Mining, Kazakhstan and the Uncooperative Capital Markets

JUNE 2015

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The mining sector

The mining sector in Kazakhstan

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The sector as a whole

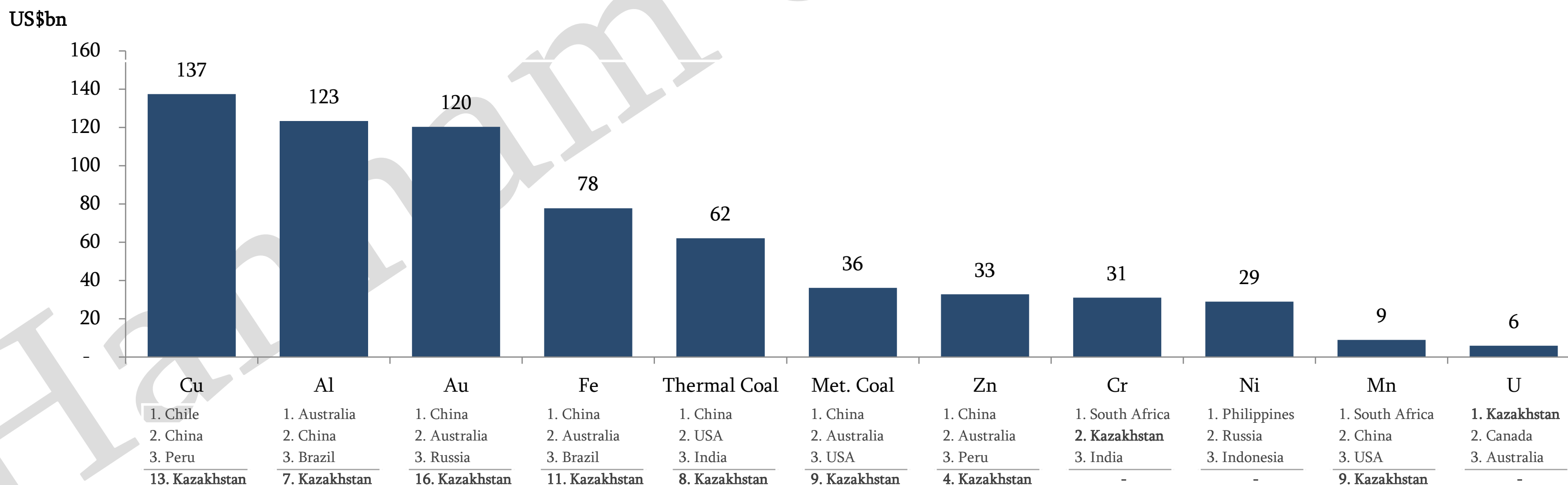
A bruised sector

- The fall in commodity prices has a lead to a prolonged "Exploitation" phase, driven by falling commodity prices and resulting in sticky cost curves and companies seeking productivity gains
- Resulted in relatively low valuations and capital outflows from the sector
- Bulk commodities and early stage commodities have suffered the most due to oversupply and slowing demand
- No development capital for the junior sector
- Markets not pricing in a price recovery

with silver lining for large parts of the sector

- Large world-class discoveries for base and precious metals are rare, suggesting long-term demand may significantly outstrip supply, leading to higher prices
- The short to medium term outlook for uranium (of which Kazakhstan is the number one global producer) is improving
- Restructuring is a way out for distressed entities with good value for seasoned investors
- M&A seeking synergies and gradually increasing
- Private equity and other "newer" forms of equity filling the public market gap
- Margins helped by exchange rates and falling energy costs

Value of major traded commodities (2015E)



Note: Aluminium price includes premium of US$344/t Other commodity prices are as per 2015 broker consensus
Source: Hannam & Partners, World Nuclear Association, SNL, Bloomberg and Mineweb

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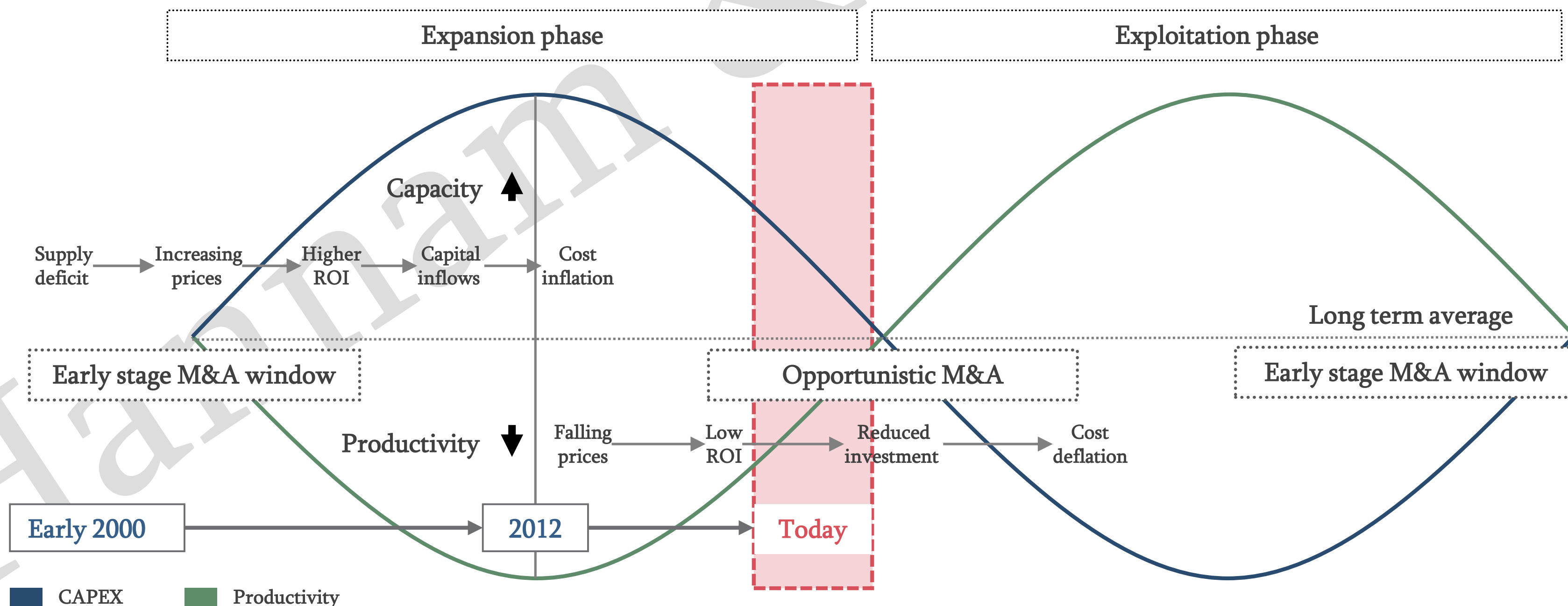
After years of expansion, the mining industry has been forced to focus on productivity improvements and strict value management

