12th Coal Trans USA

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OVERVIEW

1. COAL TRANSACTION BANK RISK ANALYSIS
2. THE "GATHERING STORM" OF REGULATIONS
3. NEW BANKING REGULATORY ISSUES
4. MANAGING RISK

COAL TRANSACTION BANK RISK ANALYSIS

COAL TRANSACTION BANK RISK ANALYSIS

Commercial Bank Coal Transaction Risk Analysis:
The analysis of a coal senior debt financing incorporates many variables.

- Coal Reserve Risk
- Stage of Project – Greenfield, Brownfield, or Existing Operation
- Mining Complexity and Techniques
- Coal Market/Price Risk
- Transportation and Handling Logistics
- Capital Expenditure Requirements
- Coal Preparation Plant and Required Infrastructure
- Permit and Political Risks
- Environmental, Safety and Remediation Risks

COAL RESERVE RISK

- Proven reserves – amount and quality – at current/forecasted production rates what is the proven reserve life

- Probable Reserves – amount and quality – amount of capital and time to bring these reserves to proven and to be brought into production

- Resources – amount of capital and time to bring these resources to proven and to be brought into production, evaluate any specific risks or barriers to prevent the resources from being converted into reserves

- Quality of the Reserves
  - BTU rate
  - Sulfur Content
  - Ash Content
  - Moisture
  - Other qualities

Reserves are defined as coal tonnage that can be economically mined under current mining and capital plans.

STAGE OF PROJECT

- Greenfield Project – requires intensive due diligence, evaluating reserve reports, constructing mining plans using specific mining techniques, required capital expenditures, sources and uses of funding, Completion Tests in terms of production, economics, and other factors. Environmental, safety and remediation plans, Environmental Impact Statements and Required Permits. Significant time to close a Financing.

- Brownfield Project – requires intensive due diligence but a significant component of infrastructure should already be in place, less capital and time than a pure Greenfield project, evaluate the probability of success of bringing the mining complex back into production (what factors led to the mine being closed?) , Environmental, safety, and remediation plans; any existing environmental liabilities that are being inherited, Completion Tests in terms of production, economics, and other factors.

- Existing Operation – due diligence can be done more efficiently than a Green or Brown Field, can review operating history, production and cost historical results, review mine plan for future production, will mining conditions become unfavorable or become more complex, Environmental, safety, remediation and permitting analysis. Evaluate mine in terms of performance reserves, and steady state cash flow to properly evaluate its value.

Time to complete a transaction is heavily dependent on the stage of the mine or project.

MINING COMPLEXITY AND TECHNIQUES

- Surface mining or underground mining

- Underground Mining: Longwall mining which requires a greater capital outlay but is very cost efficient once in operation; or continuous mining applied in uneven coal seams or where there is complexity and flexibility is required for mining. Continuous Mining require less capital expenditures but is generally less cost efficient than longwall mining.

- The Mine Plan is essential in determining the approach, and maintaining a minimum production profile as there may be difficult mining conditions in some portions of the reserve. Flexibility in the Mine Plan is also important as it may be altered to keep a strong production profile at reasonable economics to meet all capital and debt obligations during critical periods of the mine's life.

The Mining Techniques and Complexity affect capital requirements, production and cost efficiency, permitting, environmental remediation, and safety procedures.

COAL MARKET/PRICE RISK

- Quality of coal key to accessing markets
- High sulfur coal can be sold to utilities with scrubber capability or treated in coal preparation plants to improve coal quality
- Ability to wash/blend coal can expand market demand
- Off-take contracts can reduce volume and price risks
- Transport logistics important as cost effective access via rail and barge can effectively reduce price of delivered coal. Coal buyers are concerned with total cost of coal, not just the mine-mouth price.
- Low sulfur, high BTU coals trade at a premium to lower quality coal.

Managing coal market risk is dependent on coal quality, preparation plant capabilities and efficient logistics to maximize end user demand.

COAL PREPARATION PLANTS

- Construction risk can be mitigated by Fixed-cost, turn-key EPC contract, Completion and/or Performance Guarantees

- Coal throughput capacity can be sized to the mine or if access capacity could allow for coal brokering opportunities where Sponsor purchases low-quality coal at a discount and washes or blends it to create a higher priced coal earning a profit margin

- Maintenance costs and other expansion capital required for the plant must be budgeted

Increases the overall value of the Project as opposed to just having an operating mine.

CAPITAL EXPENDITURE REQUIREMENTS

- Critical to ensure that the Project has budgeted for its required capital expenditures

- The capital expenditures should be classified as required maintenance, required expansionary to support the mine plan and optional so that Lenders/Investors can review a variety of scenarios to appropriately size senior and junior capital.

Coal Mining requires significant capital and it is critical to assess needs and priorities to ensure an optimization of the project in terms of production and cash flows.

