Effective Credit Risk Pricing: Application for Treasurers

Ernest Breitschwerdt, CFA
Application Specialist

Silvina Aldeco-Martinez
Managing Director, Product & Market Development

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Topics

- Introduction
- Splitting credit risk from pricing
- Exploring top three uses of credit pricing
- Credit scores and pricing: Case study
- Industry trend observations: What constitutes a good benchmark?

Introduction

Europe's bad debts hit €360bn

Late payments threat to competitiveness

Smaller companies under heavy strain

By Sarah Gordon in London

The debt written off by Europe's companies due to late payment or non-payment of bills has swelled to €360bn despite the pick-up in economic activity in the region.

"The late payment consequences for businesses pose a real threat to Europe's competitiveness and social wellbeing," Lars Wollung, president of credit management group Intrum Justitia, said. "Hardest hit by the problem . . . are small and medium enterprises."

Justitia surveyed more than 10,000 business managers in 33 European countries, including Russia, for the annual European Payment Index.

Bad debts – bills or invoices that companies have written off due to late or non-payment – grew from 3 per cent of annual revenues in 2013, or €350bn, to 3.1 per cent this year, or €360bn.

Nearly three-quarters of companies taking part in the research reported no improvement on the issue in the past three months despite the economic pick-up, and 46 per cent believed late and non-payment risks were rising.

Graeme Fisher, head of policy at the UK's Federation of Small Businesses, said that although the public sector had upped the speed with which it paid suppliers, the private sector still faced a serious problem.

He said: "Even when the public sector pays promptly, the money doesn't sloosh down the system promptly because of the culture of late payment."

Of the groups taking part in the research, 40 per cent said the severity of the problem was preventing them hiring staff. Unemployment in the eurozone was nearly 12 per cent of the labour force in March, according to Eurostat. Suppliers are often unwilling to go public about late payment problems for fear of jeopardising relationships with their most important customers.

"Late payments can be a massive problem, mainly for cash flow reasons," one small business owner, based in Gloucester, England, who spoke to the FT on condition of anonymity, said.

"If [our] main contractors start holding back payments, we normally have quite a lot of capital tied up in projects. The main way for me to deal with that is not to pay myself for a month or two."

A 2011 EU directive sets limits on how long public and private sector companies can keep their suppliers waiting – 30 and 60 days respectively.

The directive has been adopted by the UK, but that does not mean large groups stick to its provisions. Marks and Spencer, for example, extended its window of payment from 60 to 75 days.

"Companies are deliberately not sticking to the provisions of the EU directive as a way of managing their cash flow," Mr Fisher said. "It's a way of borrowing off smaller companies."

Late payers, Page 17

Source: Financial Times, 12th May 2014.

Introduction

Suppliers lend £327bn to businesses in form of late payments

By Norma Cohen Author alerts

The sums lent to UK businesses by suppliers in the form of late payments are the biggest source of credit in the economy, a study shows.

At about £327bn, trade credit between non-financial companies is 20 per cent bigger than outstanding bank credit, according to Charting the Trade Credit Gap, a report by Professor Nick Wilson of the Credit Management Research Centre at Leeds University and Taulia, the credit research group.

"We believe this is a serious threat to the UK economy," said Jon Keating, European managing director at Taulia. "Trade credit is being used as a blunt instrument by many companies, with outdated practices poorly adapted to today's new economic environment."

Prof Wilson said although companies often provide goods and services to each other, allowing for a lag between delivery and payment, there are few tools available, particularly to small businesses, when counterparties fail to live up to terms. His study found that the delays between delivery of goods and receipt of payments were widening, despite the economic recovery.

At the end of 2012, companies in aggregate owed each other £75bn more than they were extending to their own customers in the hope of gaining more business.

More

ON THIS STORY

- BoE urges revival of business register
- Cable acts to shame business late-payers
- UK economy headlines

ON THIS TOPIC

- Challenger banks in current accounts push
- Premium Bonds limit rises to £40,000
- Lombard Banks will have to make canny choices
- UK in race to issue Islamic bond

IN UK BUSINESS

- Business welcomes focus on

Source: Financial Times, 1st June 2014.