- It takes years to effectively add capacity in response to a demand spike
- Prices rise, capital returns increase, capital in-flows are high and mining specific cost inflation is above average
- A pronounced "expansion" phase results in a material increase of the capital stock (capacity) and the destruction of productivity
- Before capital expenditure peaks, prices start to fall which pulls the industry into a downturn where surviving players focus on regaining productivity – development capital evaporates
- Funding will only be available for the best projects in the industry and sophisticated investors

Cycles of "expansion" and "exploitation" can take a considerable time in mining



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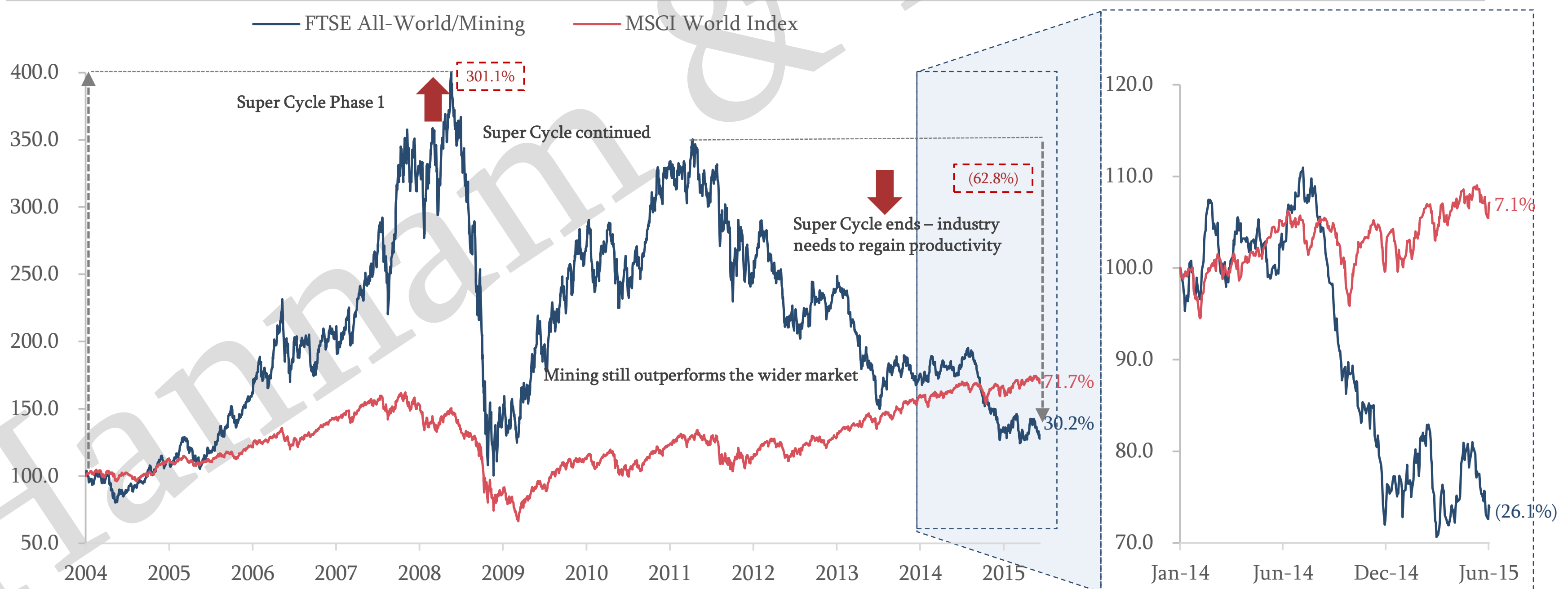
The mining sector outperformed the wider market for a decade, but …

- The emergence of BRIC nations redefined the mining landscape over the last decade
- A period of unprecedented returns and capital inflows followed
- The quick recovery after the 2008 global financial crisis indicated to many that the growth story was intact and sustainable
- From 2011, the mining industry has fallen victim to its own supply additions, leading to falling prices and consequently lower returns
- Today, the industry is struggling with low productivity and an expanding capital base at times of moderating demand growth

Global mining beat the market during the last decade but is entering a new non-expansionary phase



