




“COAL ASSET VALUE THROUGH THE SUPER-CYCLE”

talk by
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 MICA, ACPS : 11th November 2015
 SMEDG : 28th January 2016

COAL ASSET VALUE THROUGH THE SUPER-CYCLE

Contents :

- “ The super-cycle
- “ Major mining companies
- “ USA coal companies
- “ Chinese coal companies
- “ Australian coal companies
- “ Resources, Reserves and Mines
- “ Implications

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COAL ASSET VALUE THROUGH THE SUPER-CYCLE

Citigroup (June 2015) :

“...world’s largest mining companies have written off about 90% of the value of deals executed since 2007, led by charges in aluminium, iron ore and nickel...”

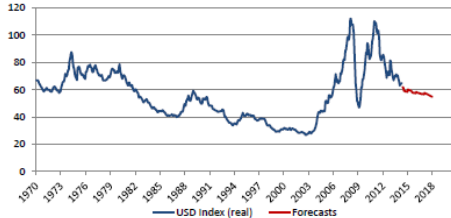
“..coal assets will add to write-downs as prices fall...”

Source : Aust Fin Review 3 September 2015 ; Financial Times 27 October 2015

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COAL ASSET VALUE THROUGH THE SUPER-CYCLE

What is/was the super-cycle ?

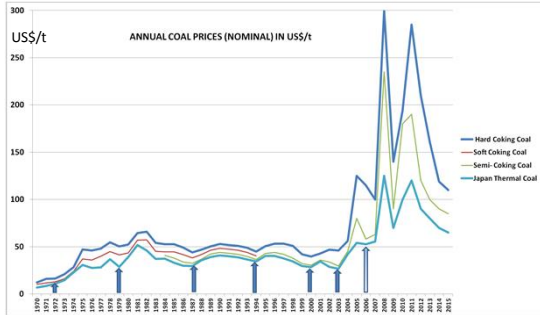


CS Commodities index, real terms, USD based

February 16 Source : Credit Suisse, Paul McTaggart (2014) 4

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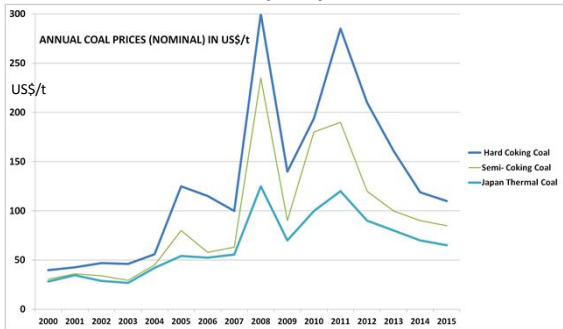
What is the super-cycle for coal ?



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COAL ASSET VALUE THROUGH THE SUPER-CYCLE

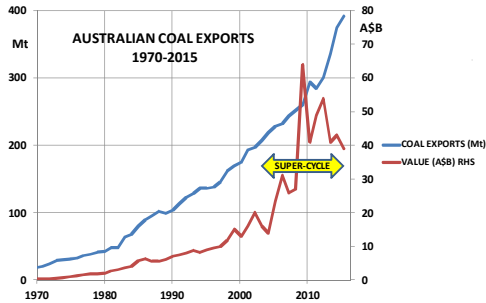
What is the super-cycle for coal ?



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What is the super-cycle for coal ?



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COAL ASSET VALUE THROUGH THE SUPER-CYCLE

What is value ?

- Market Capitalisation** : value of equity of a company
- Enterprise Value (EV)** : value of enterprise = equity + net debt
- Implied Value (IV)** : EV calculated from transactions

Value derived from :

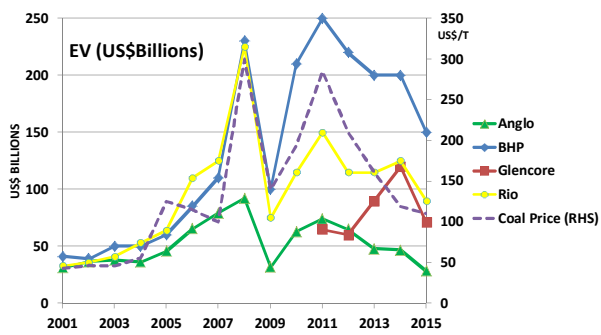
- " Share price and company public data
- " Transactions
- " DCF and NPV analysis

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COAL ASSET VALUE THROUGH THE SUPER-CYCLE