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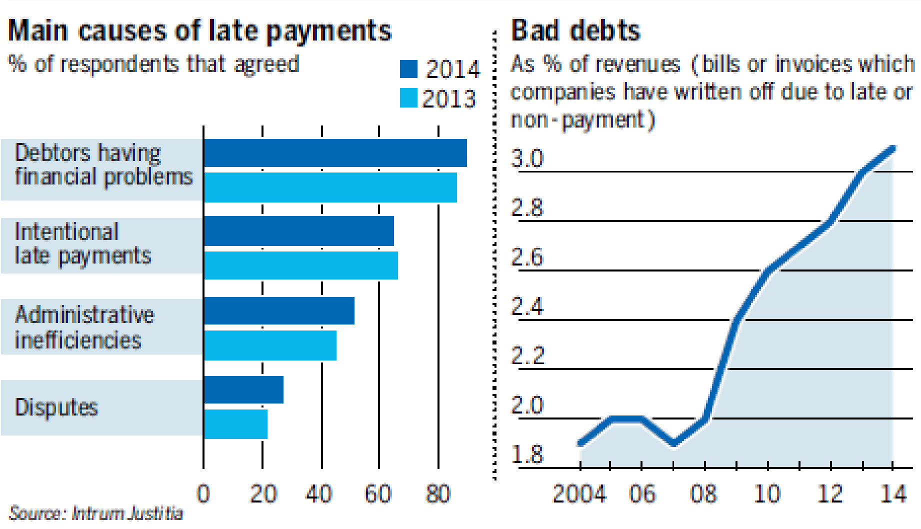
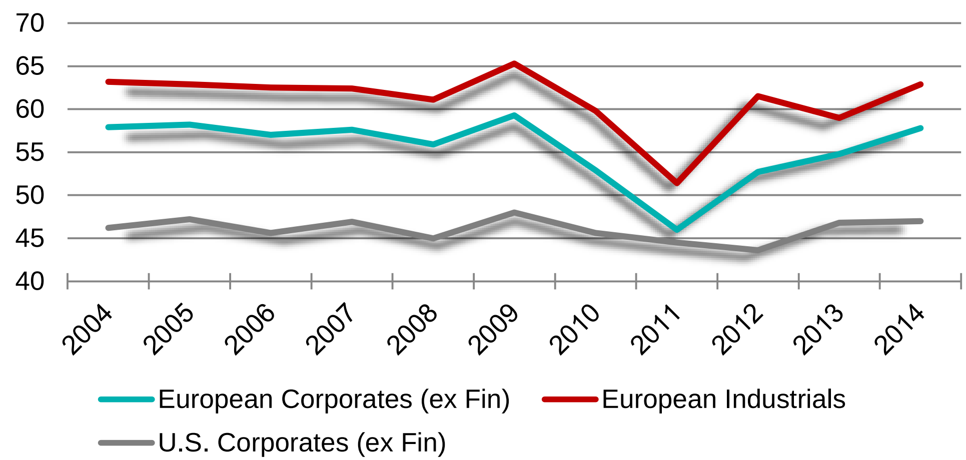


Source: Financial Times, 12th May 2014.

