry units need a mere 1.6kg of feed to produce 1kg of chicken."

## Potash Industry Overview

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### Potash Prices



Source: Infomine

Potash is a salt that contains potassium. Found in ancient inland evaporated oceans where potassium salts have crystallized into beds of potash ores, the location of potash is scarce throughout the world. As potash tends to be buried deep into the earth, the extraction of potash is a long, arduous but rewarding venture.

1. New capacity requires significant time and capital investment

Due to the difficulty for extracting potash, extensive infrastructures have to be built. A greenfield start-up investment just to get the extracting process (excluding ramp-up) would cost CDN\$4.7bn-CDN\$6.3bn, with a minimum of 7 years before the ores could be commercialized. This process forms a huge barrier of entry to new entrants into the potash industry, not unlike the industry characteristic of the metals and mining industry. On the flip side, this moat would benefit existing production.

2. Potash production is geographically concentrated in Canada with 46%, Russia with 35% and Belarus with 8%.

While it is true that there are other areas in the world in which potash deposits can be found, the time and investment needed to extract an economically viable quantity would have to mean that the political situation of the country is of top-most priority. This factor has kept potash production centered mainly across these 3 countries.

3. 70% of potash production was controlled by two cartels, Canpotex and the Belarusian Potash Company.

Canpotex consists of 3 companies: PotashCorp, Mosaic and Agrium, with 54%, 37% and 9% of potash export respectively.

The Belarusian Potash Company was a joint venture between Belaruskali and Uralkali. This cartel ceased to exist on 30<sup>th</sup> July 2013 when Uralkali announced that it was pulling out of the Belarusian Potash Company cartel and that it plans to operate at full capacity. In light of soft global demand, this led to plunging potash prices and fertilizers stocks.

4. Potash prices are especially cyclical to weather patterns.

Nitrogen speeds up plant growth. Phosphate speeds crop maturity. Potash improves stress tolerance. The usage of potash is thus rather dependent on weather patterns. Harsh weather patterns translate to more usage and vice versa.

In summary, potash is a commodity that is especially cyclical to weather patterns that requires time and capital investment similar to that of the metals mining industry and is geographically concentrated which essentially led to a duopoly cartel, in which one fell apart.

### **Company Background**

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Potash Corp of Saskatchewan Inc is the world's largest integrated fertilizer and related industrial and feed products company by capacity. It mainly operates in 3 products, phosphate, nitrogen and potash. Total revenue for FY 2013 was US\$6.7B with EBIT of US\$2.3B. Revenue have slowed considerably at 9.4% annualized for the past 2 years, mostly a result of lower potash demand and oversupply in second half of 2013.

Potash accounts for 40% of *POT*'s revenue and 56% of its gross profits in 2013.

The rest of *POT* revenue and gross profit stems from Phosphate and Nitrogen. The revenue generative ability of the two products is relatively lower and has less seasonal volatility due to its lower margin and prices.

1. Lower and more efficient cost base

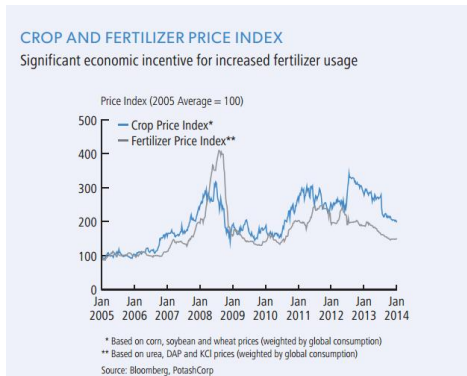
*POT* have recently taken steps to improve their cost profile in respond to the feeble potash market. They have done so by terminating 18% of their total workforce in order to improve cost improvement of \$15-\$20 per ton by 2014 and \$20-\$30 per ton by 2015. I believe this is a rational strategy as *POT* capacity in 2016 of 16.6 million tonnes of potash far exceeds the guidance given by *POT* of 8.2 – 8.6 million tonnes in 2014. Cutting idle, higher cost production will make *POT* more efficient.

