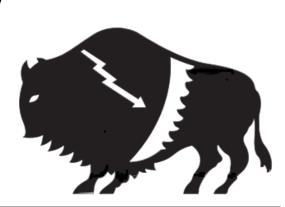


## **Cash Flow and Liquidity**



## **Cash flow and liquidity**

#### Meet your Instructor...

#### **Andrew Holmes**

- » Director, Leveraged Finance, Credit Suisse First Boston, New York and London
- » Equity capital markets and Leveraged Finance, JP Morgan, New York
- » MBA from University of Chicago
- » 5 years in asset management

## **Moody's Corporation**

Moody's

# Moody's investors service

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  - Corporate
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- Structured Analytics & Valuations
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- » Training & Certification

Session 1

## Cash Flow Analysis



## **Cash Flow Concepts: EBITDA**

# **Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA)**

- What assumptions are implicit in using EBITDA as a proxy for operating cash flow?
- What does the leverage measure Debt / EBITDA indicate?
- What is the commonly accepted industry definition of Free Cash Flow?



## Why is adjusted EBITDA always higher than EBITDA?

Adjusted EBITDA is calculated as follows (unaudited):

	Year Ended December 31,									
	2011			2010		2009		2008		2007
						(In thousands)				
Net income (loss)	\$	(115,489)	\$	(48,026)	\$	127,243	\$	142,728	\$	(102,147)
Depreciation, depletion and amortization		186,348		188,074		205,339		125,356		85,640
Sales contract accretion, net(1)		(55,020)		(121,475)		(298,572)		(249,522)		_
Asset retirement obligation										
expense		81,586		63,034		35,116		19,260		20,144
Restructuring and impairment										
charge		13,657		15,174		20,157		_		_
Interest expense and other		65,533		57,419		38,108		23,648		8,337
Interest income		(246)		(12,831)		(16,646)		(17,232)		(11,543)
Income tax provision		372		492		_		_		_
Adjusted EBITDA	\$	176,741	\$	141,861	\$	110,745	\$	44,238	\$	431

<sup>(1)</sup> Net sales contract accretion resulted from the below market coal sales and purchase contracts acquired in the Magnum acquisition that were recorded at fair value in purchase accounting. The net liability generated from applying fair value to these contracts is being accreted over the life of the contracts as the coal is shipped.



## **EBITDA** (Moody's Definition)

Interest

Gross Interest Expense per Income

**EBIT** 

Pretax Income + Interest + Non-Recurring Expenses/(Gains)

- Equity accounted entities' income may be included if integral to operations and backed by cash distributions
- 2) For Japanese GAAP reporters, equity accounted entities' income is included in reported EBIT but excluded from adjusted EBIT.
- 3) US GAAP reporters' minority interests should be excluded from adjusted EBIT.

**EBITDA** 

EBIT + Depreciation + Amortization of Intangibles

#### CONCOLIDATED CTATEMENTS OF CASI

**Cash Flows From Operating Activities** 

Amortization of debt discount

Selenium-related asset write-offs

Income from equity affiliates

Accounts receivable

Other current assets

Interest on notes receivable

Asset retirement obligations

Obligation to industry fund

Other, net

Workers' compensation obligations

Accrued postretirement benefit costs

Federal black lung collateralization

Inventories

Distributions from equity affiliates

Stock-based compensation expense

Changes in current assets and liabilities:

Accounts payable and accrued expenses

Net cash provided by operating activities

Sales contract accretion

Impairment charge

Depreciation, depletion and amortization

Amortization of deferred financing costs

Loss on early payment of note receivable

Net gain on disposal or exchange of assets

Adjustments to reconcile net income (loss) to net cash provided

Net income (loss)

by operating activities:

#### CONSOLIDATED STATEMENTS OF CASH FLOWS

PATRIOT COAL CORPORATION

Year Ended December 31,			
2010 2009	2011		
ollars in thousands)	(1)		

\$

(115,489) \$

186,348

7,356

9,543

(55,020)

13,093

5,369

5,868

(35,557)

(4,709)

3.219

13,779

(22,336)

(1,161)