Median Average DSO

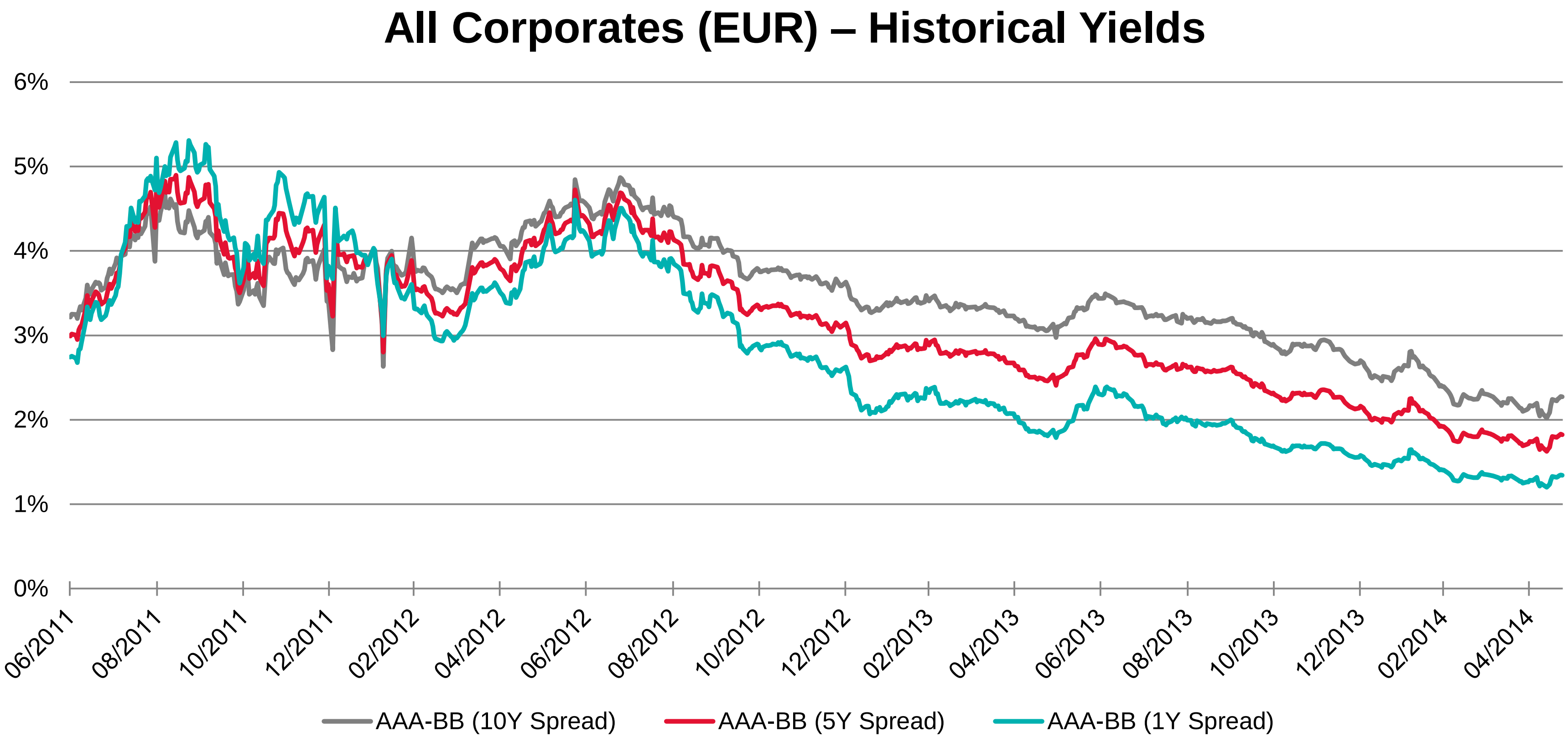


Source: S&P Capital IQ. As of 23rd May 2014.

S&P CAPITAL IQ
McGRAW HILL FINANCIAL

Introduction

- Even though times are getting tougher, spreads of high yield corporates in comparison to AAA corporates have tightened across all maturities:



Source: S&P Capital IQ – Corporate Yield Curves. As of 23rd May 2014.

Splitting Credit Risk from Pricing

Definition:

Credit risk management is considered to be the correcting element for the general profit-oriented credit management within a corporate.

Three options…

- ***On-board Credit Risk***
- ***Outsource Credit Risk***
- ***Reject Credit Risk***