FINANCIAL FORECASTS AND PROJECTIONS

- One of the key due diligence items required to obtain Lender/Investor commitments of capital

- Variety of stress tests, downside cases, single variable cases, and upside cases are evaluated depending on the investor

- The more flexible and user friendly the model, the quicker lenders can reach a credit decision

- The Projections will be used to size the capital structure, debt tenor, set financial covenants, allow dividends to the sponsors based on performance, etc. Senior Debt Providers will spend significant time ensuring the model is a fair representation of the business plan, risks, etc.

- Variables tested include:
  - Production levels
  - Production and operating costs
  - Initial and on-going capital required
  - Market prices
  - Environmental and remediation costs

The Financial Model is one of the key due diligence items and is reviewed by Independent Engineers, Marketing Consultants, Accountants, and other Technical Consultants.

ENVIRONMENTAL, SAFETY, AND REMEDIATION REQUIREMENTS

- Coal companies have unique requirements for remediation and environmental compliance
- To execute a standalone transaction the project must comply with the Equator Principles which is a set of environmental and socio-economic standards. In the US, federal and state regulations generally meet Equator Principal compliance
- Coal companies must have a remediation plan approved by federal and state authorities, detailing schedule and cost and are generally required to post a bond and/or a Letter of Credit to ensure the remediation plan is funded and can meet approved plan (federal and state) requirements
- Safety is a critically important element and is monitored by government agencies to ensure safe practices. US Coal mining accidents though rare when compared to the rest of the world, create negative publicity, and increased compliance costs
- Permitting approvals have been greatly slowed down in recent years due to greater public scrutiny and political will. Permitting risk is very difficult for lenders to properly quantify as human behavior and the political process are extremely difficult to predict

Detailed Environmental, Remediation, Safety and Permitting Plans are key elements of Lender Due Diligence and are evaluated with the assistance of Independent Engineers and Technical and Environmental Consultants.

LENDER DUE DILIGENCE CHECKLIST

In order to allow Senior Debt Providers to properly evaluate the coal mining and preparation plant risks, they would require the following up-to-date due diligence reports prepared by an independent third party with a strong reputation in terms of technical capabilities, integrity, and experience:

1. Reserve Report detailing the quantity and quality of the reserves classified according to US Mining standards as proven, probable and resources given the mining methods to be utilized;

2. Detailed Due Diligence Report on the Mine Plan including mining techniques, projected production, operating costs, coal preparation, coal recovery assumptions, coal marketing plan, coal transport logistics, financial modeling review, market price forecasts, safety procedures, permitting requirements, environmental and reclamation review;

3. Coal Marketing Report including analyzing end users who desire the coal quality produced, coal market price forecasts with base, upside and downside cases over the life of the senior debt, which are incorporated into financial projections.

4. Detailed Environmental and Reclamation Review and Report from a coal environmental expert (more detailed than the section in point 2, above);

Insurance Review including property and casualty, workers compensation, liability, key man life insurance (if applicable) prepared by an insurance expert with experience with coal mining companies so that they can address industry standards.

There may be additional requirements based on any potential issues or risks discovered from the above due diligence reports, but generally the above reports are satisfactory. The timeframe to complete these reports depend on the quality of data, management, and prior completed due diligence reports, but a 3 to 6 month (or more) timeframe is a reasonable estimate.

THE "GATHERING STORM" OF REGULATIONS

- MSHA Rule Making
- EPA Air Rule Making
- EPA Water Rule Making

MSHA RULE MAKING

RESPIRABLE DUST

- Reduction from 2.0 milligrams of dust per cubic meter of air to 1.0MG/M3
- Continuous Monitoring
- Medical Surveillance
- Changes to Ventilation Plan Parameters and Processes
- Elimination of Super-Sections

PATTERN OF VIOLATIONS

- Non-Final Citations and Orders Considered
- Posting on MSHA Website Instead of Notice & Comment Rulemaking

EXAMINATION OF WORKING AREAS

- Locate and Record All Violations Instead of Hazardous Conditions

SAFETY AND HEALTH MANAGEMENT PROGRAMS

- Proximity Detection Systems
- Equip Continuous Miners with Detection System
- National Mining Association is Developing Program

CRYSTALLINE SILICA

- OSHA Proposal to Cut the Standard in half for Permissible Exposure Limits

ROBERT C. BYRD MINER SAFETY AND HEALTH ACT (HR 5663)

- Additional Inspection & Investigation Authorities
- Enhanced Enforcement Authority
- Penalty Enhancements; Liability of Officers, Directors, Agents
- Worker Rights & Protections
- Modernizing Health & Safety Standards
- Imposition of Pre-Judgment Interest on Challenged Citations and Orders
- Fines for "Frivolous" Challenges of Citations & Orders
- Criminal Sanctions for Advanced Notice of Inspectors

