Abbington Investment Group, LLC
Investment and Market Commentary
Uranium: A Distressed Real Asset
October 2014

Dear Clients, Friends and Family:

Since we began writing our monthly note at the beginning of this year, we have concentrated on larger economic themes and investment drivers. We felt that it was important to have our readers understand the lens through which we look at the current market's structure and value. We are now looking forward to focusing in more detail on selective topics we have already written about.

There are few investments available today that offer potential returns commensurate with the unit of risk taken. When Abbington Investment Group finds these opportunities we grab them, scaling our clients' investment exposure appropriately to their needs. In this month's note, we will look closely at one such opportunity: Uranium.

Introduction

Abbington Investment Group believes in the accumulation of real assets. With the backdrop of current Central Bank monetary policy and the high levels of indebtedness in Western economies, we maintain that a meaningful allocation to real assets, such as real estate and commodities, is appropriate.

In our June note, we covered the gold market and the role that gold has as a monetary metal. We will now cover the other yellow metal, Uranium (U., atomic number 92), and delve into the supply and demand dynamics that we believe will contribute to meaningfully higher Uranium prices (see Chart 1).

Chart 1: Uranium Spot Price (NYME Future)

Source: FullerTreacy Money

The Demand for Uranium

Since the catastrophic 2011 events at the Fukushima nuclear facility in Japan, there has been an understandable review of the role of nuclear power by governments worldwide. The results of these reviews have been mixed. In Japan and Germany, for example, the governments reacted by announcing the closure of their countries' nuclear power plants. However, in other parts of the world, plans for nuclear power generation remain unchanged, particularly in China, India and many emerging economies. In these developing markets, nuclear power will be a meaningful contributor to base-load electricity supply. In Table 1 below, we can see the net effect of these demand trends.

Table 1: Planned Global Nuclear Reactor Capacity

	Current Nuclear Capacity	Under Construction	Planned	Proposed
Reactors / (Capacity)	435 (375.3GWe)	72 (76.8GWe)	174 (190.2GWe)	299 (329.4GWe)

Nuclear Reactor Fleet – Growth Forecast	2014	2020	2025	2030
Reactors	435	504	550	650

Source: World Nuclear Association

Given the scale of the Fukushima tragedy, plans to continue to build large nuclear power generation facilities may come as a surprise to many. Why does nuclear power generation remain so attractive? Is the reason economic? Or is it about diversifying energy supply? Do potential CO2 emission credits play a part? The answer to all of these questions is yes. Regardless of the reasons why, the world is once again building nuclear power generation capacity; as a result, forward demand for Uranium is increasing. We are seeing early confirmation of this trend with some recent announcements. In China, the reactor build-out program is accelerating with 29 units now under construction (up from 26 only 12 months ago); India plans to supply 25% of its electricity power needs via nuclear power by 2050; and even Japan, with the support of the new Abe government, is conducting safety reviews of 20 reactors with planned startups in 2015. All of this development will be supported by "administrative arrangements"—the latest being between India and Australia, for the purpose of structuring the Uranium supply chain between the two countries.

Due to the twin effects of emerging market energy demand growth and their energy supply deficits, nuclear power is increasingly seen as an alternative to fossil fuels. The case for nuclear power is a strong one, resulting in higher Uranium demand. However, it is the supply side of the equation that makes the debate about Uranium prices even more interesting.

Uranium Supply

With the current distressed price of Uranium, many diversified mining groups, such as Rio Tinto or BHP Billiton, have chosen to scale down their Uranium mining operations and concentrate on higher margin metal production. Evidence of this supply trend can be seen in the most recent quarterly production numbers from Rio Tinto (see Table 2).