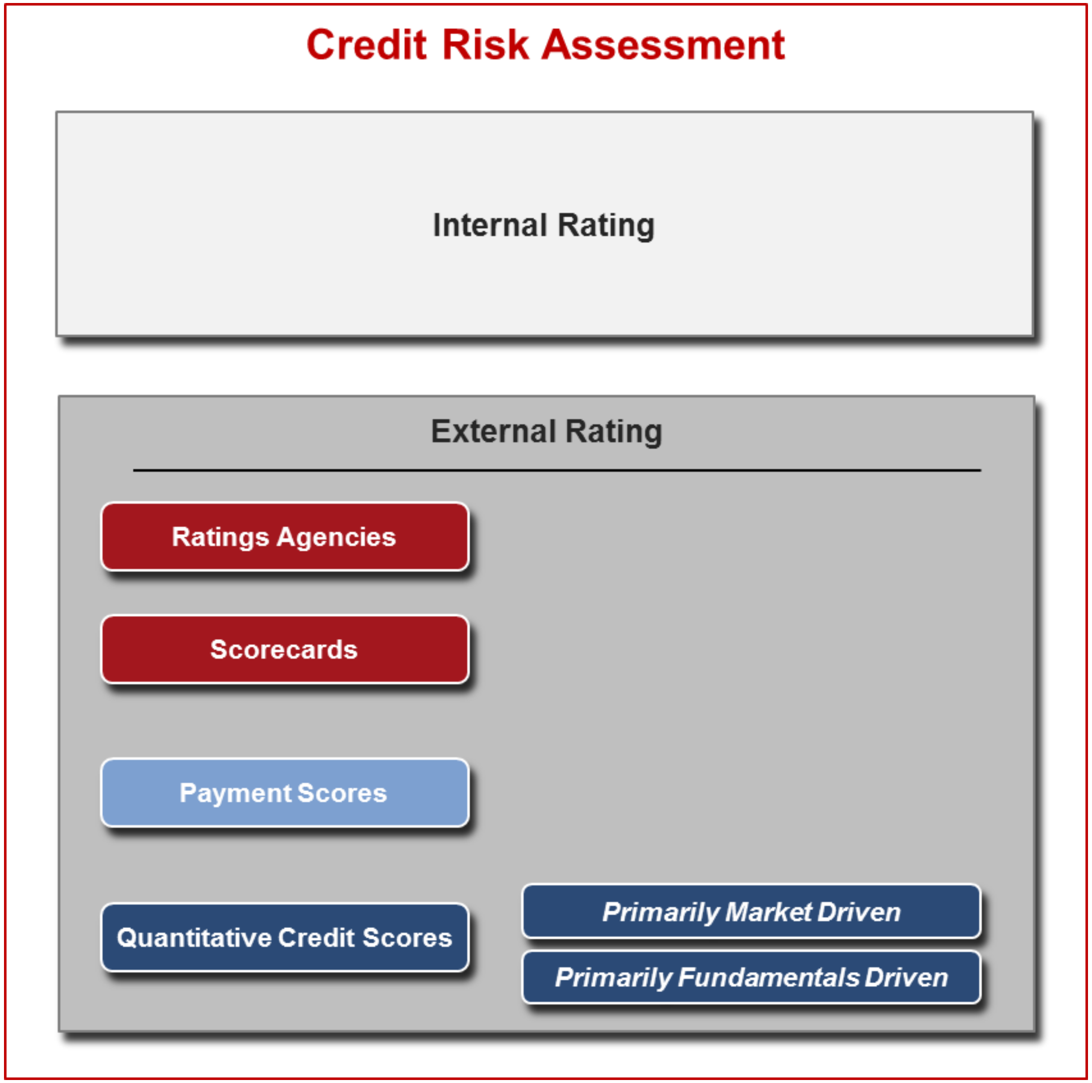
e.g.

- Am I capturing the bad debt risk? Or are my commercial terms high vs. the market?
- Is the pricing of my insurance policy overstating the risk I am outsourcing?

… on three typical use cases

- I ***Transfer pricing of loans, cash pools & guarantee fees***
- II ***Customer credit management***
- III ***Optimising debt funding***

Splitting Credit Risk from Pricing



For illustrative purposes only.

Splitting Credit Risk from Pricing

Credit Risk Assessment

Internal Rating

External Rating

- Ratings Agencies
- Scorecards
- Payment Scores
- Quantitative Credit Scores
  - Primarily Market Driven
  - Primarily Fundamentals Driven