22,125

52,042

8,580

(3,278)

(8,523)

(14,990)

124,737

58,871

(393)

(48,026) \$

188,074

6,412

8,710

2,823

(48,226)

(9,476)

5,095

11,657

(16,785)

(15,172)

(24,258)

(12,652)

38,719

12,343

50,944

(2,769)

10,432

36,311

(59)

(121,475)

127,243

205,339

3,700

7,864

(298,572)

12,949

(7,215)

(398)

1,000

13,852

(3,565)

(6,530)

(38,867)

(14,030)

14,988

26,248

4,470

(3,019)

(6,749)

39,611

903

## Don't forget capital expenditures...

#### PATRIOT COAL CORPORATION

#### CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,			
	2011	2010	2009	
Cash Flows From Investing Activities		(Dollars in thousands)		
Additions to property, plant, equipment and mine development	(174,713)	(122,989)	(78,263)	
Proceeds from notes receivable	115,679	33,100	11,000	
Additions to advance mining royalties	(26,030)	(21,510)	(16,997)	
Net cash paid in litigation settlement and asset acquisition	(14,787)	_	_	
Proceeds from disposal or exchange of assets	6,928	1,766	5,513	
Other	<u> </u>	(300)	1,154	
Net cash used in investing activities	(92,923)	(109,933)	(77,593)	



#### EBITDA versus cash flow – a final result



Rating Action: Moody's Lowers Patriot's Probability of Default Rating to D

Global Credit Research - 10 Jul 2012

#### Approximately \$250 million of rated debt affected

New York, July 10, 2012 -- Moody's Investors Service lowered Patriot Coal's (Patriot) Probability of Default Rating to D from Caa1 and the corporate family rating to Ca from Caa1. The downgrades were prompted by the company's July 9, 2012 announcement that it voluntarily filed for relief under Chapter 11 of the United States Bankruptcy Code. Moody's took the following rating actions and intends to withdraw all ratings:

#### Downgrades:

..lssuer: Patriot Coal Corporation

.... Probability of Default Rating, Downgraded to D from Caa1

.... Corporate Family Rating, Downgraded to Ca from Caa1

....Senior Unsecured Regular Bond/Debenture, Downgraded to C, LGD5, 71% from Caa2, LGD4, 60%



#### **Definitions – Free Cash Flow**

Revenues minus

Cost of Goods sold equals

Gross Profit minus

Sales, General & Administration equals

Earnings before Interest & Tax plus

Depreciation & Amortisation equals

**EBITDA** minus

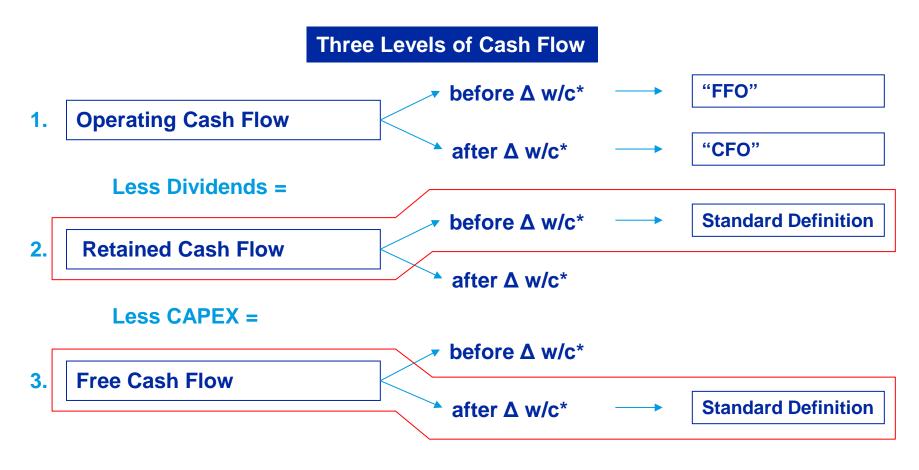
Taxes minus

CAPEX (including change in w/c) equals

Free Cash Flow to the firm (and its providers of capital)



