

Creditor Relations Tagung

Tobias Mock, S&P Global Ratings

Rating 4.0: Welche Rolle spielt die Digitalisierung im Ratingprozess?

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Agenda

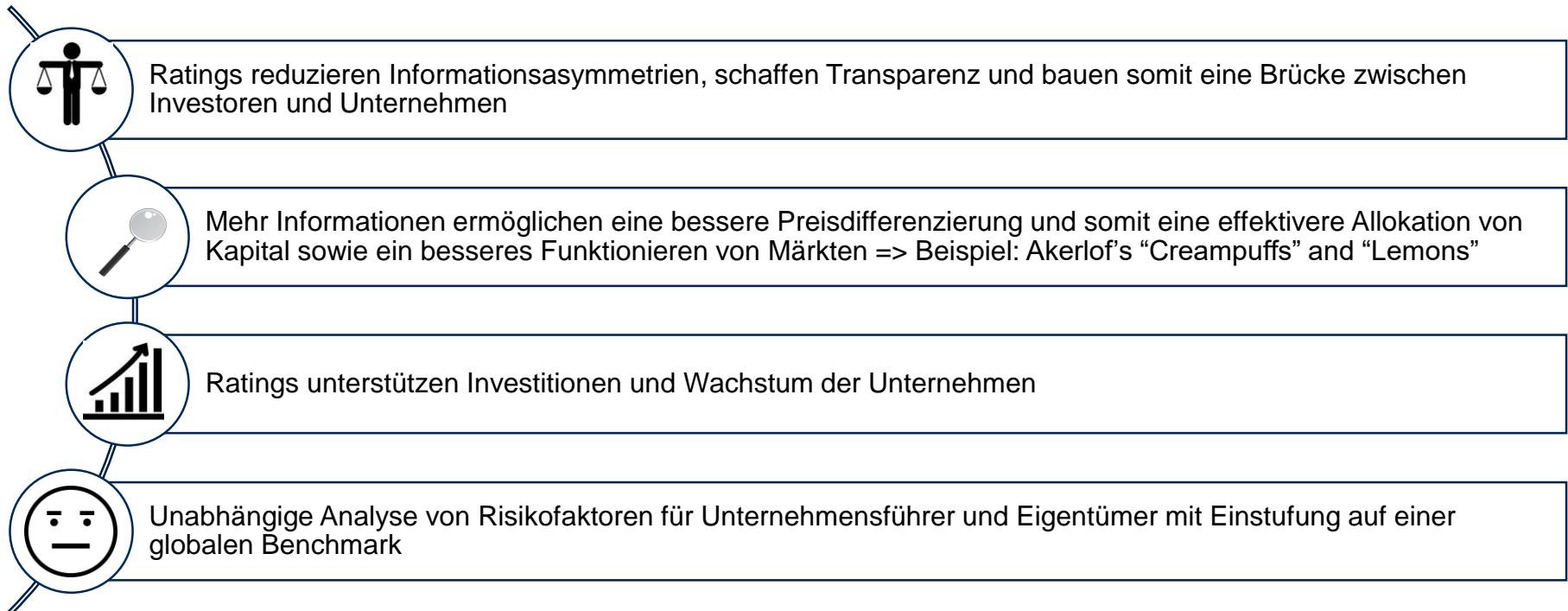
1 Rating und Ratings Prozess

2 Überblick Methodologie für Unternehmensratings

3 Ratings 4.0

Rating und Ratingsprozess

Die Rolle von Ratings im Finanz- und Kapitalmarkt

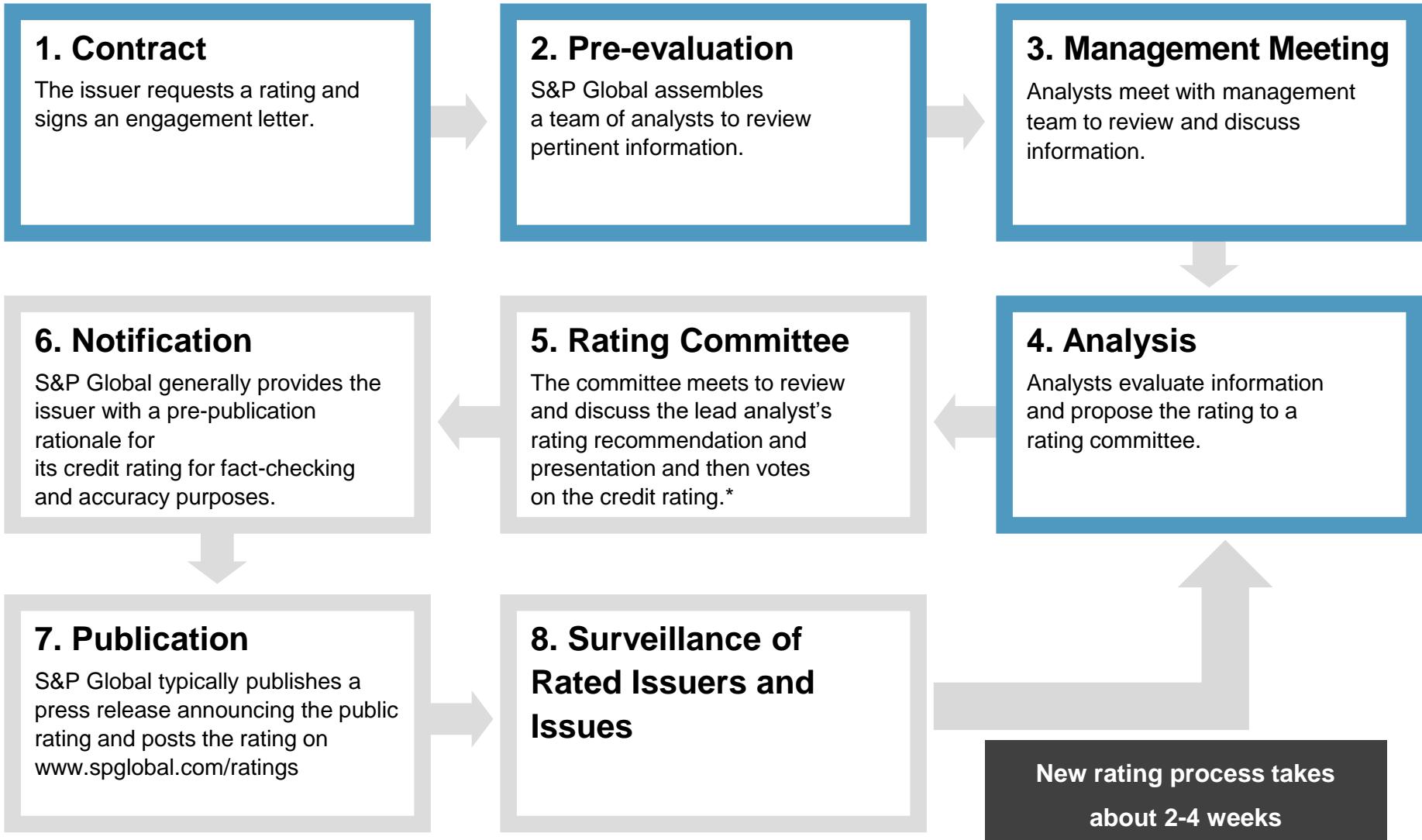


S&P Global Ratings sind eine Meinung

“S&P Global Ratings drücken unsere Meinung zur Fähigkeit oder Bereitschaft eines Schuldners aus, seinen Zahlungsverpflichtungen vollständig und pünktlich nachzukommen. Ratings sind Meinungen und ein relatives Maß zu Kreditrisiken.“

Ratings können ebenfalls eine Aussage über die Kreditqualität einzelner Schuldverschreibungen (z.B. eine Firmenanleihe) und die relative Wahrscheinlichkeit einer Zahlungsstörung dieses Wertpapiers treffen.