Table 2: Rio Tinto's Latest Quarterly Production Numbers

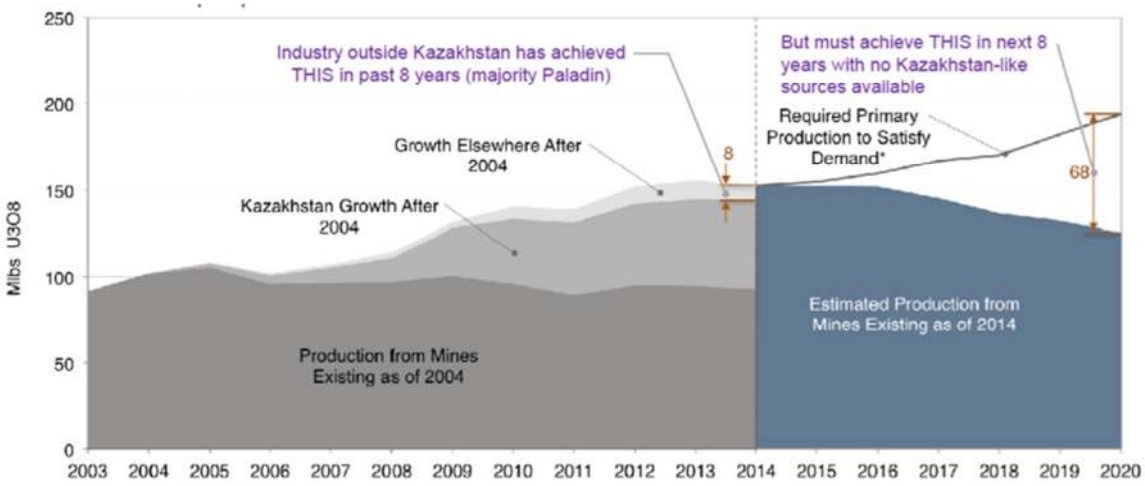
		Quarter			Half Year		% Change		
		2013 Q2	2014 Q1	2014 Q2	2013 H1	2014 H1	Q2 14 vs Q2 13	Q2 14 vs Q1 14	H1 14 vs H1 13
Principal Commodities									
Alumina	('000 t)	2,246	2,392	1,934	4,432	4,326	-14%	-19%	-2%
Aluminium	('000 t)	843	832	839	1,677	1,671	0%	1%	0%
Bauxite	('000 t)	10,960	10,044	10,144	20,522	20,188	-7%	1%	-2%
Borates	('000 t)	137	126	133	248	259	-3%	6%	4%
Coal-hard coking	('000 t)	1,902	1,874	2,015	3,552	3,888	6%	8%	9%
Coal-semi-soft coking	('000 t)	1,147	936	903	2,186	1,839	-21%	-4%	-16%
Coal-thermal	('000 t)	5,978	5,860	5,758	11,030	11,618	-4%	-2%	5%
Copper-mined	('000 t)	129	158	165	263	323	28%	4%	23%
Copper-refined	('000 t)	63	76	95	136	170	50%	25%	25%
Diamonds	('000 cts)	4,135	3,650	3,832	7,370	7,483	-7%	5%	2%
Iron ore	('000 t)	51,829	52,339	57,530	100,079	109,869	11%	10%	10%
Titanimum dioxide feedstock	('000 t)	461	389	372	888	762	-19%	-4%	-14%
Uranium	*('000 lbs)*	*2,408*	*644*	*455*	*4,744*	*1,099*	*-81%*	*-29%*	*-77%*

Source: Rio Tinto as of June 30, 2014

Rio Tinto is the world's largest swing producer of Uranium. With its variety of mining interests, this resources giant can choose to increase or decrease production of any one metal as appropriate. In the above table, it is clear how aggressive Rio Tinto can be. In their latest quarterly report, the company detailed an 81% quarter on quarter reduction in Uranium production. In addition to Rio Tinto's supply cut, there have been supply reduction announcements from other Uranium mining groups such as Paladin Energy and Denison Mines Corp.

However, the nuclear power industry is not overly worried about the recent reduction in current supply. They understand the economics of mining and the effects of today's below cost Uranium production. Low prices create low supply; as such, they are a temporary phenomenon. The greater threat to the nuclear power industry involves issues such as the security of Uranium supply and the future cost of new production. In Chart 2, we can see why they have reason to worry. From 2016 onwards, the mining industry is forecasting a growing structural deficit in Uranium supply. Nuclear power generators have already received much of the benefit that was derived from the 2004 increase in Kazakhstan's Uranium production. The impact of Kazakhstan's competitively priced Uranium put a stop to many new Uranium mining projects elsewhere. Instead, large mining groups focused their capital expenditure on copper, iron ore, nickel and fossil fuels rather than on metals with poor economics, like Uranium. The effects of this lack of resource development can be seen in the growing deficit between supply and demand that is forecast by many in the mining industry.