## Moody's Cash Flow Concepts



\* Working capital and other items not directly related to ongoing operations (e.g. pension and OPEB contributions)



## **Key Moody's Cash Flow Concepts**

#### CASH FLOW STATEMENT OPERATING ACTIVITIES

#### **Net Income**

- + Depreciation & Amortization
- +/- Deferred Income Taxes
- +/- Minority Interest
- +/- Undistributed Equity Earnings
- +/- Other Non-Cash Items
- +/- Other Operating Cash Flow
- +/- Discontinued Operations
- FUNDS FROM OPERATIONS
- +/- Changes in Working Capital Items
- +/- Changes in Operating Assets & Liabilities ST
- +/- Changes in Other Oper. Assets & Liabilities LT
- CASH FLOW FROM OPERATIONS
- +/- Unusual & Non-Recurring Items Cash Flow Adjs
- CASH FLOW FROM OPER After Unusual & Non-Recur Adjs

Source: Moody's Financial Metrics, Chart of Accounts, www.moodys.com/MFM, March 2007



## **Key Moody's Cash Flow Concepts**

#### RETAINED CASH FLOW

#### Funds from Operations

- Preferred Dividends
- Common Dividends
- Minority Dividends
- RETAINED CASH FLOW

#### FREE CASH FLOW

#### Cash Flow from Operations

- CAPEX ( = gross additions to PP&E)
- Preferred Dividends
- Common Dividends
- Minority Dividends
- FREE CASH FLOW

Source: Moody's Financial Metrics, www.moodys.com/MFM, March 2007



## A market overview of Chesapeake Energy





## **Treading water for 5 years**





## But what's really driving the price?





#### **Case Exercise**



#### **Cash Flow Concepts**



Calculate EBITDA, CFO, FFO, RCF, and FCF

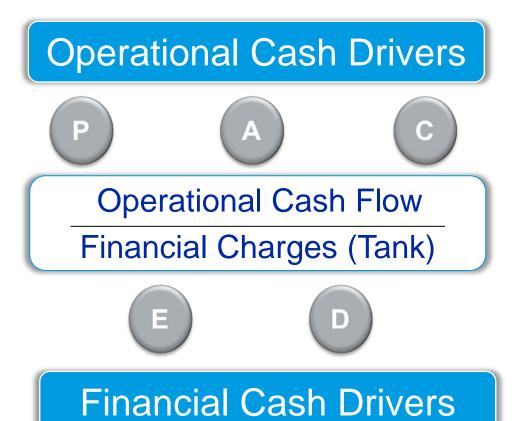


# Session 2

# Liquidity Analysis and Refinancing Risk



## **Debt Service Capacity**



**TOOLS E12 and E13** 

## **Overview of Debt Service Capacity**

Debt service capacity is an assessment of whether the sustainability and stability of cash flows are sufficient to service a client's financing charges.

It reflects the Company's ability to generate normal / sustainable cash flow to meet:

- cost of debt
- scheduled repayments (short term debt assumed refinanceable)
- Cost of Equity ?



A DSCR of less than 1 means negative cash flow and liquidity need



## Financial Charges ("Tank")

#### **Gross Interest**

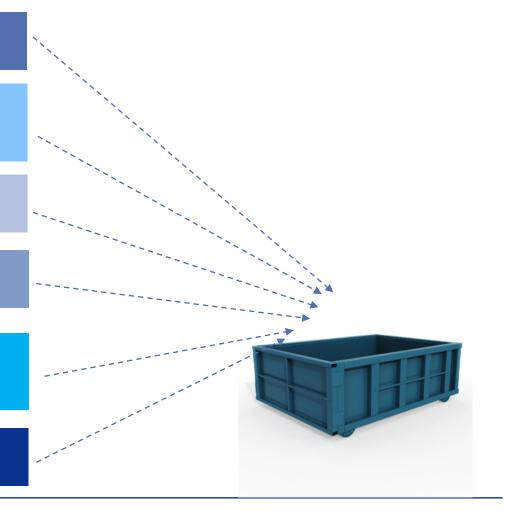
Capitalized interest (tangible fixed assets note)

Bank fees & charges (?)