FINANCIAL RULE MAKING

- SEC
- Rule on Mine Safety Disclosure under Section 1503 of Dodd-Frank
- Wall Street Reform and Consumer Protection Act

EPA AIR RULE MAKING

Key Environmental Issues

- **New EPA CAIR Regulations -** On July 6th, the EPA proposed "The Transport Rule", which would require 31 states and the District of Columbia to reduce air pollution by meeting strict emission guidelines. The rule specifically limits emissions on SO2 and NOx that cross state lines. The reductions would take place one year after the rule is in place (2012), and by 2014, would reduce SO2 emissions by 71% from 2005 levels and NOx emissions by 52% from 2005 levels. A 60-day comment period began in August. The EPA rule has been stayed pending judicial review.

- MATS

- **Clean Water Act; Section 404 -** The U.S. Army Corps of Engineers issues "404 permits" that define surface mining and waste fill requirements. The EPA has challenged many issued permits, further slowing Central Appalachian mine development. The National Mining Association has filed a lawsuit against the Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers, requesting that the court vacate recent federal rulings on surface mining and process a backlog of permit applications.

- **Coal Ash Regulations -** The EPA is in the process of developing new regulations for the storage and disposal of coal ash. The EPA is considering two potential avenues – one that classifies ash as "special waste" and another that classifies it as "solid waste". Under the "special waste" designation, the EPA could enforce strict standards for generation, storage, transport and disposal. Landfills would have to be lined and groundwater monitored.

EPA WATER RULE MAKING

Coal and the Clean Water Act

The Clean Water Act (CWA) was enacted in 1972 to regulate the amount of pollutants that industry could discharge into "the waters of the United States" from any "Point Source Discharge". The original intent was to "generally" assign water discharge limits based on an ability to comply relative to the type of industry (Farming-Timbering-Mining-Chemical-Etc.) and the type of pollutants. As such, Farming/Timbering received requirements that primarily consisted of BMP's (Best Management Practices), such as fencing off streams to prevent contamination from livestock and hay bales/silt fence to limit the contribution of suspended solids. Mining received more stringent limits that utilized BAT (Best Available Technology) known as "Technology Based Limits and Water Quality Limits). Other industries such as Chemical/Steel/etc… utilized the same approach as mining but received more stringent limits because of their ability to comply along with the potential to discharge pollutants more toxic than associated with the Coal Industry. Since 1972, EPA has modified the Coal Industry

Coal and the Clean Water Act

discharge limits to the extent that Coal is now expected to discharge quality the same as a Chemical plant or Steel Mill despite the fact that science does not support these changes. In 1972 with subsequent refinement in 1977, Coal had limits as follows assigned based on a pH less than 6 and a pH greater than 6 as follows:

Discharges <6 pH

- Iron = 3.5-7 mg/l
- Manganese = 2-4 mg/l
- pH = 6-9

Discharges >6 pH

- Iron = 3.5-7 mg/l
- pH = 6-9

Coal and the Clean Water Act

These types of limits remained in effect until the Mid 80's when States were forced to implement TMDL and Anti-degradation programs (on the books but not yet implemented) that resulted in reducing the discharge limit concentrations for iron and manganese and adding aluminum as another discharge parameter. In West Virginia, the WVDEP categorized all streams to be of "Drinking Water" quality and started new discharge limit evaluations based on,

All Discharges

- Iron = 1.5 mg/l
- Manganese = 1 mg/l
- Aluminum = 0.75 mg/l
- pH = 6-9

Coal and the Clean Water Act

Based on subsequent lawsuits from environmental groups pertaining to the Mountain Top Mining issue, selenium has been added to the effluent list at the chronic value of 5 parts per billion instead of the acute value of 50 parts per billion which is the EPA Drinking Water limit. Also, the aluminum limits were implemented on a Total basis (EPA mandated) rather than a Dissolved basis, which conflicts with the States Dissolved criteria. The reason for a Total Aluminum limit has nothing to do from a toxicity standpoint, but rather is used because the EPA water report forms won't accept a Dissolved number. This has effectively eliminated the Suspended Solids limits of 35 mg/l since most of the solids associated with mining contains clays which contain aluminum (Non-Toxic solid form but shows up when samples are acidified for laboratory testing). With all these changes, the current Coal Mining effluent

limits are primarily as follows:

Coal and the Clean Water Act

Discharges 1977 >6 pH

- Iron = 1.5 mg/l
- Manganese = 1 mg/l
- Aluminum = 0.75 mg/l
- pH = 6-9

Discharges 1977 <6 pH

- Iron = 1.5 mg/l
- Manganese = 1 mg/l
- Aluminum = 0.75 mg/l
- pH = 6-9

2011 Limits apply to most all Discharges except some On-Bench structures.

- Iron = 0.23 mg/l
- Manganese = 0.43 mg/l
- Aluminum = 0.75 mg/l warm water—0.087 mg/l cold water (Trout)
- Selenium = 5 Parts per Billion
- pH = 6-9