2. Sufficient capacity to meet future raising demand

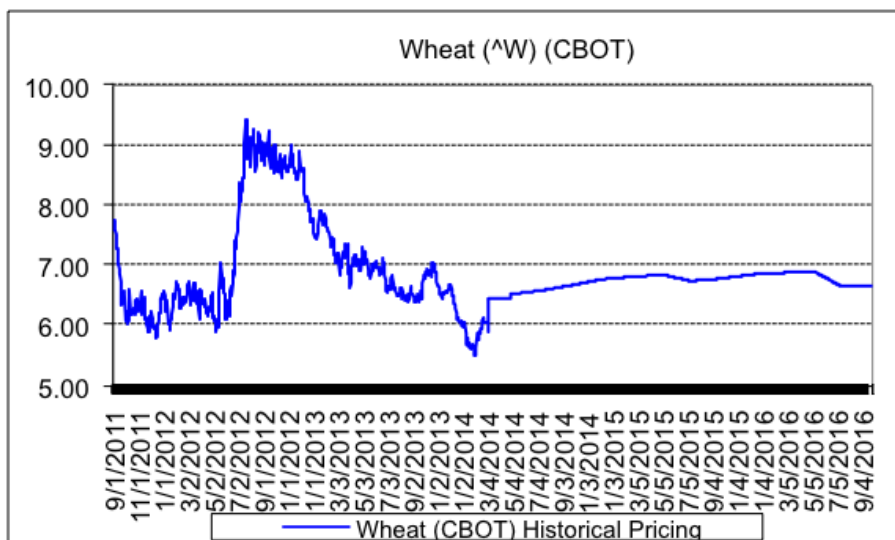
Also, since capacity far exceeds guidance and that *POT* does not have any plans to further expand capacity, CAPEX spending should fall and exceed cash could be used to return capital to shareholders by the means of dividends and share repurchases and for debt repayment, which they are doing so right now.

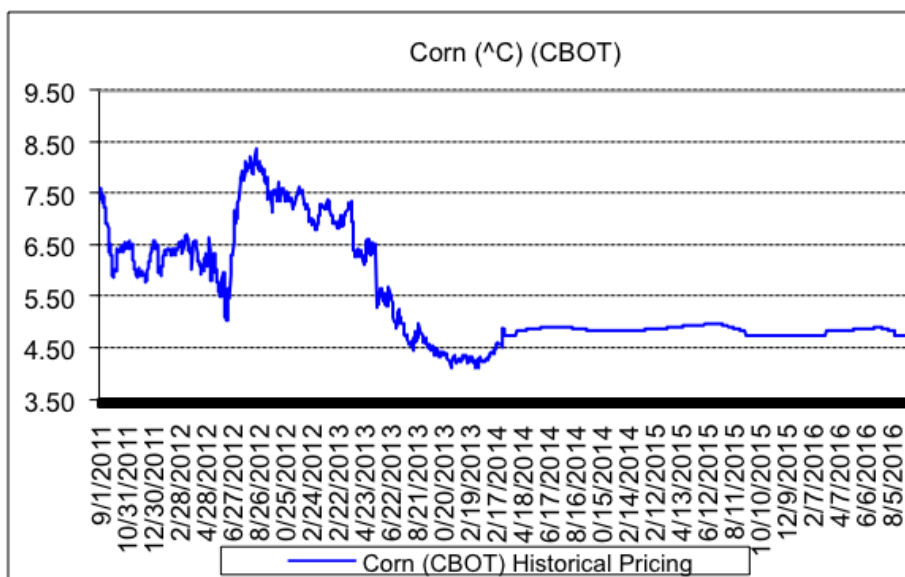
## Investment Thesis

### Demand Analysis



From the chart above, one can see that fertilizer prices correlates very strongly with crop prices. This makes sense as higher crop prices would incentivize farmers to lock in current prices and use fertilizer to improve crop yield. In addition, this would boost volume. This makes fertilizer companies highly cyclical to crop prices.





Recently, the global weather conditions have been nothing less than harsh. As a result, I believe that grain prices have bottomed out. The global weather conditions should eat through the current stockpile as it dampens crop yields. The market will no doubt realise that historical low prices is a result of backwards thinking and should price the grains appropriately, improving demand for potash. A weather driven constraint of supply should improve the demand for potash more as it is used to increase plant stress tolerance.

All in all, I believe that the guidance given by POT of their 2014 potash volume sales (8.2 MMT to 8.6 MMT) and gross margin figures are far too conservative considering the global situation.

