SPECIAL REPORT

TD Economics

March 5, 2014

UNCERTAINTY HOVERS OVER THE GLOBAL POTASH INDUSTRY

Highlights

- Global potash markets experienced a roller coaster ride in 2013, due to a Russian-Belarussian potash joint venture (BPC) breaking up. This cartel supplies 42% of all world potash exports. The split negatively reverberated through markets, sending potash prices to a four-year low.
- Russian potash producer Uralkali's move to pursue a volume strategy as opposed to a price strategy ought to translate into heightened competition within the industry. Additional potash supply will limit the upside potential for potash prices.
- Key potash buyers, including China, delayed their contract settlements in the hopes that potash prices would move lower. This game plan proved to be a good one, as China recently settled a contract with a potash price of US\$305 per tonne, cost and freight included (CFR). This agreement sets the tone for what to anticipate in 2014.
- We expect international potash prices will hover close to the current level of US\$305-320 per tonne, on a CFR basis, over the next two years. This is in line with supply-demand fundamentals, includ-ing: the ongoing transition to more balanced diets, global urbanization and a need to increase crop yields in light of less arable land per person.

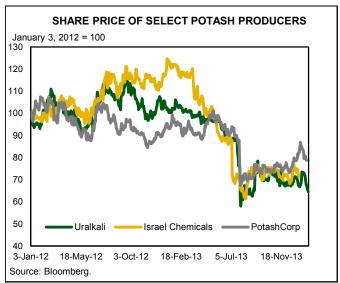
The break-up of a Russian-Belarussian potash joint venture in July 2013 negatively reverberated through financial markets, sending potash prices to a four-year low. Near-term potash demand should remain strong for developing economies. However, growth in global demand will be muted due to high

North American crop inventories. Additional global potash supply – from producer Uralkali and new projects coming online – should lower industry-wide utilization rates, thereby limiting upside potential for prices.

We expect international potash prices will average close to the current level of US\$305-320 per tonne, cost and freight included (CFR), over the next two years. That said, the profile will be bumpy and volatile. This forecast is in line with medium-term supply-demand fundamentals including the transition to more balanced diets, urbanization and a push to increase crop yields due to less arable land.

Potash prices and producers experience a turbulent 2013

On July 30, 2013, Russian-based potash and fertilizer company, Uralkali, announced that it would no longer export with Belarusian Potash Co. (BPC) – the joint venture Uralkali entered in 2005 with Belarus-based Belaruskali. The corporate break up came after negotiations stalled between the two partners.



D

China

21%

Other Asia 16%

India

8%

POTASH USE BY REGION

All Other

18%

North

America

16%

Latin America 21%



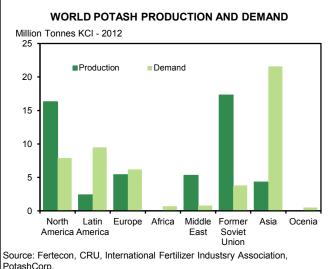
The dissolution of the partnership effectively dismantles BPC, the world's largest potash cartel, as measured by exports. In 2013, roughly 42% of all world exports were distributed through BPC. Canpotex - an international marketing and distribution company wholly-owned by Saskatchewan potash producers – is the second largest player, exporting 25% of all exports.

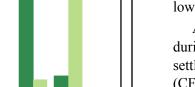
The impact of liberalizing roughly 42% of the global potash sector rippled through financial markets. Following Uralkali's announcement, potash prices plummeted. For example, Midwest West potash prices fell from around US\$443 per ton in July to roughly US\$350 at the end of 2013. The potash industrial shake-up was felt across the board, as evidenced by the near synchronous change in the share price of the major potash companies including Uralkali, PotashCorp and Israel Chemicals (see chart on page one).

Uralkali will now pursue a volume-driven growth strategy versus a price strategy. To achieve this goal, Uralkali will raise its utilization rates to near full capacity and supply the global market with an additional 3.9 million tonnes of potash by the end of 2014. This proposed injection is quite significant – it is roughly equivalent to 8% of total global 2013 potash sales.

What's in store for the potash sector for 2014-15?

The potash sector was thrust into full-blown change management mode last year. That said, we are guardedly optimistic about the near-term potash price outlook. Contract price settlements with key players like China were in line with what the market had been expecting. Potash demand and the overall economic and agricultural backdrop will generally remain supportive. Additional supply from Ural-





kali or new projects will limit the upside potential for prices, but project schedules can be tweaked based on overall need and market conditions.