Coal and the Clean Water Act

Current Discharge limits cause for the installation of multi-million dollar treatment systems which have nothing to do with improving water quality and in fact, degrade the water with respect to the aquatics. Instead, the millions being spent on these systems should be used to change the effluent limits to what they should be based on real Science. Failure to do this results in having to treat water that exceeds EPA Drinking water limits such as follows:

This Native Trout Stream fails to meet Total Aluminum Limits-**Treat This?**

New Regulatory Issues Affecting Bank Lenders

Richard Reeves, SVP
Mining & Minerals

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Dodd-Frank Act Background & Goals

On July 21, 2010, “The Dodd-Frank Wall Street Reform & Consumer Protection Act” was signed into law by President Obama

From a financial services industry perspective, the most significant parts of the reform revolve around three concepts: (i) the U.S. needed a revamped regulatory regime, (ii) financial institutions must be “de-risked,” and (iii) consumers must be protected

- The Financial Stability Oversight Council (“FSOC”)
  - Monitoring systemic risk
  - Making recommendations to regulators
- Liquidation of financial institutions
- Insurance industry regulation
- Preemption / state Attorneys General enforcement
- Increased FDIC assessments

More powerful Fed, more regulatory bodies, and higher direct regulatory cost

Source: Deutsche Bank; Regulatory reform impact assessment team

…"de-risking" the financial services industry…

- Enhanced prudential standards
  - Volcker rule
  - "Excessive" growth and complexity discouraged
  - Hedge fund and private equity fund investment restriction (3% rule)
  - Mortgage reform (risk aspects)
- Derivatives
  - Clearing
  - Increased capital requirements
  - Push out
- Incentive pay restrictions
- Retention of some securitization risk
- Generally increased compliance / transparency / reporting requirements

Fundamental change of business model for large banks with diverse and risky segments

…and protecting consumers

- The Consumer Financial Protection Bureau ("CFPB")
- Permanently increased deposit insurance limit to USD250K
- Increased investor protection (better SEC management / accountability)
- Regulation of interchange fees
- Mortgage reform (consumer protection / transparency / disclosure aspects)
- Less Federal preemption of state consumer protection laws
- More state Attorneys General enforcement against national banks
- In general, an effort to increase transparency / simplicity of financial products

Explicit protection of consumers of financial products

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What is Basel?

The Bank of International Settlements was established in 1930 and is the principal point of coordination for the world's central banks. After the global oil crisis in the 1970s, the BIS focused on establishing more consistent capital rules for banks, which resulted in the release of the Basel Capital Accords. The BIS is located in Basel, Switzerland.

Participating countries agree to adopt the principles set forth in the Accords.

Participating Countries		
Argentina	India	Saudi Arabia
Australia	Indonesia	Singapore
Belgium	Italy	South Africa
Brazil	Japan	Spain
Canada	Korea	Sweden
China	Luxembourg	Switzerland
France	Mexico	Turkey
Germany	The Netherlands	United Kingdom
Hong Kong	Russia	United States