### Supply Analysis

Both Dmitry Razumov and Uralkali, which owns 21.75% and 20% of Uralkali respectively, have agreed that a renewal of the partnership with the Belarusian Potash Company would be beneficial for POT. This position is shared by Bill Doyle, CEO of POT, which states that it is logical that they will get back together at some point. A partnership is likely to ease the potash glut as supply begins to be regulated.

Furthermore, recently Uralkali sign a pact to provide 700,000 tonnes of potash for the price of \$305/tonne, adding stability, and a price floor, to the uncertain market.

Finally, the possibility of a Russian sanction as a result of the Russian-Ukraine standoff would benefit *POT*. Firstly, as Ukraine is the world 3<sup>rd</sup> largest corn exporter and that farmers in Ukraine are holding back supplies as a hedge against devaluing currency, there would be a shift in demand to US producers, boosting grain prices. *POT*, deriving a substantial portion of its revenue from the US would thus stand to benefit the most as demand for potash increases. Secondly, as Russia is the second largest potash producers in the world, sanction would shift demand from Russia to *POT*. As *POT* has the greatest ability to increase production quickly and substantially by means of restarting idle operations, they would stand to benefit the most.

I believe the secular and cyclical outlook are pointing towards the direction of a potash boom, which is similar to the commodity boom of the 2000s. The potash situation shares many similarity with the

commodity boom. It involves the production of a product that requires significant time and capital investment that has a fixed production cost and a secular boom. The only differences are that any required capacity has already been build, and that the product is sold in a duopoly cartel.

## Catalysts

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Potential catalysts in the near future include:

- A Russian Embargo
- Possibility of a partnership renewal between Belaruskali and Uralkali
- Significantly higher grain prices

Catalysts #2 and #3 are the most significant in terms of its probability and thus its impact on valuation.

## Valuation

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Assuming 3 years normalized Avg. Price/Ton of \$390, and a volume of 8.5 MMT of potash which is in the higher end of guidance, the assumption that Phosphate and Nitrogen keep steady as per guidance and cost saving per ton as per guidance, 2014 EPS should stand around \$2.50 - \$2.80. Assuming a 17x P/E, which is near current level, that implies a US\$42.50 - US\$47.60 share price, a 22% - 37% upside to current levels. This does not assume any share repurchases or dividends.

P/E expansion as a result of higher growth prospects, a lower debt level and industrial certainty can be expected.

Dividends and EPS growth as a result of share repurchases should also improve total returns.

A comparable company analysis against Mosaic and Agrium would show that on a TEV/EBIT basis, *POT* is the lowest, despite being the lowest-costs, biggest producer of potash. Reversion to comparable company levels could be additional reason that boost share price.

	<u>TEV/LTM EBIT</u>
PotashCorp	13.84
Mosaic	17.95
Intrepid Potash	34.58

## Investment Risk

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### 1. Falling Grain Prices

Grain prices are currently near its low, a result of a good harvest and stockpile in 2013. However I believe that it have reached a level whereby any marginal decrease in grain prices have little effect to dampen demand for potash while any marginal increase have the opposite effect. This is because potash might reach some form of a price floor with the continual downtrend in grain which isn't reflected in potash prices. I believe potash demand is largely accretive in the possible range of outcome.

## 2. Resumption of irrational pricing by Uralkali

It is likely that rational strategic decision is not the driving force behind Uralkali decision to break the cartel. It is possible that this would continue and Uralkali will resume their “volume over price” strategy. In addition, the recent Russian-Ukraine standoff could impact this likelihood of the partnership as Belarus refuses to support Russia’s invasion.

Assuming an Avg. Price/Ton of \$305, which is presumably the price floor set by Uralkali, a volume of 8.2 MMT of potash which is in the lower end of guidance, the assumption that Phosphate and Nitrogen keep steady as per guidance and \$0 cost saving per ton, 2014 EPS should stand around \$1.50 - \$1.90, a range higher than guidance and consensus estimates. To caveat this fact, *POT* has been lowering their debt level and buying back shares which increases the EPS of *POT* and lower its riskiness. This is the reason to why I believe the risk involved in *POT* is minimal and poses an attractive risk/reward situation.