Source: Fertecon, International Fertilizer Industsry Association, PotashCorp.

Each of the factors underpinning our near-term potash outlook is explored next.

Potash demand returns with new contract settlements and start of spring planting season

Heading into 2014, the most significant concern facing the potash market was where prices were headed. The collapse of BPC led to a significant price correction. Key potash buyers- China and India - were not settling contracts in the hopes that prices would be bid lower. Over the past two months, markets have received pricing signals from new contracts and/or announcements.

On December 12, Belarus Finance Minister, Andrew Kharkovets, set 2014 export targets at 6.6 million tonnes at an average price of US\$306 per tonne on a CFR basis (i.e. the price which includes delivery to the customer). This target, if achieved, will represent a year-over-year decrease in volumes and prices. However, the plan does signal that Belaruskali will not pursue a volume strategy. At the same time, US\$306 is soft price for potash and unfortunately, the low mark sets the tone for the first half of 2014.

All eyes were on China and the price it would lock into during the first few months of 2014. Uralkali just recently settled a Chinese contract at a price of US\$305 per tonne (CFR) for the delivery of 700,000 tonnes of potash. A few days later, Canpotex announced a similar contract settlement for the delivery of 700,000 tonnes, at a price we expect was in line with the Uralkali-negotiated deal. With the two contracts more or less finalized, the potash market has some



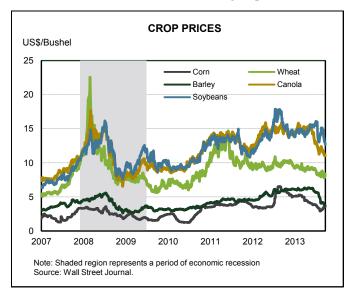
much needed clarity, as a price floor has effectively been signalled.

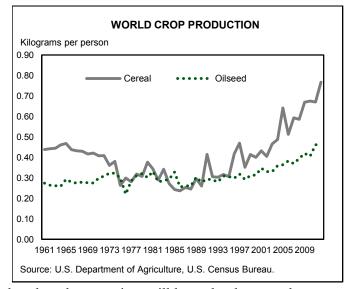
Global potash demand is set to perk up in light of the upcoming spring planting season. However, crop inventories at the end of 2013 in the U.S. are 14% above their 5-year average. A supply glut also prevails in Canada. In light of the bountiful crop reserves, U.S. and Canadian farmers may choose to plant fewer acres and instead, deplete their inventory stockpile. However, the lower price environment may actually encourage farmers to increase their potash demand in order to make up for previous years of under-application.

Supportive economic and agricultural backdrop

World economic growth is set to improve over the next two years, helped in large part by a better showing from advanced economies. In particular, Europe has emerged from its six-quarter recession and will likely post positive growth over the next two years. The U.S. economy also looks poised to move into a higher gear, thanks in part to solid economic momentum and reduced fiscal uncertainty. Canada, through its trade channels, will reap the benefits from the improved global backdrop. All told, global economic conditions will support the consumption of food, including fruits and vegetables.

Most global agriculture-based commodities are priced in U.S. dollars. As a consequence, swings in the greenback can have an impact on the crop prices received by farmers (see chart below). The U.S. Federal Reserve began to taper the amount of monetary stimulus it was injecting into the economy in December 2013. The change in the path of monetary policy will lend strength to the value of the U.S. dollar in international markets. All things equal, U.S.-dollar



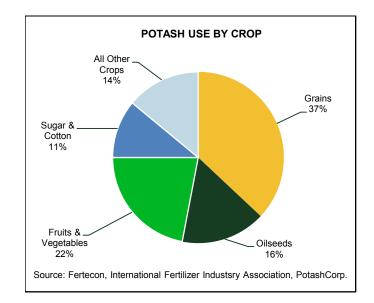


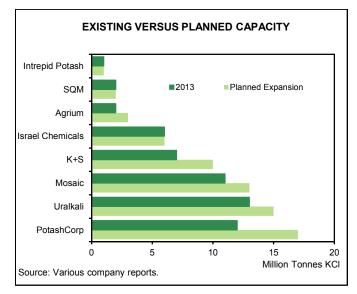
benchmark crop prices will be under downward pressure, thereby constraining the overall profitability of farmers around the world.

Potash production capacity exceeds demand

Canada, Russia and Belarus account for two-thirds of global potash production capacity. These same countries possess almost 90% of potash reserves. However, global potash shipments have fallen below their long-term trend over the past few years, as farmers expressed caution about potash affordability and displayed an aversion to holding inventories.