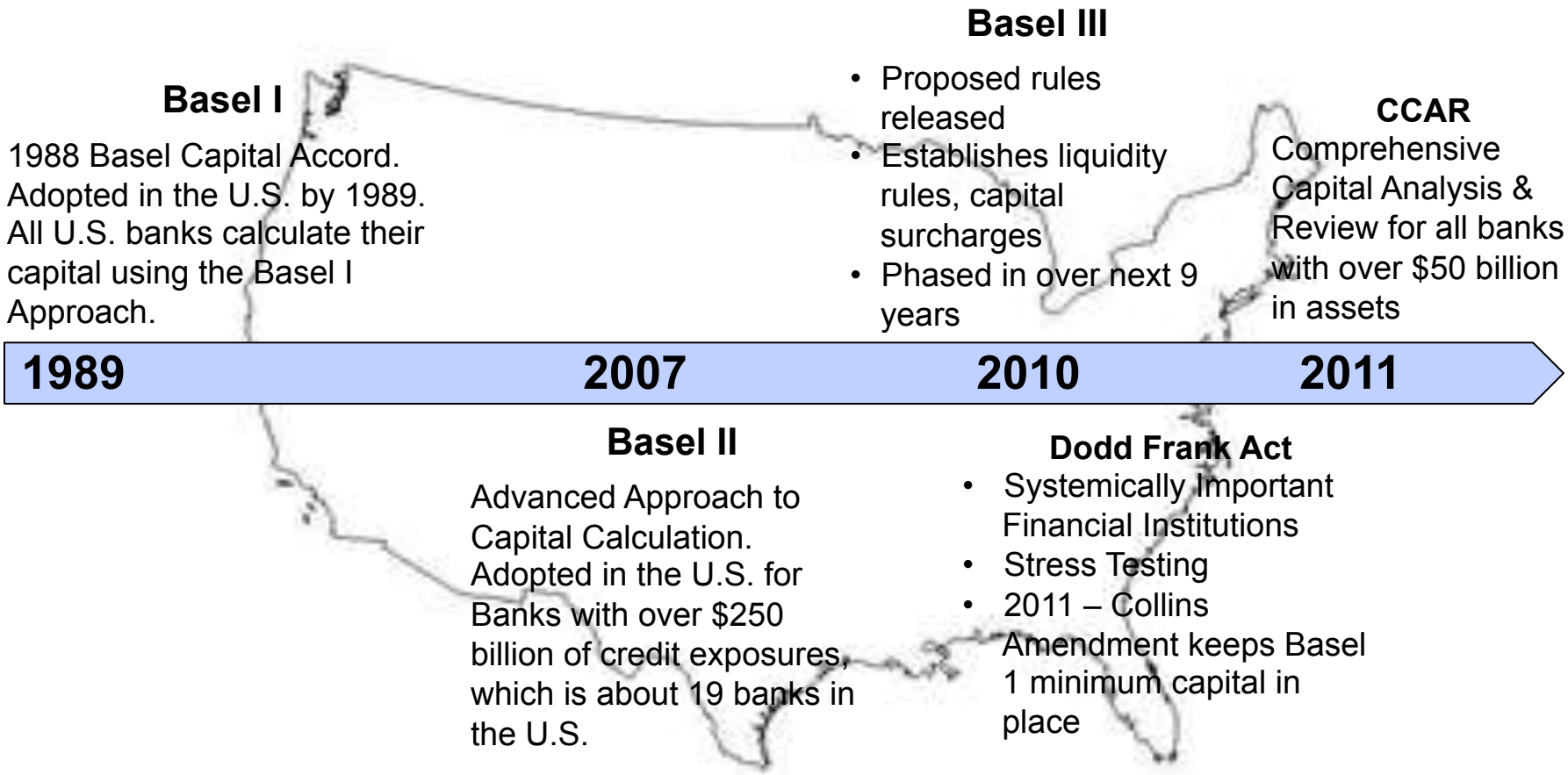
Basel I, the first of the Basel Capital Accords, sets down the agreement among the G-10 central banks to apply common minimum capital standards to their banking industries, to be achieved by end-year 1992. The standards are almost entirely addressed to credit risk, the main risk incurred by banks.

Basel II improved the measurement of credit risk and included operational risk, was released in 2004.

Basel 2.5, agreed in July 2009, enhanced the measurements of risks related to securitization and trading book exposures.

Basel III builds upon and enhances the regulatory framework adopted by Basel II and Basel 2.5, which has set higher levels of capital requirements and introduced a new global liquidity framework.