Source: Capital IQ as of June 11, 2015
Note: Indices rebased to 100

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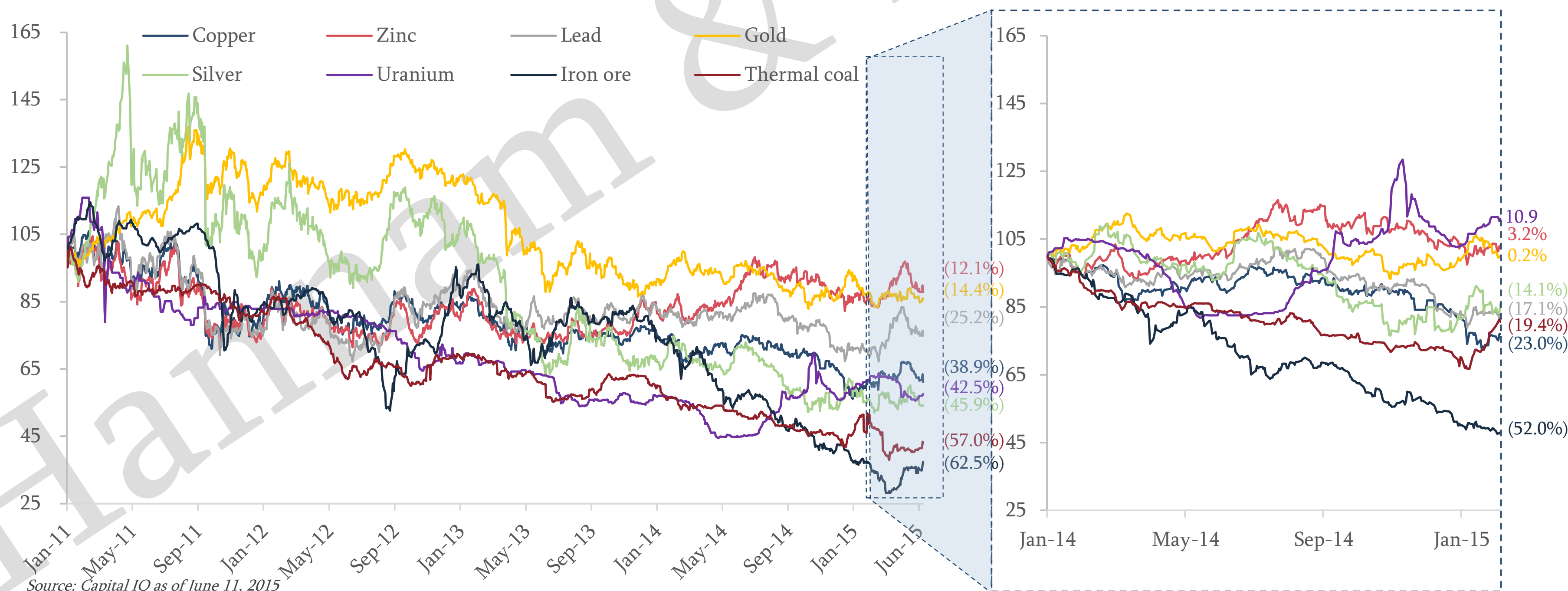
…in the last four years, metal prices have fallen on the back of large capacity additions and a moderation of demand across the world…

- Emerging markets were the sole driver for demand growth over the last decade
- A slowdown in the economic growth in emerging markets forced commodity prices downward from record highs
- Early stage commodities (such as iron ore), by and large, have seen fast falling prices in recent months
- Most markets are well supplied and low prices are unlikely to stimulate demand
- Many companies had to react by closing down loss-making operations and cancelling expansion projects
- But many closures are temporary, and restructured business seek a return to the market

The price performance of all major metals was negative over the last three years



Source: Capital IQ as of June 11, 2015
Note: Commodity prices rebased to 100

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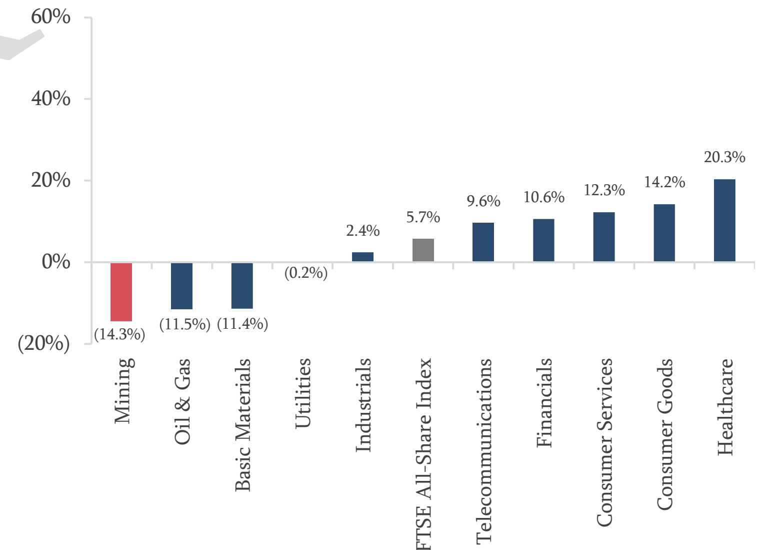
…resulting in significant underperformance of mining stocks

- The market moved away from mining and focused on industries with higher returns and lower risks
- Producing companies were able to weather the storm better
- Overall, market values plummeted, with $140 billion of market capitalisation lost in 2014 alone
- Three years of falling prices led to record impairments of $57 billion in 2013
- The period of fast price correction is past us, and mining stocks now sensitive to balance sheet health

The industry had to realigning expectations and focus on productivity improvements and cash conservation

Performance of FTSE sectors (Apr 2014 – Mar 2015)



Source: Capital IQ as of June 12 2015
Note: Diversified miners index includes BHP Billiton, Rio Tinto, Vale SA, Glencore, Anglo American, Vedanta and Teck Resources
Base miners index includes Freeport, First Quantum, Boliden, Lundin, Nyrstar, Southern Copper, and KGHM
Junior miners index includes Coalspur, Resource Generation, Prairie Mining, Ncondezi, Waratah, Bellzone, Beowulf Mining, Sundance Resource, Flinders Mines, Equatorial Resources, Cape Lambert, Nevada Copper, Copper Fox Metals, Western Copper and Gold, Northern Dynasty Minerals, Ascot Resources, Pacific Booker Minerals, NovaCopper, Newport Exploration, Independence Group, CuDeco, Nautilus Minerals, Avanco Resources, Finders Resources, Hot Chili, Panoro Minerals, Los Andes Copper
Note: Prices rebased to 100