Uralkali's decision to inject more supply into the system will undoubtedly add to the competitive pressures of the global potash sector. This comes at a time when global demand for potash has risen just modestly at 1.4% per year,

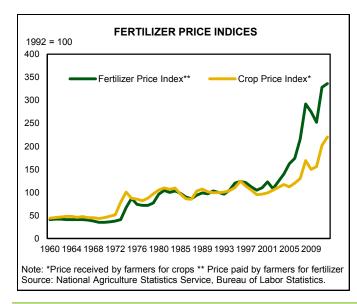


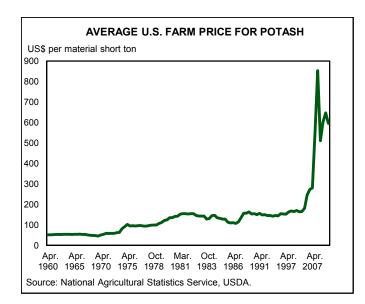


on average, over the past decade. We estimate that current global potash production capacity is roughly 71 million tonnes. This suggests that production capacity exceeds prevailing demand by 15 million tonnes, or 27%.

While there is excess production capacity today, there are significant expansion projects in the pipeline. However, production does not get switched on immediately. Rather, extensive time is required to develop new potash supply – it takes about seven years for a new project to reach full operational capability. This timeline assumes no major permitting or construction delays are encountered.

From 2013-17, 11 million tonnes of Brownfield operational capacity will be added at existing facilities. This translates to overall global production capacity increasing at roughly 4% per year through the middle of the next decade. More capacity may translate into a weaker potash price





environment, as potash supply will be driven further away from underlying demand. Looking ahead to the next two years, the potash industry's capacity utilization rate should decline due to the new capacity.

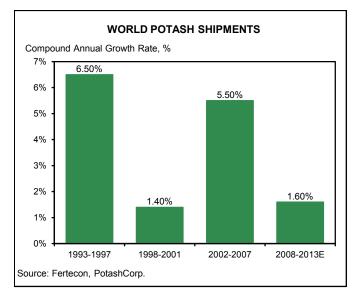
The lower potash prices seen in the second half of 2013 will likely cause many companies to adjust their projects and schedules, either delaying them or cancelling them altogether. It is important to note that the potential added capacity between now and 2017 is concentrated to just a few members. For instance, 50% of the potential added capacity is controlled by Canpotex member companies. This centralization of decision-making makes it easier to coordinate decisions, adjust project schedules and augment additional supply.

Potash prices to stabilize, but risks to the upside and downside persist

As we outlined in the previous section, there are many cross-currents expected to influence the global potash sector over the next two years. While uncertainty is heightened at present in the market, fundamentals suggest that we should be cautiously optimistic about the near-term potash outlook. In turn, we expect that prices will stabilize at the current level of US\$305-320 per tonne (CFR basis).

There are upside and downside risks to any baseline forecast. Several events could trigger a stronger-than-expected recovery in prices.

 Uralkali and Belaruskali could reconcile their differences, or at the very least, both could return to the negotiating table. Due to the fact that BPC represents 42% of all global potash exports, pricing certainty in the market



would be improved and there would be less concern about a deluge of new global potash supply.

- Financial market reaction to the BPC breakup was synchronous across most major potash producers, including Uralkali. The prevailing uncertainty seems to be hurting everybody and a swift resolution would likely benefit all potash market participants.
- If global potash producers were to cut back on production – in an attempt to offset the additional supply from Uralkali – there could be more upward pressure than we have included in our forecast. This outcome is not the odds on favourite. In the prevailing price climate, producers will want to maximize their volumes to help meet earnings' targets. This is particularly true for small volume potash producers who constantly fight for market share and do not have access to a cartel.
- Uralkali management have said that US\$300 per tonne CFR prices could not be sustained for a protracted period of time: the heightened demand response would bump up prices.
- Fertilizer demand could come in stronger-than-expected, particularly in emerging economies such as China, who continue to commercialize their agricultural sector.

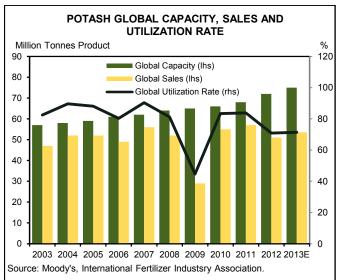
There are just as many downside risks to our base case potash price profile.