Basel in the United States



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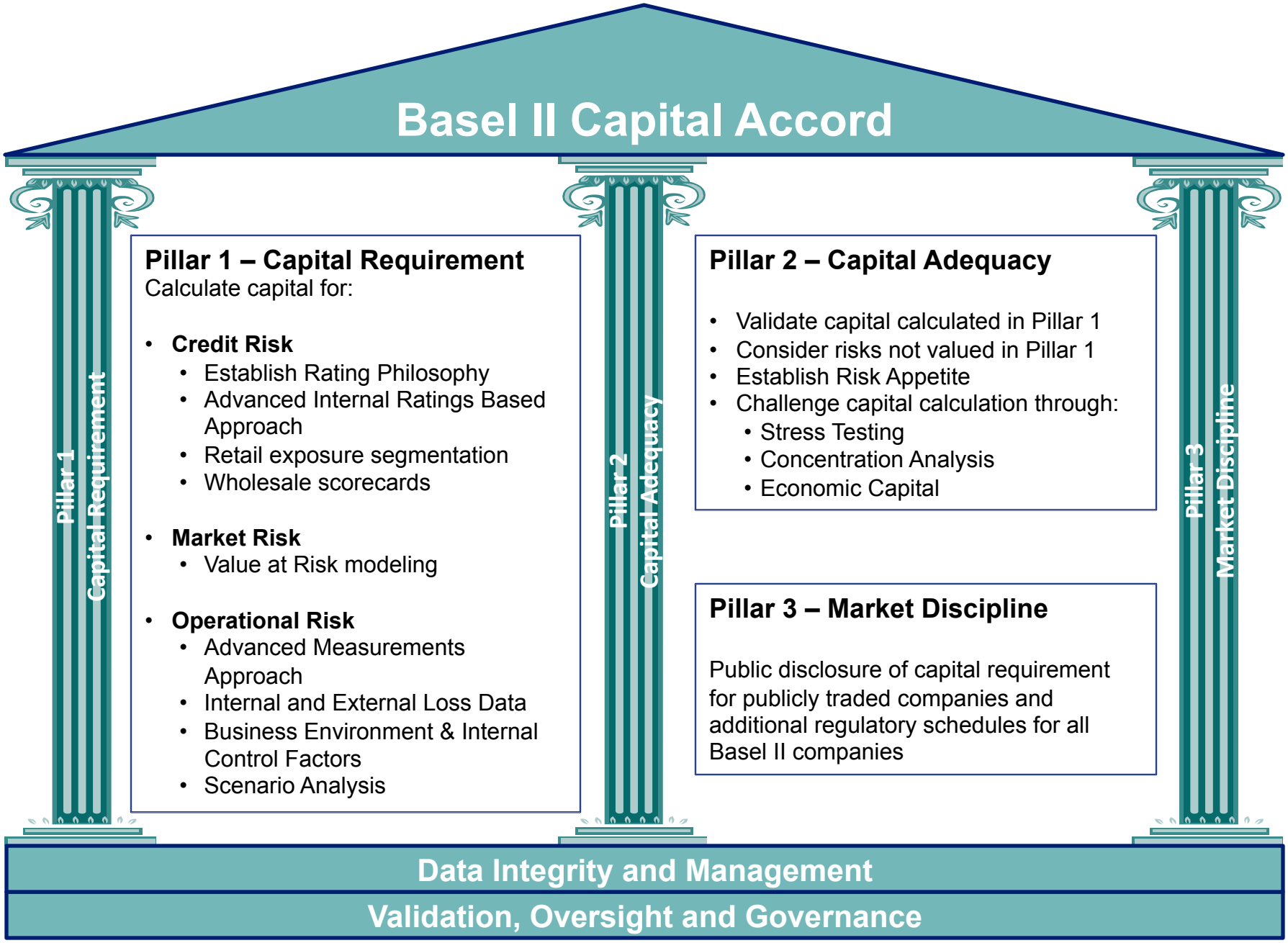

Basel II Capital Accord
Pillar 1 – Capital Requirement
Calculate capital for:
• Credit Risk
• Establish Rating Philosophy
• Advanced Internal Ratings Based Approach
• Retail exposure segmentation
• Wholesale scorecards
• Market Risk
• Value at Risk modeling
• Operational Risk
• Advanced Measurements Approach
• Internal and External Loss Data
• Business Environment & Internal Control Factors
• Scenario Analysis
Pillar 2 – Capital Adequacy
• Validate capital calculated in Pillar 1
• Consider risks not valued in Pillar 1
• Establish Risk Appetite
• Challenge capital calculation through:
• Stress Testing
• Concentration Analysis
• Economic Capital
Pillar 3 – Market Discipline
Public disclosure of capital requirement for publicly traded companies and additional regulatory schedules for all Basel II companies
Pillar 1 Capital Requirement
Pillar 2 Capital Adequacy
Pillar 3 Market Discipline
Data Integrity and Management
Validation, Oversight and Governance

Impact of Regulations will be Superseded by Economic Issues over short to intermediate term

Macro

- Sluggish Economic Growth
- Higher Macro Risk
  - Lower LIBOR
  - Results in higher pricing and tighter covenants

Industry

- Bifurcation of coal industry into producers of Base Load vs. Distinctive coals
  - Base Load: Coals such as PRB that are generally only marketed domestically and not suitable for use other than in power generation
  - Distinctive: Coal that can be sold into higher value markets such as metallurgical or PCI, or can be exported