Operating lease payment (P&L)

CPLTD & financial lease OBS (previous year B/S)

Dividends/drawings



## **Debt Service Capacity**

- What is the size of the "Tank" (financial charges) this year and next year?
- » Is the "Tank" impacted by debt maturity profile or dividend payments?
- » How much does the "normal" operating cash flow cover the "Tank"?
- What level of operating cash flow should we use? Before or after ACC (WC) and Capex?
- » What is the quality/sustainability of the operating cash flow? Check volatility caused by business risk and asset conversion cycle.



## **Debt Service and Liquidity Ratios**

#### **Cash Flow Interest Coverage**

» Measure of cash flow / Interest, Measure of cash flow / Interest and leases.

#### **Debt Service Capacity.**

» Measure of cash flow / Financial charges.

#### **Liquidity Internal**

» Unrestricted cash on the Balance Sheet

#### **Liquidity External**

» Analysis of undrawn (committed?) bank lines / assessment of access to equity



## **Moody's Liquidity Assessments**

- » Investment grade companies
- » Commercial paper ratings (short term)
- » Specific measures versus cash usage over the next 12 months
  - Cash and marketable securities
  - Cash flow
  - Committed and undrawn facilities
    - » Covenant levels
  - Commercial paper programs
    - » Backstop facilities
  - Other facilities (e.g. uncommitted lines)



## **Moody's SGL Ratings**

#### SGL-1

At all time over the next four quarters, SGL-1 issuers can comfortably cover all cash requirements from internal sources. including seasonal working capital needs, maintenance capital spending, and extraordinary capital spending (with the exception of retailers and some distributors; see "vendor financing below").\*

#### SGL-2

For a projected 12 month period, but not necessarily at all times (not all interim quarterly periods), SGL-2 issuers can likely cover all cash requirements from internal sources except for extraordinary capital spending and seasonal working capital needs.

#### SGL-3

Over the next four quarters, it is unclear if SGL-3 issuers can cover all basic cash requirements for internal sources. Basic cash requirements would include maintenance capital spending, as well as other items.

#### SGL-4

Issuers rated SGL-4 are not likely to be able to meet basic cash requirements through internal sources, and are likely to need external financing to remain liquid.

<sup>\*</sup> Vendor financing Approach: For retailers and some distributors with large seasonal working capital needs we have made "operational" assumptions of confidence and assume that "normal" vendor financing terms will be available.