• Potash buyers could continue to delay their purchases in an attempt to secure lower prices for contracts. We saw this behaviour play out in the first few weeks of 2014, but ultimately, contracts have to be settled in order to meet demand (i.e. demand cannot be put off indefinitely while potash prices race to the bottom).

- More capacity than anticipated could widen the gap between potash supply and demand, placing downward pressures on prices. However, global supply targets seem optimistic given that China is hoping to source more of its potash from domestic sources.
- Fertilizer subsidies are an important influence to world fertilizer consumption. It is estimated that countries who subsidize fertilizers account for 55% of world demand. India's current fertilizer subsidy program favours nitrogen-based fertilizer over potash, but the subsidy scheme is likely to be re-negotiated over the next few years. Policy changes in India or elsewhere can have a real influence – negative or positive – on overall global potash demand.

Supportive factors in place over the medium-term

If we switch our perspective from the next few years to the medium-term, there are many supporting, underlying factors for potash demand. As incomes rise in many developing economies – such as China, India and sub-Saharan Africa – people will increasingly want to consume nutritious, high-quality food. The transition away from a starch-based diet towards fruit, vegetables and protein is already underway in many parts of the world and will only intensify going forward. A good example of this is the fact that many African countries are currently dedicating 10% of their budgets to agriculture. The continuation of this dietary transition will be a key driver of global food demand going forward.



It is estimated that roughly 800 million people will be



added to the world by 2020. That's a staggering figure as it represents twice the number of current inhabitants of North America. Not only is the population increasing, but more people are choosing to settle in urban areas. According to the World Health Organization, 2 out of every 10 people lived in an urban area a hundred years ago. In 2010, more than half of all people lived in an urban area. This proportion is expected to increase to 7 out of 10 people by 2050. The changing population distribution between urban and rural has important implications for overall demand. Data show that urban dwellers tend to eat more, on average, and they possess more balanced diets than rural dwellers. In China, for example, the urban population consumes 75% more meat and 25% more fruits and vegetables than the rural population, all else equal.

As demand for high-quality fruits and vegetables increases around the world, additional pressure will be on crop production. This is especially true because there is a finite amount of arable land in the world. In most developing countries today, there is roughly 0.2 hectares per person for crop and animal production. This number will only get squeezed as populations grow and developing economies become less agriculture-intensive. In this same vein, longterm crop productivity will be increasingly relied upon. The United Nations projects that 90% of the increase in global crop production over the next thirty years will come from improving yields and increasing cropping intensity. The most significant opportunities for improvement over this period will likely come from developing countries, given their current low yields and under-application of fertilizers.

Summing it all up

The potash industry experienced a turbulent 2013, particularly in the second half of the year. Prices responded to the uncertainty and tumbled to a four-year low. Uncertainty clouds the near-term outlook for potash prices. That said, underlying fundamentals should be supportive. Potash demand from developing economies – many of whom are key drivers of the overall global potash market – is poised to grow roughly in line with historical trends. This strength will likely offset the tepid demand in North America as farmers work to deplete their excess crop reserves.

Potash supply over the near-term is more of a wild card. Many projects over the next few years are expected to pop up. The additional supply could limit the upside for potash prices. However, project timelines can be adjusted to partially mitigate the downward influence. In light of both supply and demand factors, we forecast that potash prices will stabilize over the next two years. Unfortunately, volatility will likely remain an undercurrent until the market firmly regains its footing.

> Sonya Gulati, Senior Economist 416-982-8063

This report is provided by TD Economics. It is for informational and educational purposes only as of the date of writing, and may not be appropriate for other purposes. The views and opinions expressed may change at any time based on market or other conditions and may not come to pass. This material is not intended to be relied upon as investment advice or recommendations, does not constitute a solicitation to buy or sell securities and should not be considered specific legal, investment or tax advice. The report does not provide material information about the business and affairs of TD Bank Group and the members of TD Economics are not spokespersons for TD Bank Group with respect to its business and affairs. The information contained in this report has been drawn from sources believed to be reliable, but is not guaranteed to be accurate or complete. This report contains economic analysis and views, including about future economic and financial markets performance. These are based on certain assumptions and other factors, and are subject to inherent risks and uncertainties. The actual outcome may be materially different. The Toronto-Dominion Bank and its affiliates and related entities that comprise the TD Bank Group are not liable for any errors or omissions in the information, analysis or views contained in this report, or for any loss or damage suffered.