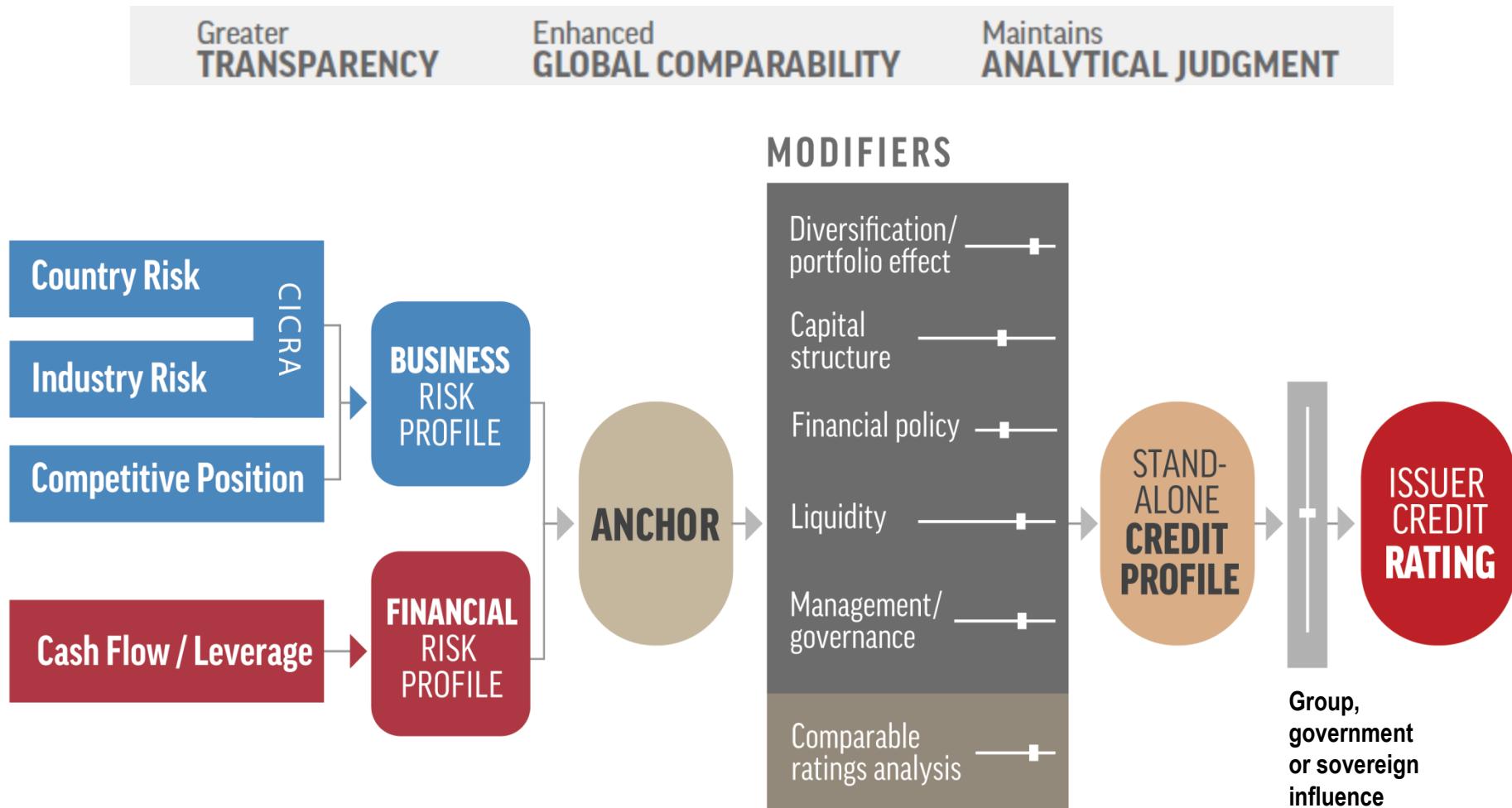
Der Ratingprozess

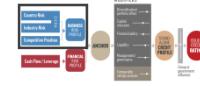


*S&P Global may allow for an appeal only if the issuer can provide new and significant information to support a potentially difficult rating conclusion.

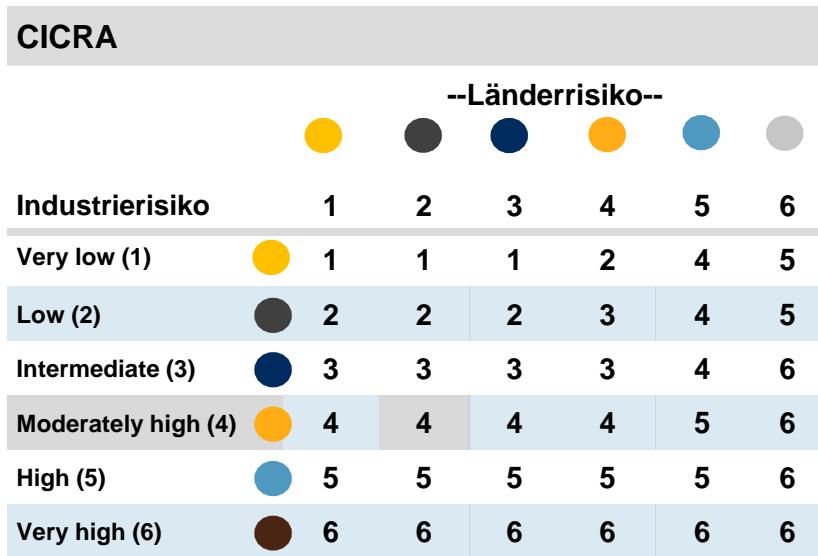
Überblick Methodologie für Unternehmensratings

S&P Global Ratingsmethodologie für Unternehmen





Geschäftsrisikoprofil: Kombination von Wettbewerbsposition, Industrie- & Länderrisiko – Beispiele