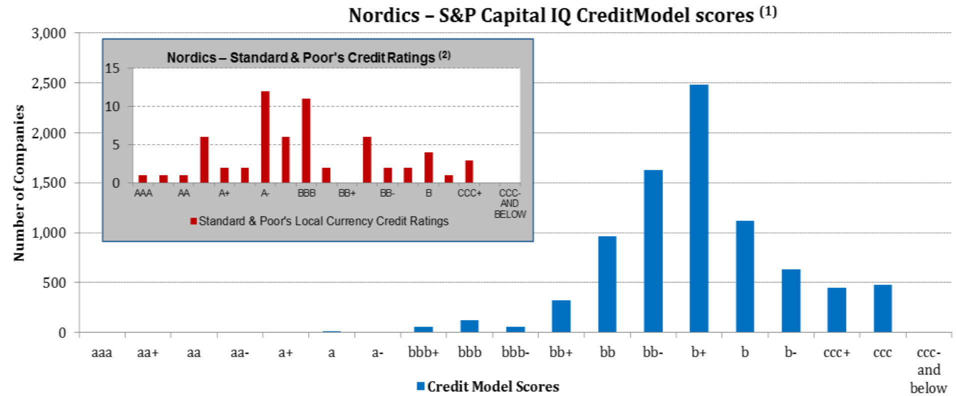
Credit Risk Pricing

- Corporate Yield Curves
- Loan Benchmarks
- Risk Free Yield + x % Markup Approach
- Comparable Securities
- Bank Quotes

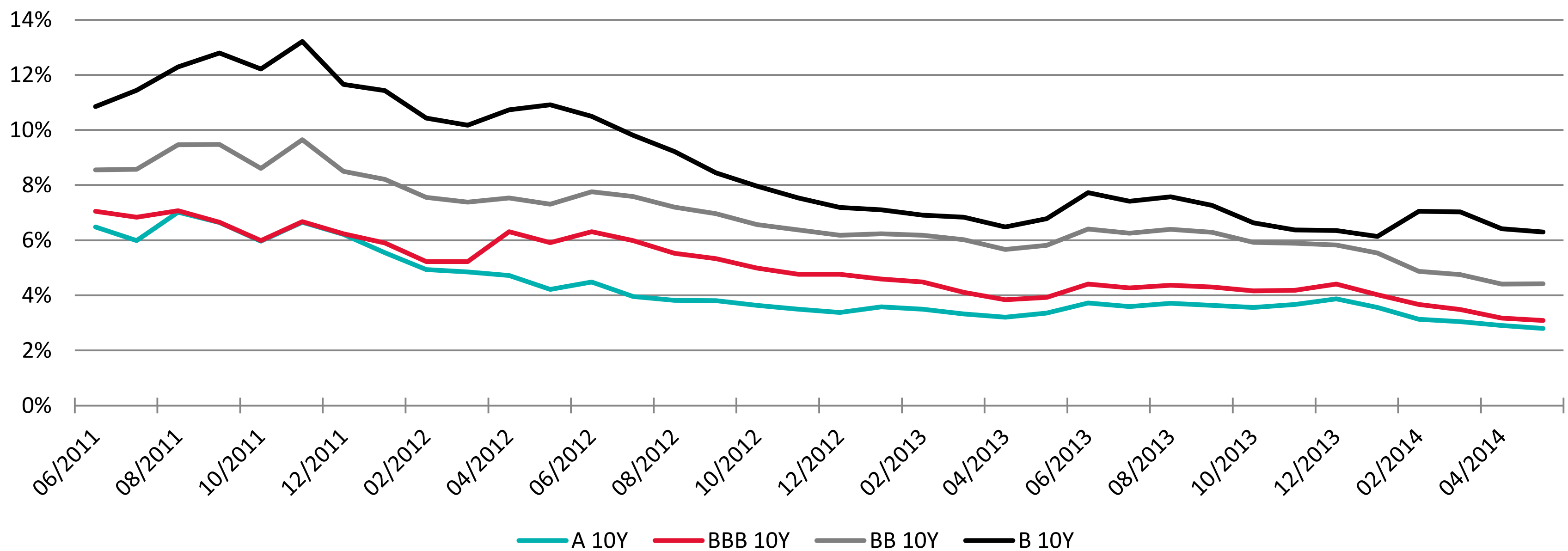
For illustrative purposes only.

Splitting Credit Risk from Pricing

The interest rate differential illustrates the importance of accurately pricing credit risk to maintain a competitive position.



All Corporates (EUR) – Historical Yields



Source: Top chart: S&P Capital IQ, Credit Analytics and RatingsDirect. As of 2nd May 2014. Bottom chart: S&P Capital IQ – Corporate Yield Curves. As of 23rd May 2014. For illustrative purposes only.