## Are markets like teenagers?

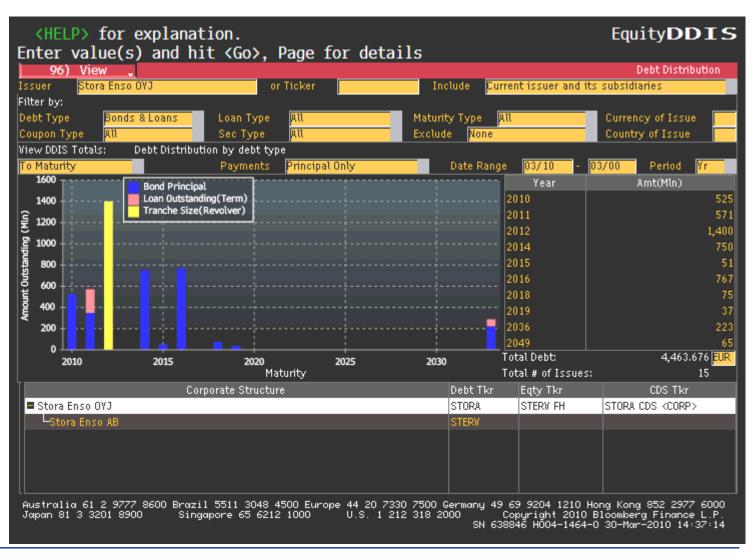




## Seeing the issue

#### Key issues

- » Refinancing
- » M&A
- » Market Sentiment



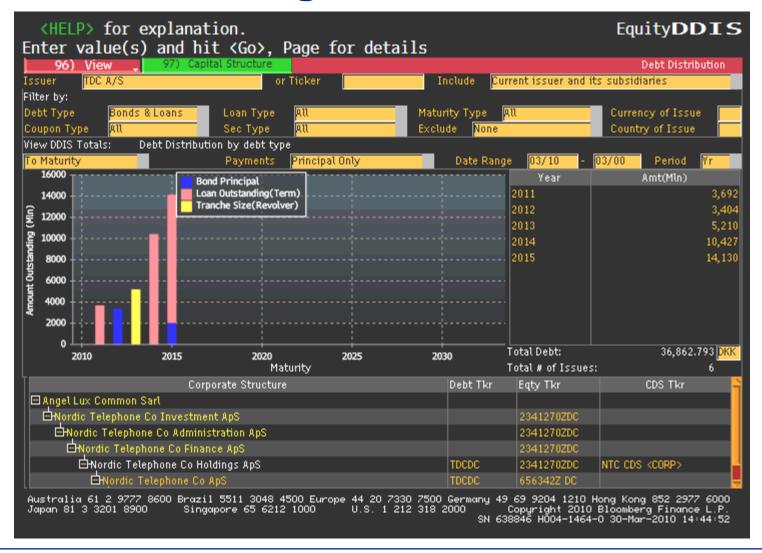


## **Better - maybe**





## Part of the leveraged 'tsunami'?





#### **Ericsson learned Its lesson from 2001/2**



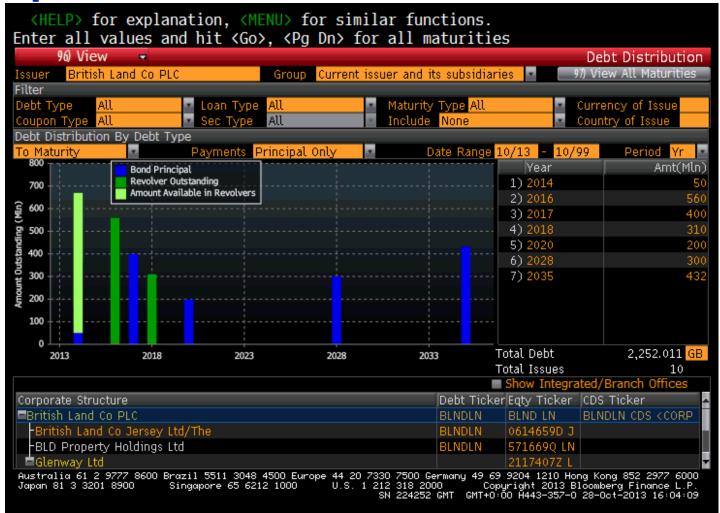


## AT&T's structure is like a utility





# **British Land – financing property companies**





## How to spot the top of the market?

#### The tech LBOs of 2006

- » Freescale Semiconductor was LBO'd in Q4 2006
  - » Ex-Motorola business
  - » Raised almost \$6bn in high yield bonds
  - » Including 'toggle' bonds
- » Philips Semiconductors (now NXP) was taken private by a consortium headed by KKR in early 2006
  - One of the largest European LBOs ever

#### **Global Semiconductor Sales**



Source: SIA



## Risky LBO, 'low risk' capital structure

#### **NXP's Capital Structure**

<u>Tranches</u>	Maturity/call	Rating
\$1.5bn Senior secured FRN @ L+275	7 non-call life	Ba2/BB+
€1.0bn Senior secured FRN @ L+275	7 non-call life	Ba2/BB+
\$1.0bn Senior secured bonds @ 7.875%	8 non-call 4	Ba2/BB+
\$1.25bn Senior* unsecured bonds @ 9.5%	9 non-call 5	B2/B
€525mm Senior* unsec. bonds @ 8.625%	9 non-call 5	B2/B