BIG 4 MINING COMPANY VALUE : Enterprise Value



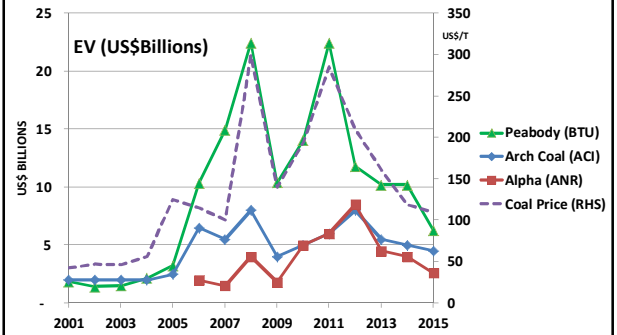
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Source : YCharts

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USA COAL COMPANY VALUE : Enterprise Value



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COAL ASSET VALUE THROUGH THE SUPER-CYCLE

USA COAL COMPANY VALUE : Market Cap. 2015

Company	EV \$B	DEBT \$B	Mkt Cap \$M
PEABODY	\$6.2B	\$6.0B	\$250M
ARCH	\$5.1B	\$5B	\$63M
ALPHA	\$4B	\$4B	Chapter11

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COAL ASSET VALUE THROUGH THE SUPER-CYCLE

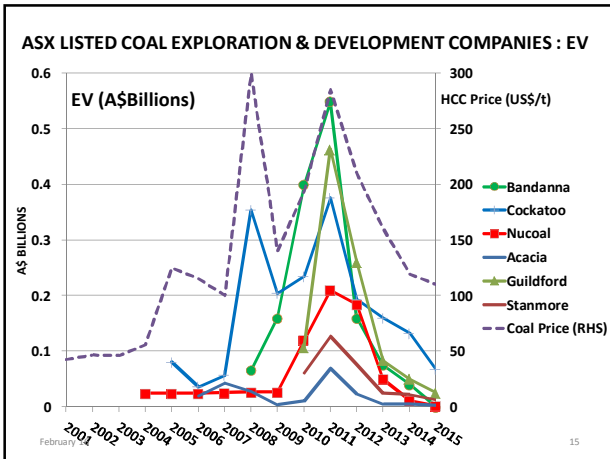
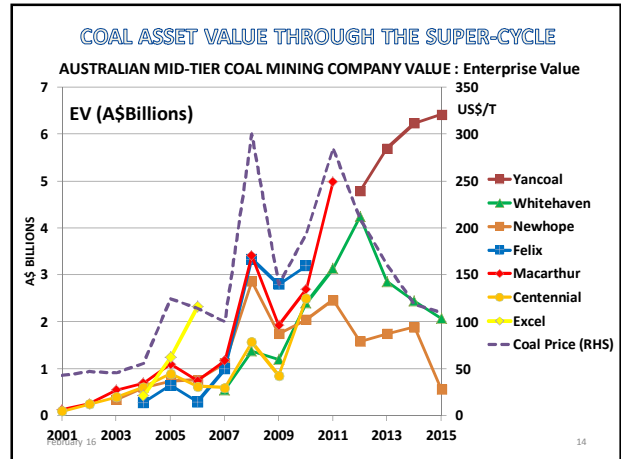
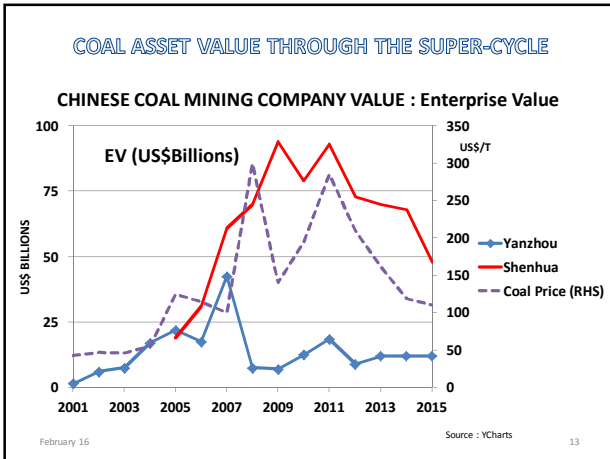
USA COAL COMPANY VALUE : Market Cap in Super-cycle

Company	Mkt Cap 2003 US\$M	Mkt Cap 2008 US\$M	Mkt Cap 2015 US\$M
PEABODY	\$1,800	\$20,000	\$250
ARCH	\$1,000	\$7,000	\$63M
ALPHA	\$1,000*	\$4,000	Chapter11