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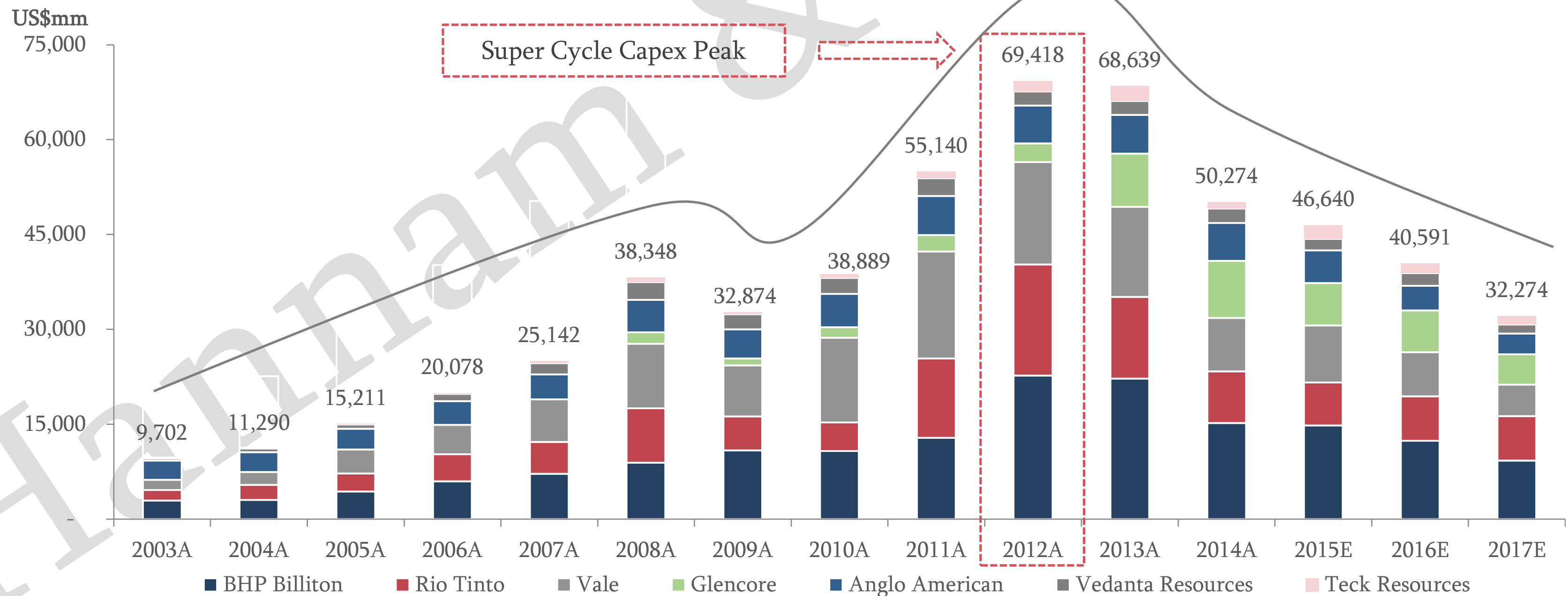
Capex is still high compared to a normalisation of demand

- The "Expansion" phase peaked in 2012, a year after the post crisis commodity prices peaked
- Majors tried to stop projects, but most projects that had already started looked attractive ignoring sunk costs and continued
- We expect a prolonged period of reducing capital expenditure and a focus on exploiting the existing asset based
- The thermal coal industry is a good example, where based on record low prices, shut downs of operating mines have started and companies are focussing on regaining productivity
- Shareholders force boards to be conservative resulting in limited M&A driven by synergistic consolidation

Capital expenditure by global diversified miners from the start of the "Super Cycle"



Source: Company filings and Capital IQ as of June 2015

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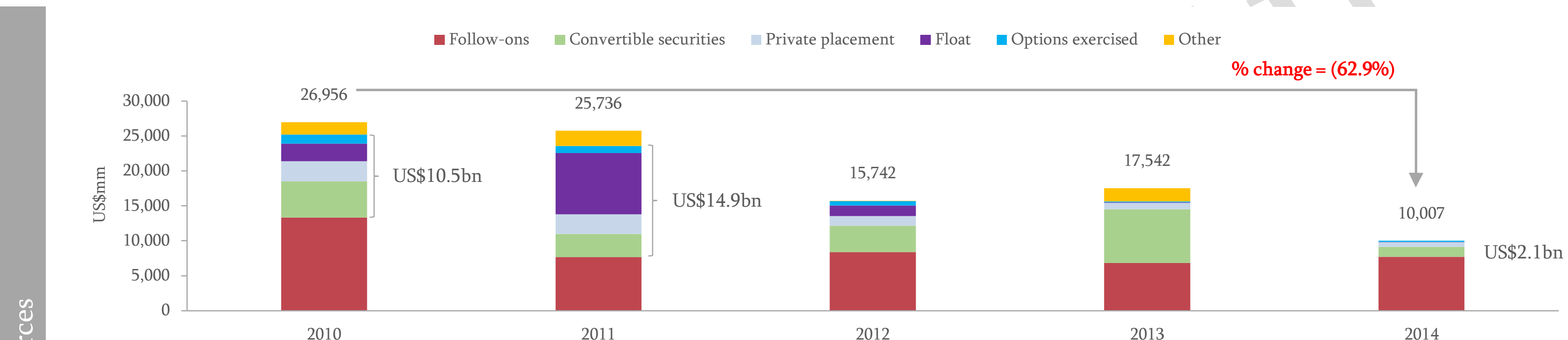
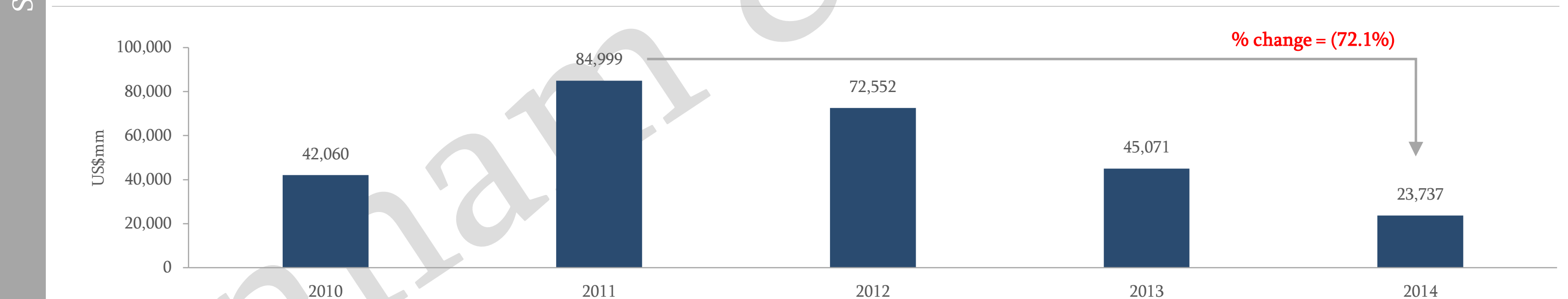
Capital flows to the mining industry have slowed but the new sources are rare…