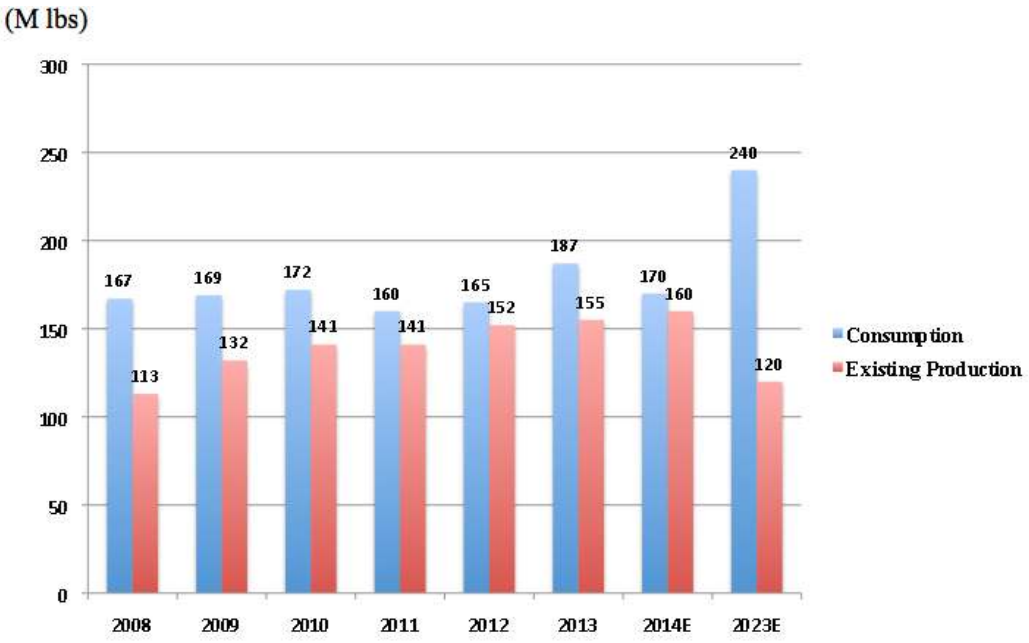
Chart 2: Primary Uranium Supply Must Grow to Meet Expected Demand



Source: Paladin Energy

New Uranium supply is constrained by two major factors. The first is increasing global environmental awareness and regulatory and licensing risk. The second is the decreasing economic incentive to build and develop new projects due to today's low Uranium prices. With regard to the second risk, it will take pricing of approximately $80 a pound to attract new project development and $50 a pound to entice the industry to ramp up to today's full capacity. Until then, we will see further supply reductions, in addition to this year's 11 Mlb (or 7%) capacity reduction. To date, inventory and secondary production sources have matched demand requirements. However, in Chart 3 we get a sense of how large the supply shortfall will be in ten years. It was this anticipated supply deficit that boosted Uranium prices in 2007 and 2011. On both occasions, prices were knocked down aggressively: in 2008 by the global credit crisis and in 2011 by the Fukushima disaster. However, the threat of a future supply deficit has not gone away; in fact, it is now a concern more pressing than ever.

Chart 3: Consumption Outpaces Production Showing Average U Consumption Growth of 4%/year to 2023



Source: Cameco

Conclusion

Over the last five years, real asset investments in metals and metal miners have severely underperformed US equity markets (see Chart 4). Due to supply and demand dynamics, we believe we are near the end of this process.

Chart 4: SPDR Metals and Mining ETF / S+P 500

Source: FullerTreacy Money

Of the different metal supply chains, we think Uranium offers one of the more compelling investment opportunities. With supply deficit forecasts, and increases in future demand,

we believe Uranium prices will move higher. We are now positioning our clients' portfolios to take advantage of this opportunity, which we expect to play out over the next five years. Throughout this time, we will be monitoring our current expectations against outcomes. We are looking forward to this process and to deepening our own, as well as our clients', understanding of the Uranium market.

Thank you for reading this piece. We look forward to sharing our next one with you.

Best regards,

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