Exploring The Top Three Uses of Credit Pricing

I Transfer pricing of loans, cash pools & guarantee fees

- More than 40 countries have adjusted their transfer pricing regulation recently
- Regulations generally dictate that your interest rate should equal the rate charged in an independent transaction with unrelated parties under similar circumstances

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Stylised Process

Determine the credit risk of the borrower
(standalone credit risk assessment)

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(*Comparable Uncontrolled Price , [...]*)

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(Comparable Uncontrolled Price , [...])

- Most Transfer Pricing disputes are due to disagreement in determining arm's length prices by:
  - Using interest rates / guarantee fees without compelling evidence
  - Basing interest rates / guarantee fees on informal analysis
  - Using stale interest rates

Exploring The Top Three Uses of Credit Pricing

II Customer Credit Management

– Trade credit is more than *financing*
  - Means of price discrimination
  - Marketing instrument
  - Screening mechanism to gauge buyer default risk
  - Assuring buyers of product quality

Exploring The Top Three Uses of Credit Pricing

II Customer Credit Management

- Trade credit is more than *financing*
- Typically no co-movement with market interest rates
- Empirically, firms that are more creditworthy and have some buyer market power receive
  - larger early payment discounts*
  - longer maturities**

* Gianetti, Burkart, Ellingson, 2011, What You Sell Is What You Lend? Explaining Trade Credit Contracts, *Review of Financial Studies 24,* 1261 – 1298
** Klapper, Laeven, Rajan, 2010, Trade Credit Contracts, *The World Bank Policy Research Working Paper 5328*

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- With longer term contracts, the Capital Goods industry starts to explicitly incorporate credit risk pricing in T&C (beyond captive finance subsidiaries)

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Adjust the risk for specific commercial terms
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→

Determine interest rates based on market sources

Exploring The Top Three Uses of Credit Pricing

III Optimising Debt Funding

- Three primary factors
  - Debt maturity
  - Movements in interest rates
  - Changes in the company's credit quality

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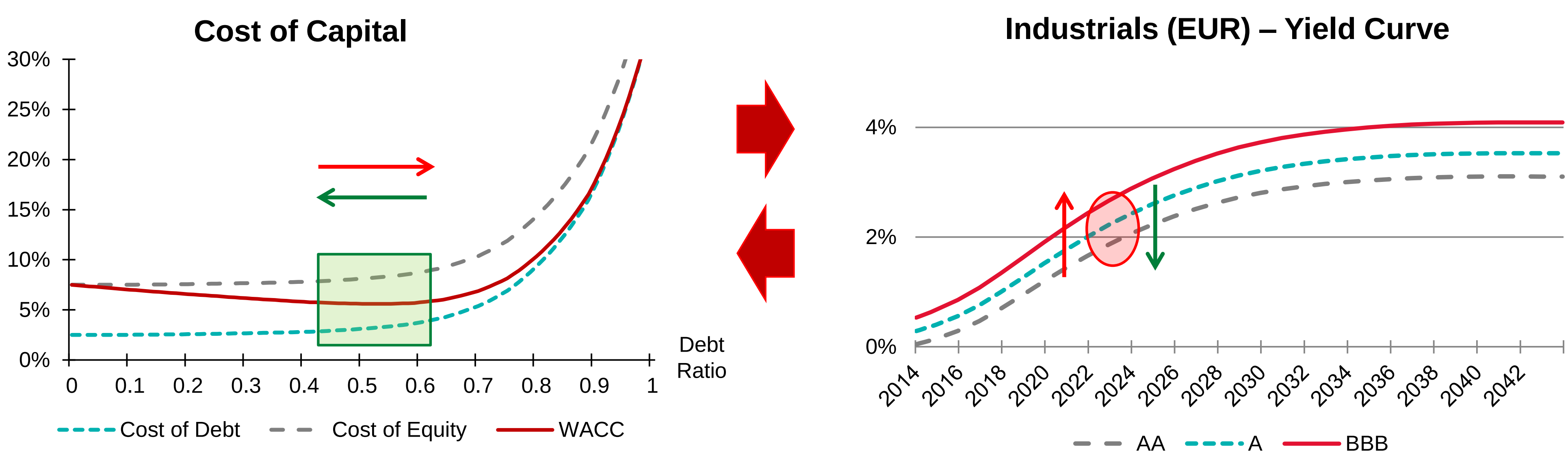

Source: Own chart. For illustrative purposes only.

Source: S&P Capital IQ – Corporate Yield Curves. As of 23rd May 2014.