Sources

Equity or convertible bond



Credit facility or loan



Proportion of totals

	2010	2011	2012	2013	2014	Total US$mm	Total (%)
Credit facility or loan	60.94%	76.76%	82.17%	71.98%	70.34%	268,420	73.7%
Follow-ons	19.30%	6.92%	9.48%	10.93%	22.82%	43,901	12.0%
Convertible securities	7.48%	3.01%	4.29%	12.22%	4.25%	21,370	5.9%
Float	4.19%	2.51%	1.56%	1.48%	1.98%	12,930	3.5%
Private placement	3.65%	7.94%	1.71%	0.12%	0.09%	8,639	2.4%
Other	1.89%	0.90%	0.75%	0.24%	0.51%	5,858	1.6%
Option exercised	2.54%	1.95%	0.05%	3.03%	0.00%	3,284	0.9%

Source: SNL.

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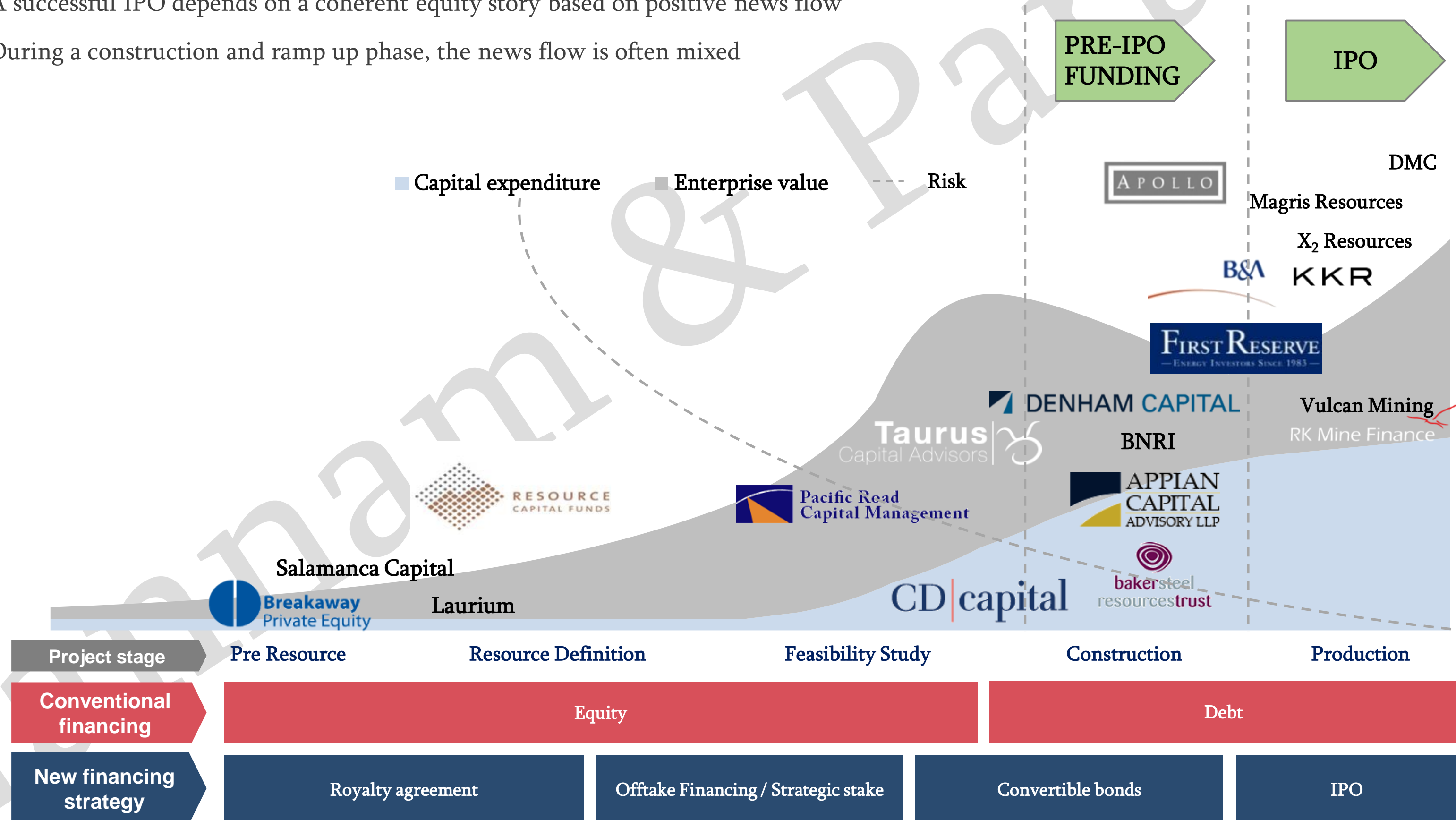
Listed companies in construction / ramp up often experience a fall in share price

Mine life development

- A successful IPO depends on a coherent equity story based on positive news flow
- During a construction and ramp up phase, the news flow is often mixed



