The China Factor: Short and Long-term Drivers of Chinese Coal Imports

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China Becomes a 100 mt Net Importer in 2009

- Chinese imports of 126 mt were approximately 15% of the seaborne market in 2009
- Chinese demand supported prices after global recession
- But China produced 3.3 Bt of coal in 2009 – it doesn’t “need” the imports
Agenda

• **Part I:** A New Paradigm? What Drove China to a Record 126 mt Imports in 2009

• **Part II:** Will it Last? Key Long-term Market Reforms that Could Reduce Domestic Prices and Impact China’s Long Term Import Demand
High Transport Costs Help Make International Coal Competitive With Domestic Coal in Heavily Industrial Southern China
Price Relationship of Domestic to International Coal Shifted Dramatically in Late 2008

Qinhuangdao vs. Imports: Price Differentials for Coal Landed in Guangzhou

- Guangzhou is the largest importing province and Indonesia, Australia, and Russia are the key swing suppliers
- Price spreads into south China shifted to favor imports in 2009
- Indonesian coal is the most competitive into southern China

Note: Positive numbers represent a profit advantage for imports. All prices are on an equivalent 6700 kc/kg GAD basis and are indicative. International freight is capesize, domestic is 50k DWT vessel. Source: Reuters, AXS Marine, McCloskey, Shanghai Shipping Exchange, authors’ analysis.
Price Arbitrage Drives Chinese Imports

Monthly Differentials Between Qinhuangdao And Import Coal Landed in Guangzhou and Resulting Import Levels

- China is a profit-seeker and will import when international coals are at a discount
- Some demand is quality-specific but a portion can swing from domestic to international
- “Two Markets, Two Resources” policy encourages imports

Note: All prices adjusted to a 6700 kc/kg GAD basis and are indicative. International freight is capesize, domestic is 50k DWT vessel. Source: Reuters, McCloskey, AXS Marine, Shanghai Shipping Index, China National Bureau of Statistics, author’s analysis.
Arbitrage Driver #1: Strong Chinese Freight vs. Weaker International Freight

China’s coastal freight markets declined less than international freight markets after the financial crisis, putting Qinhuangdao coal at a relative disadvantage.

Note: International rates are capesize, China rates for 40-50k DWT vessels. Source: AXS Marine, Shanghai Shipping Index.
Arbitrage Driver #2: Stronger Domestic Coal vs. Weaker International Coal

Qinhuangdao prices declined less than international coal prices after the financial crisis, putting domestic coal at a disadvantage

Source: Reuters, McCloskey.
Arbitrage Driver #3: Short-term Domestic Fundamentals

• Domestic coal policy:
  • China’s policy push to close small mines, consolidate mines, and increase safety in Shanxi and elsewhere held back supply and supported domestic prices
  • The “coal-power conflict” led to the breakdown of the Annual Negotiations in December 2008 pushed domestic buyers to look overseas

• Other short-term factors:
  • Weather: harsh winter and high power demand, low hydro availability
  • Transport interruptions
  • Safety shut-downs of mines
Part II: Will it Last? Key Long-term Market Reforms that Could Reduce Domestic Prices and Impact China’s Long Term Import Demand

1. The Coal-Power Conflict - 煤电矛盾
2. Vertical Integration and Coal-Power Bases
3. Consolidation and Closure of Small and Medium Mines
Coal-Power Conflict is a Critical Pressure on the Chinese Energy System that Will Drive Market Reforms and Government Price Intervention

2008: China’s Power Market Can’t Even Bear the Cost of Coal

- Coal markets are liberalized while electricity prices are still tightly capped to stem inflation and maintain “social stability”.
- The “Big 5” generators lost 40 billion RMB in 2008 and the government instituted coal price caps in response to mounting losses – an implicit cap on domestic coal prices.
- Short-term gridlock is bullish for imports, but long term pressure to lower power generation costs could reduce domestic prices and be bearish for imports.
- Three types of market reforms could fix this: reduce coal prices for power companies, reduce monopoly rail prices, or increase the power price. The first is most likely.

Source: Power price is Shanghai grid as reported by Shanghai Development and Reform Commission. Coal price is Qinhuangdao spot price.
Vertical Integration and Coal-Power Bases
Lower Cost Structures

• **Vertical Integration:**
  • The Chinese government is encouraging power companies to acquire coal assets and coal companies to acquire power assets to resolve the coal power conflict.
  • **Result:** more guaranteed domestic supply at internal transfer (below market) prices.

• **Coal Power Bases:**
  • *11th Five Year Plan of the Coal Industrial Development* calls for 13 consolidated, high-efficiency coal-power “bases” to produce more than 100 mt each.
  • Policy aims to produce 70-80% of total domestic supply at the bases.
  • *1st* base at Huainan and Huaibei declared complete in 2009.
  • **Result:** more efficient (lower cost) production, reduced transport bottlenecks and costs, higher degree of state control over coal production.
Consolidation Polices Alter Production Cost Structures

- Key government policies promote closure or merging of small mines to promote safety and efficiency:
  - *Opinions on promoting the healthy development of coal industry, 2005*
  - *Coal industry policy, 2007*
- A key conflict: central government has incentive to keep prices low, but provincial does not.
- Shanxi mine consolidation supported prices in 2009 but could put downward pressure on prices after restructuring is complete as a higher percent of production will be at lower cost structures.

### Shanxi Mine Consolidation Targets

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Conclusions

1. Modeling price arbitrage for imports into southern China can reliably predict Chinese imports.

2. China is a profit seeker that will import when the price is right – as it was in 2009.

3. China’s import demand therefore does not represent a “structural shift” in global markets and is not likely permanent – a stark contrast to increasing Indian demand which is a “structural” shift underpinned by a shortage of domestic coal.

4. China’s “in and out” participation in global markets will have a moderating impact on price as it will add demand in low price environments and reduce demand in high price environments.

5. Indonesia stands to gain the most from Chinese import demand.

6. Chinese coal and power market policy and reforms will have a large impact on domestic prices over the long-term and thus impact appetite for imports – but power demand is an “x-factor”.
Thank You

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