Exploring The Top Three Uses of Credit Pricing

III Optimising Debt Funding

- Three primary factors
  - Debt maturity
  - Movements in interest rates
  - Changes in the company's credit quality

Stylised Process

Determine the credit risk under different scenarios → **Adjust the risk for specific debt characteristics** *(e.g. maturity, convertibility, options, collateral, prepayment rights)* → **Determine cost of debt based on market sources**

Credit Scores & Pricing: Case Study

Setting the scene…

- Global operating software company which designs, develops, and sells Enterprise Resource Planning (ERP) software solutions for the construction industry worldwide
- Full software package with annual subscription fees of up to 1,5 Mio. EUR

- ***Task:*** *Create a differentiated pricing schedule for its Top 10 customers.*

Credit Scores & Pricing: Case Study

Construction & Engineering	Country	Total Revenue [LTM] (MM €)
VINCI S.A.	France	40.942
Bouygues SA	France	33.631
Hochtief AG	Germany	25.552
Koninklijke Volker Wessels Stevin NV*	Netherlands	4.506
Royal Imtech N.V.	Netherlands	4.881
Fluor Corporation	USA	18.543
Jacobs Engineering Group Inc.	USA	9.068
URS Corporation	USA	7.826
CH2M HILL Companies, Ltd.*	USA	4.144
Granite Construction Incorporated	USA	1.646

**private company, Data as of May, 23rd 2014*

Source: S&P Capital IQ. As of 23rd May 2014. For illustrative purposes only.

Credit Scores & Pricing: Case Study

Construction & Engineering	Country	Total Revenue [LTM] (MM €)	S&P Credit Rating
VINCI S.A.	France	40.942	A-
Bouygues SA	France	33.631	BBB+
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Hochtief AG	Germany	25.552	-	bbb-	a
Koninklijke Volker Wessels Stevin NV*	Netherlands	4.506	-	bb	--
Royal Imtech N.V.	Netherlands	4.881	-	b+	b
Fluor Corporation	USA	18.543	A-	a	aa-
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VINCI S.A.	France	40.942	A-	bbb+	aa+	0,29%	0,31%	0,40%
Bouygues SA	France	33.631	BBB+	bbb+	bbb+	0,53%	0,56%	0,67%
Hochtief AG	Germany	25.552	-	bbb-	a	0,53%	0,56%	0,67%
Koninklijke Volker Wessels Stevin NV*	Netherlands	4.506	-	bb	--	1,92%	1,97%	2,21%
Royal Imtech N.V.	Netherlands	4.881	-	b+	b	4,94%	4,97%	REJECT
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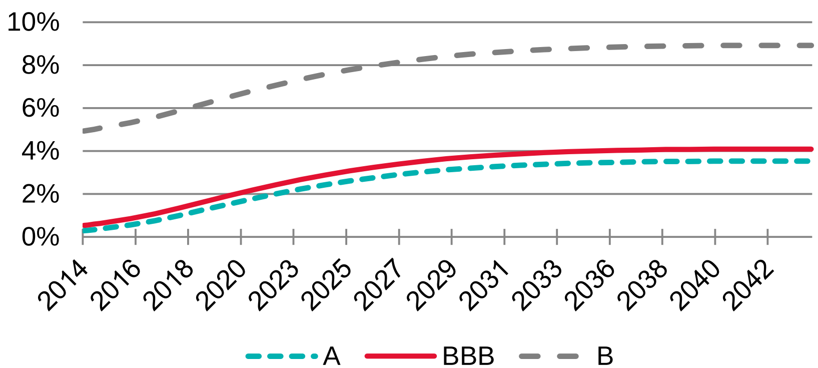
Industrials (EUR) – Yield Curve



Source: Top Diagram: S&P Capital IQ. As of 23rd May 2014. Bottom Chart: S&P Capital IQ – Corporate Yield Curves. For illustrative purposes only.