* 2005

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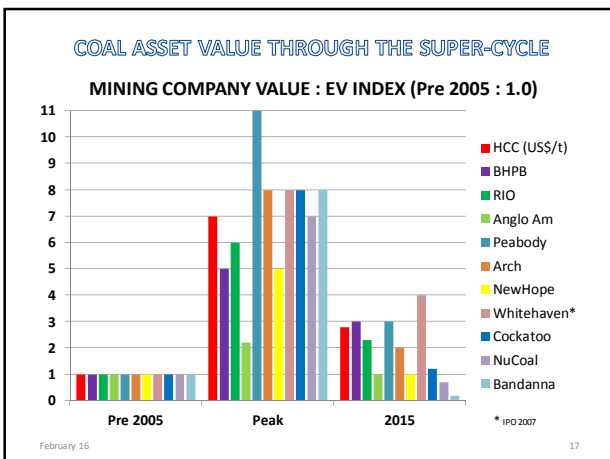
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ASX LISTED COAL EXPLORATION & DEVELOPMENT COMPANIES

COMPANY	IPO	Takeover/End	Chart. Peak mkt cap	Status Sept 2015
Acacia (AIC)	2006		Chart. Peak mkt cap \$70m (2011)	Shares at \$0.002
Allegiance (AHQ)	2011		Peak mkt cap \$18m at \$0.12	Shares at \$0.004
Bandanna (BND)	2008	Admin. 2014	Chart. Peak mkt cap \$500m (2011)	In Administration
Blackwood	2010	T/O: 2013	T/O by COK with scrip	Part of COK
Bounty (BNT)	2008		Selling equipment	Shares at \$0.025
Carabella Resources	2010	T/O: 2013	IPO at \$0.40 Peak mkt cap \$225m	TO: Wealth Min. at \$63m
Coalworks	2008	T/O: 2012	T/O by WHC at \$170m	Part of WHC
Cockatoo Coal (COK)	2005		Chart. Peak mkt cap \$400m (2011)	Shares at \$0.001
Cokal (CKA)	2010	T/O: 2015	Peak mkt cap \$250m (2011)	TO by Cakra at \$70m
County Coal (CCJ)	2012		Peak mkt cap \$33m (2012)	Shares at \$0.01
Cuesta Coal (CQC)	2012		IPO at \$0.30 Mkt cap: \$35m (2014)	Shares at \$0.02
Endocoal	2010	T/O: 2012	T/O: \$70M. Mkt cap \$45m	Part of U&D. Delisted.
Guildford (GUF)			Chart. Shares in 2011 >\$1 (\$500m)	Shares : \$0.03
Malabar Coal (MBC)	2012		IPO at \$1.00 Mkt cap: \$85m	Shares at \$0.07
NuCoal (NCR)	2004	ICAC	Chart. Peak mkt cap \$200m (2011)	Shares at \$0.002
Stanmore (SMR)	2009		Shares in 2011 >\$1. Chart.	Shares : \$0.10
Tiaro Coal (TCM)	2008	Admin. 2015	Peak market cap \$30m	In Administration
Wollongong Coal (NRE)	2012		Peak market cap \$600m	Delisted 2015

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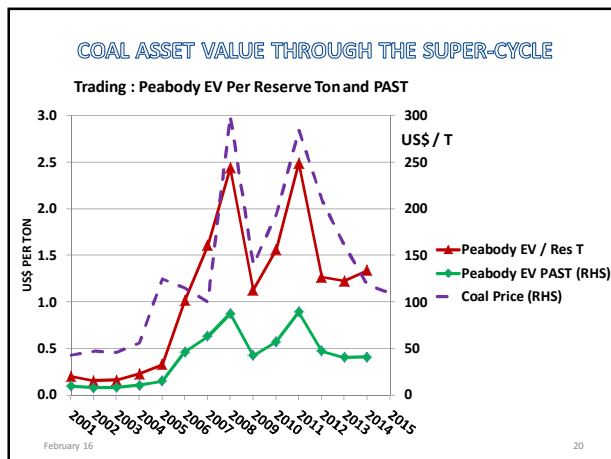
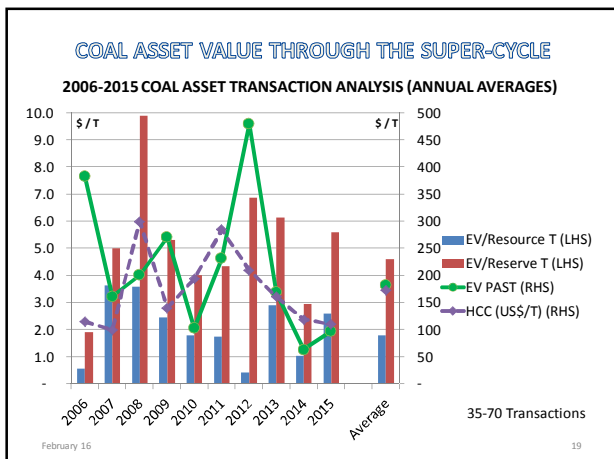