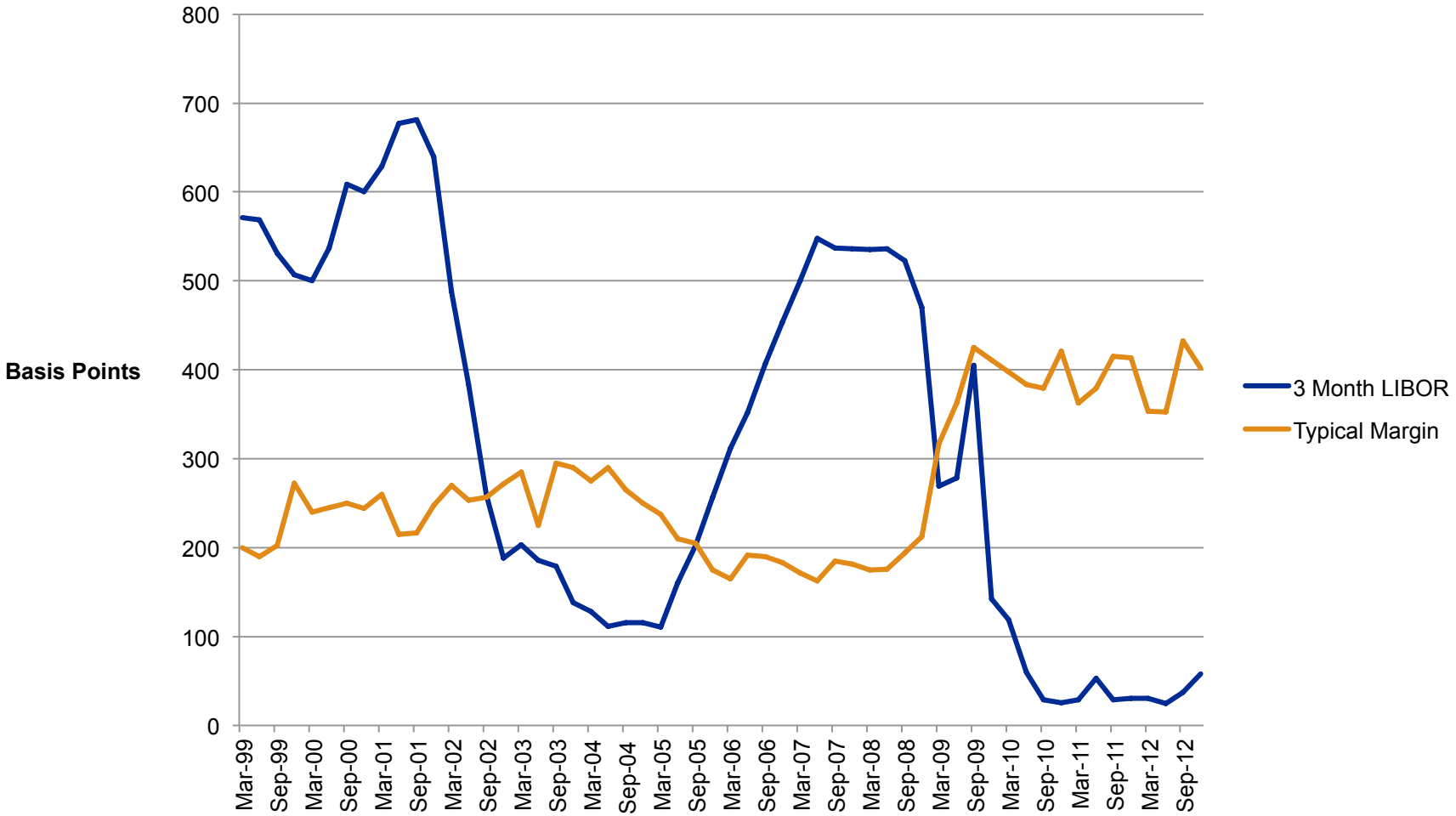
Relationship between LIBOR and Interest Margins

LIBOR and interest margins are generally inversely related in normally functioning markets

- Decreasing LIBOR: Occurs during economic weakening and higher lending risk
- Increasing LIBOR: Occurs during economic expansion and low lending risk

- Other Factors:
  - Willingness of borrowers to pay
  - Bank Costs
- Impact of higher bank regulatory costs will be to limit downward movement in LIBOR spreads in the future

LIBOR vs. Loan Margins for Non Investment Grade Loans



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MANAGING RISK

MANAGING RISK AND PROTECTING YOURSELF EFFECTIVELY

- **INNOVATION**
- **PRODUCT DIFFERENTIATION**
- **OPERATIONAL EXCELLENCE**

INNOVATION

- **CENTRAL APPALACHIA**
  PRODUCTIVE MINING SYSTEMS HI-WALL MINER FOR PRE-LAW REMINING

- **ILLINOIS BASIN**
  LARGE SCALE MULTI-LONGWALL MINES
  REVOLUTIONARY PARTNERSHIP BETWEEN CN RAILROAD AND NS

- **POWDER RIVER BASIN**
  CROSS PIT AND AROUND THE PIT CONVEYORS
  AUTONOMOUS TRUCKS AND DRILLS

PRODUCT DIFFERENTIATION

- **OPTIMIZE HIGH QUALITY METALLURGICAL COAL SALES**

- **CONTRACT FOR THERMAL SALES WITH NEW EPA FAVORED PLANTS THAT MEET UMATS AND CSPAR STANDARDS (800 MEGAWATT; SUPERCRITICAL; SCRUBBED)AVOID TWO RAILROAD HAULS**