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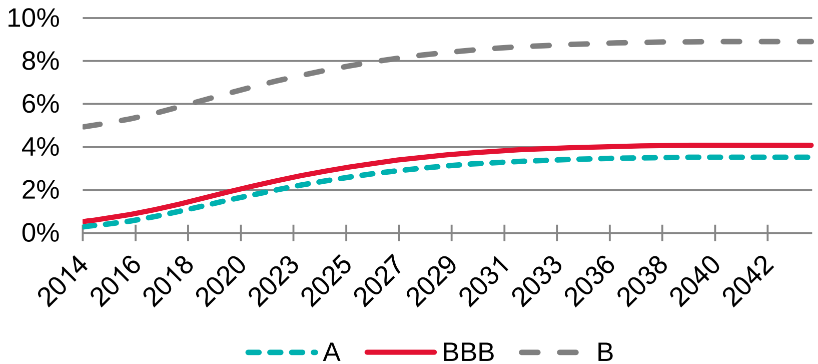
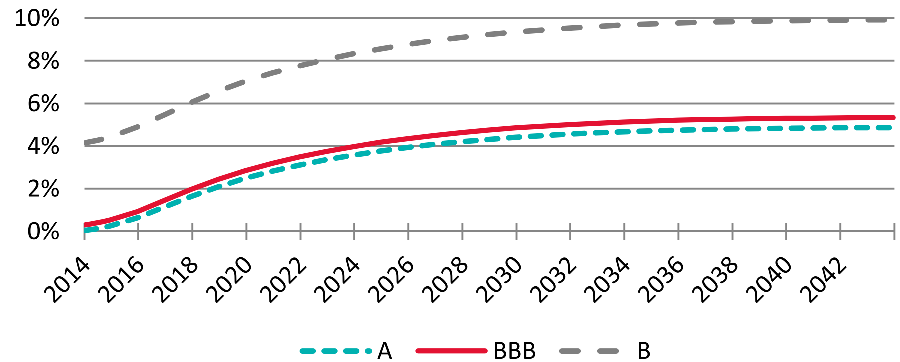


Industrials (USD) – Yield Curve



Source: Top Diagram: S&P Capital IQ. As of 23rd May 2014. Bottom Charts: S&P Capital IQ – Corporate Yield Curves. As of 23rd May 2014. For illustrative purposes only.

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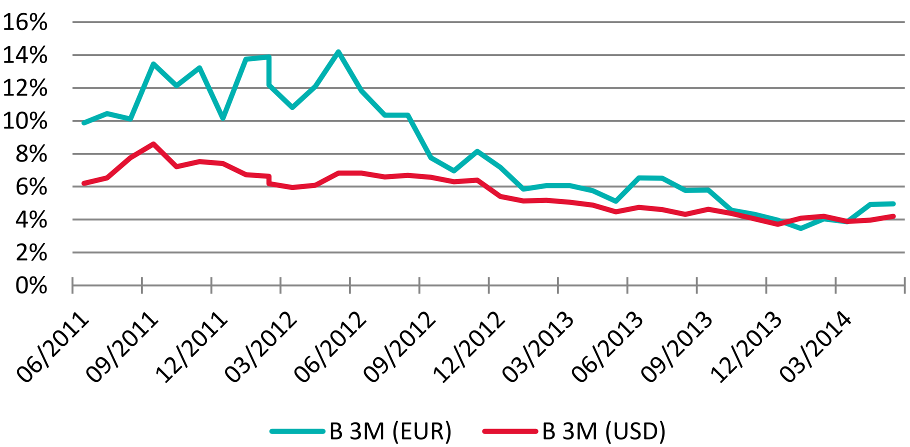
Industrials – Historical Yield Comparison



Source: S&P Capital IQ – Corporate Yield Curves. As of 23rd May 2014.

Industry Trend Observations:

What Constitutes a Good Benchmark?

- **No-Arbitrage Condition**

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- **Coverage**
  - True executable prices
  - Daily
  - Different risk characteristics (AAA – CCC)
  - Across various maturities (1M – 30Y)
  - Illiquid segments

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  - Across various maturities (1M – 30Y)
  - Illiquid segments
- **Transparency**
  - Provide auditable list of input data points

Contact Us

Ernest Breitschwerdt, CFA
Application Specialist, EMEA
ernest.breitschwerdt@spcapitaliq.com

Silvina Aldeco-Martinez
Managing Director, Product and Market Development, EMEA
s.aldeco-martinez@spcapitaliq.com

For more information about S&P Capital IQ,
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or e-mail emea-marketing@spcapitaliq.com.

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