COAL ASSET VALUE THROUGH THE SUPER-CYCLE

Transaction and Trading analysis

- “ EV/Resource tonne
- “ EV/Reserve tonne
- “ EV/Sales tonne (current; planned)
- “ Transactions through the cycle
- “ slide
- “ EV through mine development
- “ Example : Maules Creek

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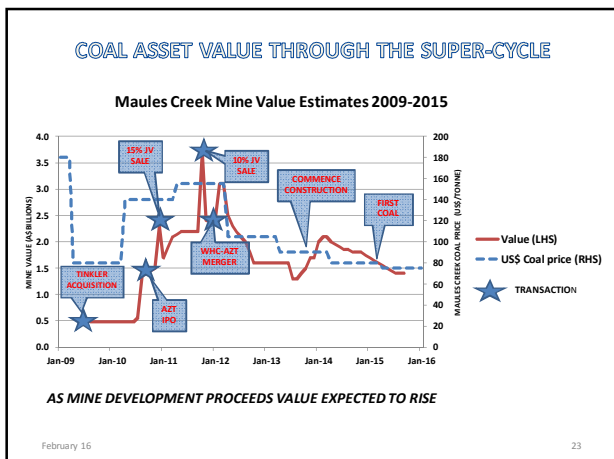
COAL ASSET VALUE THROUGH THE SUPER-CYCLE

Multiple mine/project transactions

~ East Saraji	2006 : <\$50M	2008 : \$2.5B
~ Integra	2007 : \$835M	2015 : sale for "negligible" amount
~ Isaac Plains	2011 : \$860m	2015 : \$1
~ MDL162	2010 : \$360M (90%)	2014 : \$70M
~ Taroom and Collingwood (50%)	2010 : \$100M	2014 : \$25M
~ Riversdale	2010 : \$4B	2014 : \$50M
~ Grande Cache	2012 : C\$1B	2014 : US\$2

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- ### COAL ASSET VALUE THROUGH THE SUPER-CYCLE
- #### Transaction and Trading analysis
- ~ EV/Resource tonne
 - ~ EV/Reserve tonne
 - ~ EV/Sales tonne (current; planned)
 - ~ Transactions through the cycle
 - ~ EV through mine development
 - ~ *Expectation: value increase as risk reduced*
 - ~ *Example : Maules Creek Mine*
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- ### COAL ASSET VALUE THROUGH THE SUPER-CYCLE
- #### Transaction and Trading analysis
- ~ Transactions through the cycle
 - ~ EV/Resource tonne
 - ~ EV/Reserve tonne
 - ~ EV/Sales tonne (current; planned)
 - ~ EV through mine development
 - ~ *Example : Maules Creek*
- #### CONCLUSIONS :
- ~ Price cycle dominated value
 - ~ Relationship: price and value
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COAL ASSET VALUE THROUGH THE SUPER-CYCLE

Where to from here for coal asset values?

Driver : coal price - current and forecast

Cost reductions happening

Value now ?

The next coal price cycle? Or structural decline?

~ If/when does cycle start?

~ Drivers and unknowns

- Import coal demand : China, India, E & SE Asia
- Coal supply : Indonesia, India, China, Australia
- Nuclear
- Renewables

~ Is the next coal cycle an

- up cycle or a
- "super bear cycle" or a
- normal cycle

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COAL ASSET VALUE THROUGH THE SUPER-CYCLE

Where to from here for coal asset values?

Related to coal price.

The next coal price cycle?

~ When does it start?

~ Is it an up cycle or a "super bear cycle" or normal cycle

Where to from here for coal asset values?

Slide 3: "...coal assets will add to write-downs as prices fall..."

Debt levels.

Is it the time to buy?

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