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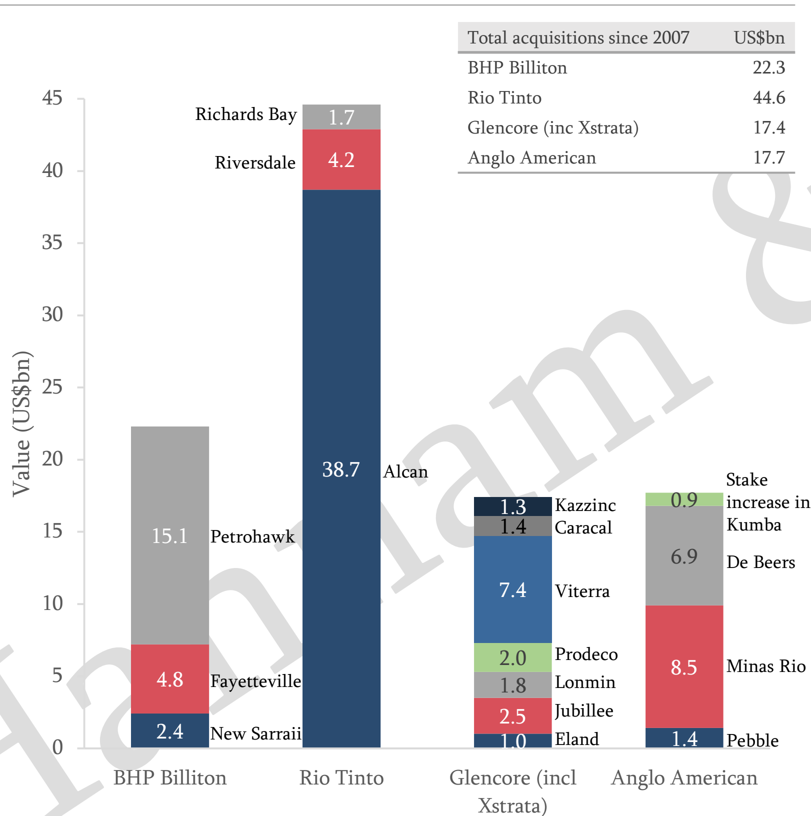
…and many Majors have made regrettable M&A and capital allocation choices making them unlikely buyers for some time to come

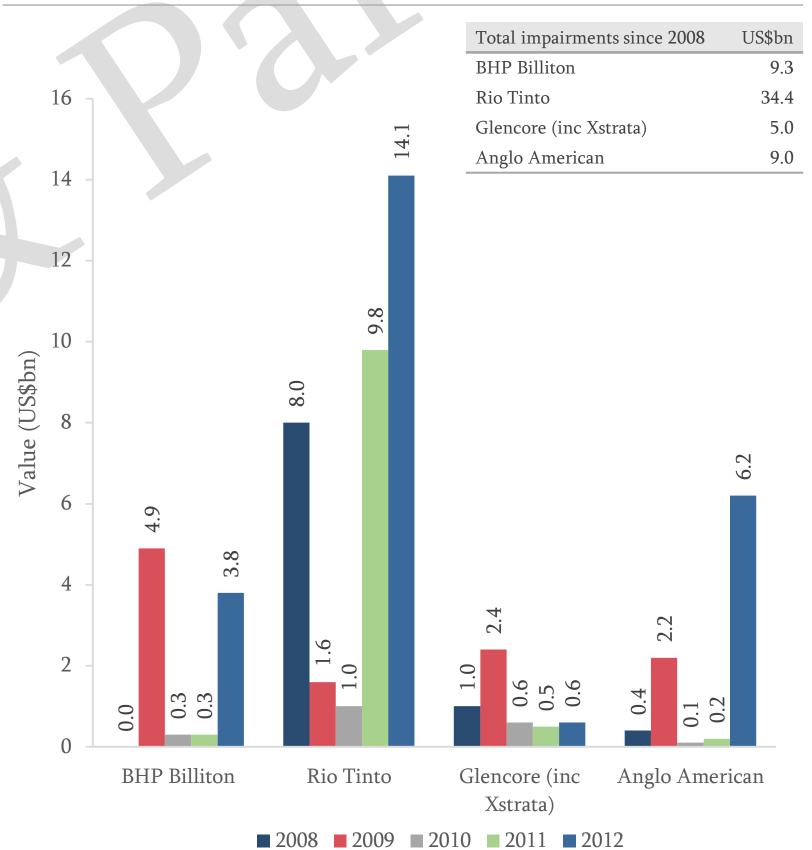
- The ill-timed Alcan take-over resulted in an impairment equal to 70% of the acquisition price
- The worst is over for most of the big ones, with iron ore still giving headaches

Major acquisitions since 2007



Total acquisitions since 2007	US$bn
BHP Billiton	22.3
Rio Tinto	44.6
Glencore (inc Xstrata)	17.4
Anglo American	17.7

Annual impairments since 2008



Total impairments since 2008	US$bn
BHP Billiton	9.3
Rio Tinto	34.4
Glencore (inc Xstrata)	5.0
Anglo American	9.0

Source: Company filings
1 Based on BHPB's June fiscal year end
2 Ratios include Capex spent as part of the acquisition price

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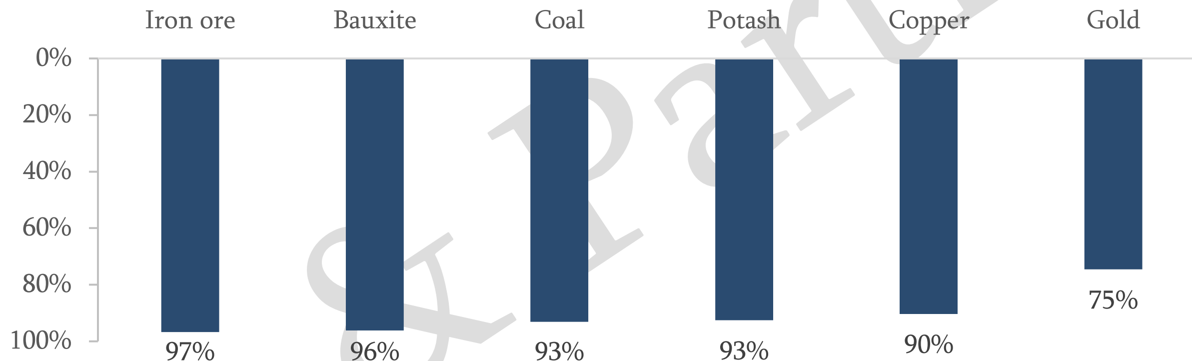
Unfundedl developing assets are currently heavily discounted by the market