OPERATIONAL EXCELLENCE

- **ATTENDANCE**
- **SAFETY**
- **LABOR PRODUCTIVITY**
- **COST CONTROL**

APPENDIX

- NATURAL GAS VS. PRB PRICING

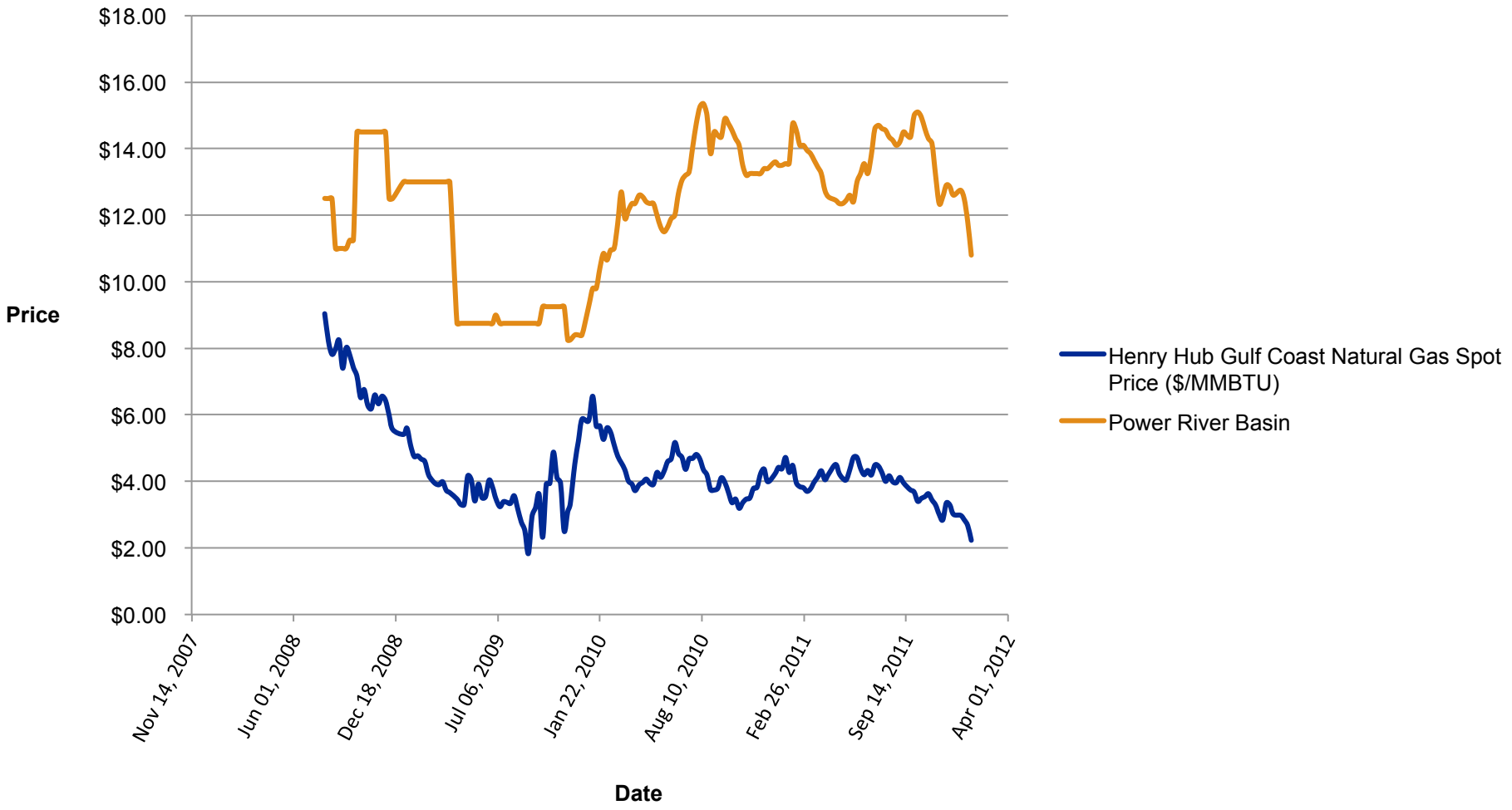
Natural Gas Market is bifurcating Coal Market

Base Load Coals such as PRB are now pricing at parity with natural gas when efficiencies of generation are taken into consideration

- PRB delivered spot price: $2.00 / MMBtu
- Gas delivered spot price: $2.70 / MMBtu
- Oil delivered spot price: $16.50 / MMBtu

As a result, Base Load coal and natural gas prices are moving in tandem

Natural Gas vs. PRB Coal Prices



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Impact

The bifurcation of the coal market requires producers to innovate both strategically and with respect to their operations in the short and intermediate term

- Differentiate themselves by identifying higher value markets for their coal; in this way becoming producers of Distinctive coal
- Pursue efficiency and safety through Operational Excellence to be the most competitive producer in their marketplace

Longer term macro and market factors that are likely to negate direct price competition between Base Load coal and natural gas include:

- Economic Recovery
  - Increased residential use
  - Increased industrial use
- Substitution of gas into non-coal fuel market, oil appears particularly vulnerable to this on a $/MMBtu basis