Plus a €500mm unfunded, super senior, covenant light (bond indenture) revolver

\* Subordinated really <u>Leverage</u>

Gross: 4.3x

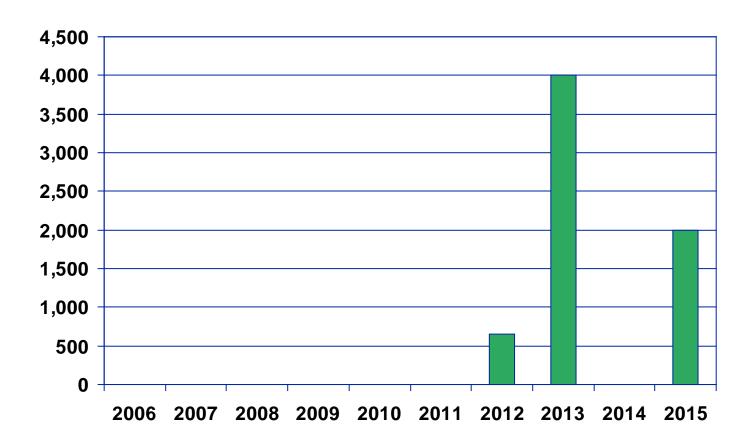
Net: 3.5X

Equity: 44% (24% from sponsors)



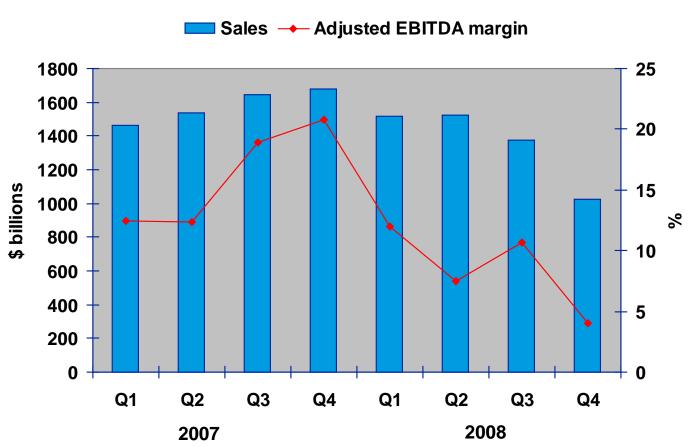
## NXP's capital structure by maturity

#### **NXP** debt maturities (\$bn)





# Things did not however go according to plan... NXP Operating Performance

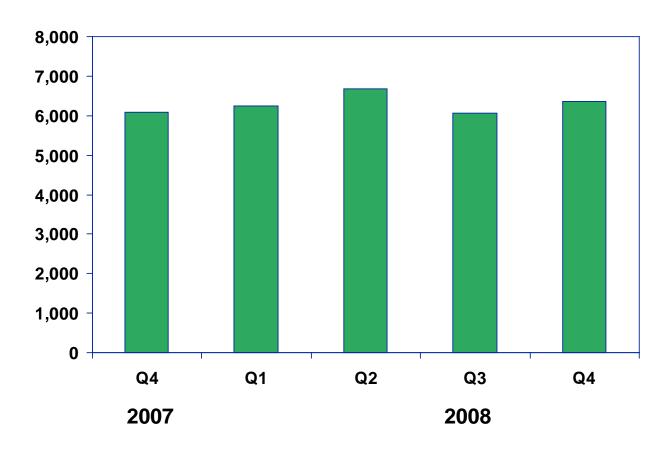


Source: company filings



## ...debt repayment was non-existent...

#### NXP total debt (\$mm)





#### ...and the outlook was bleak

- » Economic conditions deteriorated significantly in Q3 2008
  - » Automotive and consumer sectors hit first
  - » Downturn broadened in Q4
  - » Capacity utilization fell to 56%
- » Outlook sufficiently unclear that NXP withdrew 2009 guidance
  - » Q1 2009 sales expected to be down 30-40% based on order book and customer sentiment
- » Company accelerating its restructuring program
  - » Savings of \$550 million expected by mid-2010
  - » Cash cost of \$700 million
- » What, realistically, are the lenders' options?
  - » 2008 adjusted EBITDA of \$485m



# The market's view was decidedly pessimistic



About 10¢ for the sub. bonds – roughly the next coupon...

» Capitulation – the market is now expecting a restructuring



## A happy ending – but only for some







#### **Thank You!**

For more information, please contact us

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