Pre-money discounts

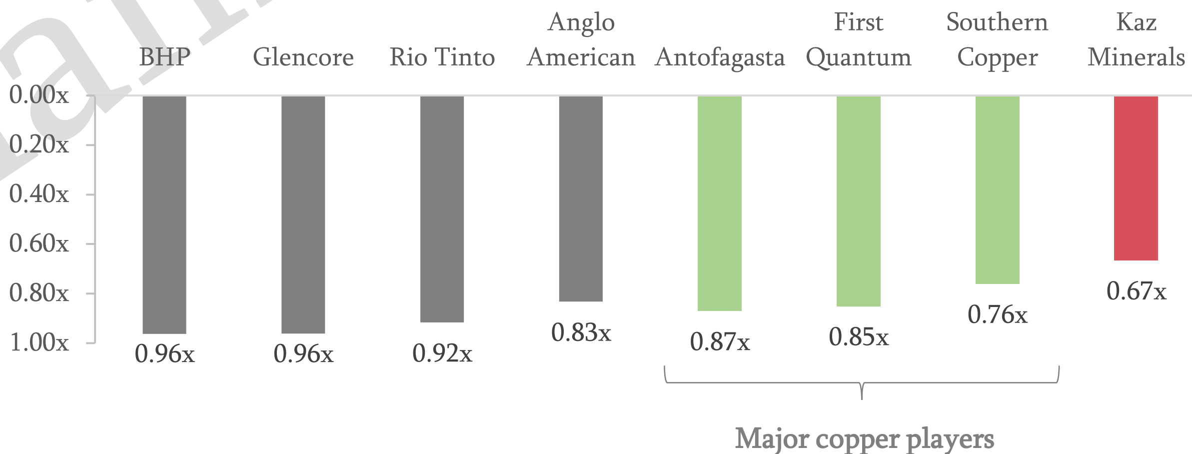
- The market value of companies compared to their asset NPV shows significant discounts
- On average, un-funded copper projects are discounted to 91% of their DCF valuations (based on public technical reports)



Source: H&P research

P/NAV of Majors and Central Asian players

- Majors are being discounted by the market with P/NAV multiples at 0.96x-0.83x
- Major Kazakhstan mining companies are discounted in the 0.6x-0.7x range



Source: Broker reports, CapIQ

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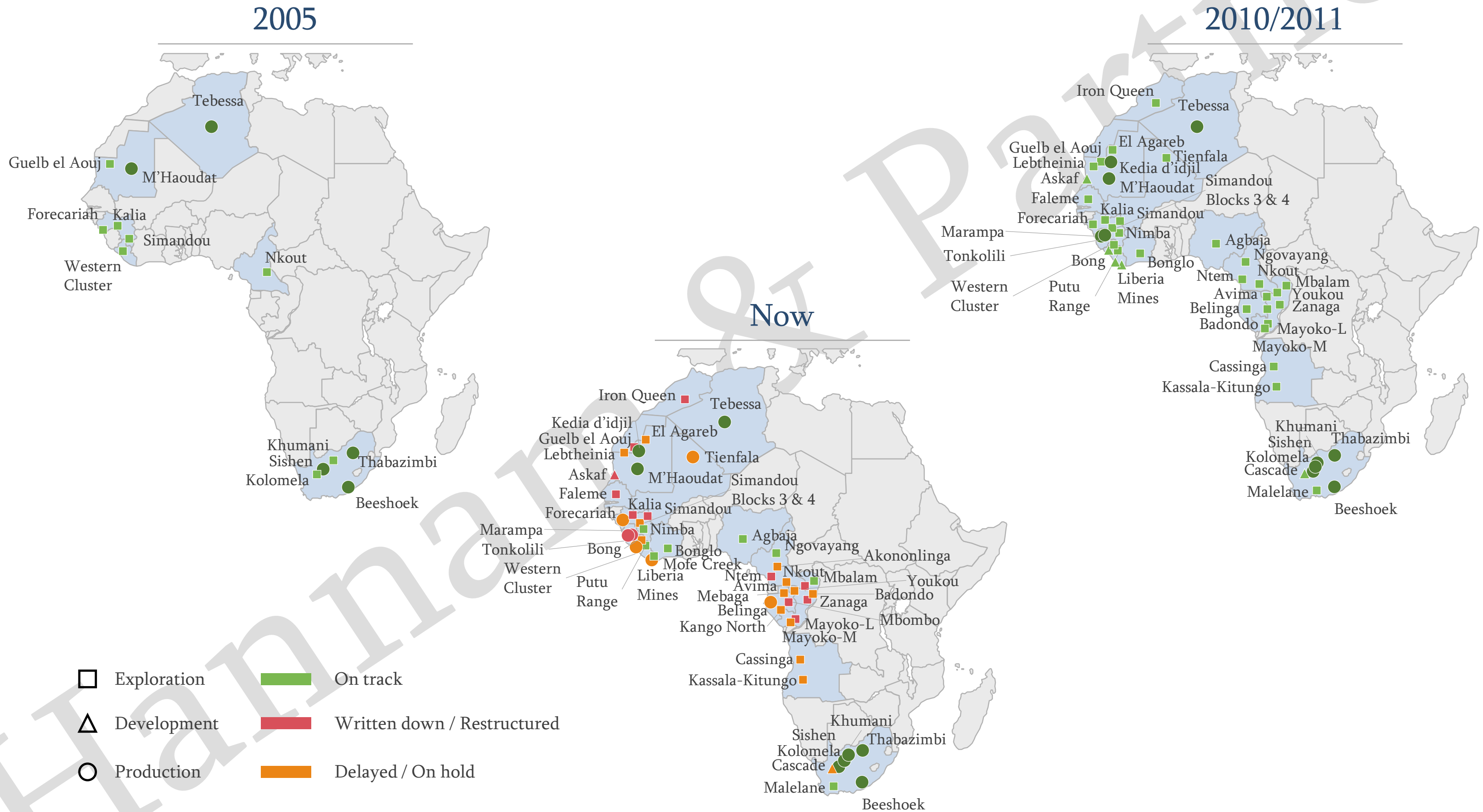
Impact of iron ore prices on African projects



Source: SNL, company filings

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The mining sector in Kazakhstan

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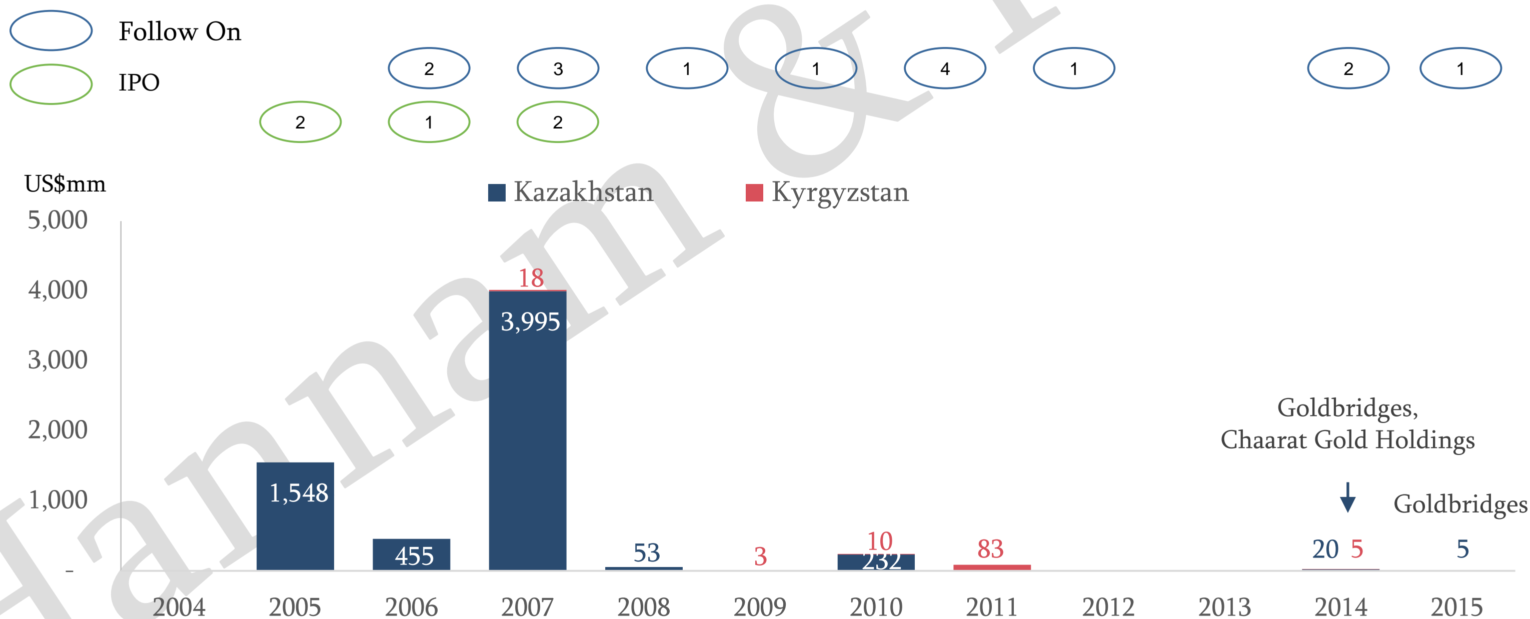
Central Asia has not been able to attract risk capital for several years

- There has been very little equity raised by Central Asian mining companies in the public markets over the last five years (Goldbridges raised $5m in April 2015)
- General governance issues and the delisting of ENRC has dampened investor confidence in Central Asian mining companies
- We see this also as a reflection of an underdeveloped junior mining industry in the region

Capital raised by Central Asian mining companies not reflective of geological potential



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The global outlook for commodities needs to be paired with the competitive advantage of Kazakhstan to lead to a consistent investment framework

- Kazakhstan's mining companies and the state are best placed to build on their existing strength (instead of developing assets on other continents and expanding their commodity reach)
- In uranium Kazakhstan has become a world leader with unique competencies and is now a global preferred partner
- Kazakhstan is close to China, but still has logistical disadvantages compared to other major producers of bulk commodities (iron ore and coal) and it might be sensible to use domestic coal to generate competitively priced electricity
- Downstream expansion makes sense where the country has low factor costs, i.e. cheap coal for conversion

Kazakhstan can be a strong competitors in several key commodities

Global commodity outlook driven by

- Industry size
- Future growth
- Robustness of demand
- Industry structure
- Price outlook

Opportunity

Competitive advantages of Kazakhstan

- Mineral endowment
- Capital market
- Cost position
- Existing competencies
- Closeness to markets

Kazakhstan has a significant share in several important mineral resources:
Chromite ore (30%), Manganese ore (25%), Lead and Zinc (13%), Copper (10%) and Iron ore (10%)

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Attractiveness of a commodity is driven by market size, future demand growth, robustness of demand and the market structure

- Commodity markets are inherently volatile, but the larger the market the lower the volatility
- The robustness of demand is driven by number of end uses for a certain mineral/metal. Varied applications equate to stronger demand and reduced demand volatility

		Market Size		LT Price Outlook	Robustness of Demand[3]	Market Structure[4]	Comments
		$bn[1]	Growth[2]				
1	Cr	25.8	4.3%	⟷	Foundries 6%; Special steel 20%; Stainless steel 74%		■ Chinese domestic cost competitiveness is questionable ■ Market structure plays into Kazakhstan's hands
2	Cu	131.0	4.1%	↑	Consumer products 8%; Transport 14%; Industrial machinery 13%; Construction 30%; Electrical & Electronics 35%		■ Classic mid-cycle commodity with robust demand outlook ■ Temporarily lower construction activity in China tempers demand but the longer term outlook remains positive
3	Mn	7.3	6.8%	↑	Other 14%; Mn Alloys 12%; Other steels 32%; Stainless steel 42%		■ Stainless steel is a late cycle commodity which is driving a favourable demand outlook ■ Very favourable market structure
4	Zn	25.7	2.8%[5]	⟷	Others 10%; Processing 6%; Copper 17%; Alloy 17%; Galvanizing 50%		■ As mature mines close, demand increases and insufficient new production comes online ■ The balance is expected to shift further into deficit with the market bullish on funding zinc projects
5	U	4.5	1.8%	↑	Energy, 100%		■ The uranium market will remain over-supplied with little supply side response ■ Kazakhstan has a very strong competitive position in a highly concentrated market

[1] 2013 [2] CAGR up to 2017 [3] Applications (end use)
[4] Concentration of top 10 producers
[5] CAGAR up to 2016 [6] CAGAR up to 2016

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