1. Beispiele Industrierisiko

Retail restaurants	
Pharmaceuticals	
Engineering and Constructing	
Transportation Cyclical	
Regulated utilities	

2. Beispiele Länderrisiko

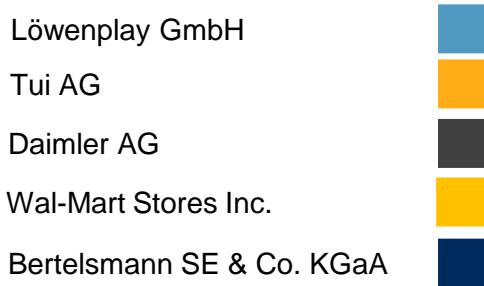
Frankreich	
Deutschland	
Indien	
Russland	
Pakistan	
Spanien	

(*) scores according to Publication „S&P Global Ratings assigns industry risk assessments to 38 nonfinancial corporate industries“, published on November 20th 2013

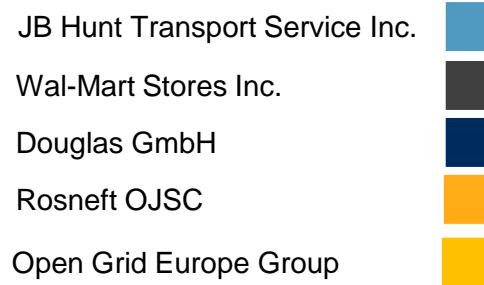


Geschäftsrisikoprofil: Kombination von Wettbewerbsposition, Industrie- & Länderrisiko – Beispiele

1. Beispiele Wettbewerbsposition



2. Beispiele CICRA



Business Risk Profile

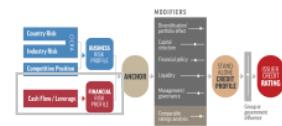
--CICRA--							
Wettbewerbsposition	1	2	3	4	5	6	
Excellent (1)		1	1	1	2	3	5
Strong (2)		1	2	2	3	4	5
Satisfactory (3)		2	3	3	3	4	6
Fair (4)		3	4	4	4	5	6
Weak (5)		4	5	5	5	5	6
Vulnerable (6)		5	6	6	6	6	6

*Business risk profile assessments: 1 (excellent), 2 (strong), 3 (satisfactory), 4 (fair), 5 (weak), 6 (vulnerable)

**See: 'Corporate Methodology', Nov. 19, 2013;

(*) scores according to Publication „S&P Global assigns industry risk assessments to 38 nonfinancial corporate industries“, published on November 20th 2013

Cash Flow/Leverage (CFL)



Core Ratios

FFO/Debt

Debt/EBITDA

FFO Definition

EBITDA minus Nettozinsaufwand, minus laufende Steuerausgaben, adjustiert nach S&P Global Methodologie

EBITDA Definition

Umsatz minus Betriebsaufwand plus Abschreibungen und Amortisierung adjustiert nach S&P Global Methodologie

Supplemental Ratios

Falls der vorläufig ermittelte Wert “Intermediate” oder besser ist :

- CFO/Debt
- FOCF/Debt
- DCF/Debt

Falls der vorläufig ermittelte Wert “Significant” oder schlechter ist :

- EBITDA/Interest
- $(FFO + \text{Interest})/\text{Cash Interest}$

Industry Key Credit Factor commentaries may identify additional supplemental ratio(s)

Die Analyse der Supplemental Ratios kann den vorläufig ermittelten Wert **BESTÄTIGEN** oder **VERÄNDERN**.

Cash Flow/Leverage (CFL)



Cash Flow/Leverage Analysis Ratios—Standard Volatility

	--Core ratios--		--Supplementary coverage ratios--		--Supplementary payback ratios--		
	FFO/debt (%)	Debt/EBITDA (x)	FFO/cash interest(x)	EBITDA/interest (x)	CFO/debt (%)	FOCF/debt (%)	DCF/debt (%)
Minimal	60+	Less than 1.5	More than 13	More than 15	More than 50	40+	25+
Modest	45-60	1.5-2	9-13	10-15	35-50	25-40	15-25
Intermediate	30-45	2-3	6-9	6-10	25-35	15-25	10-15
Significant	20-30	3-4	4-6	3-6	15-25	10-15	5-10
Aggressive	12-20	4-5	2-4	2-3	10-15	5-10	2-5
Highly leveraged	Less than 12	Greater than 5	Less than 2	Less than 2	Less than 10	Less than 5	Less than 2

FFO - Funds From Operations, approx. equals ($EBITDA - Interest\ Expense - Current\ Tax\ Expense$).

CFO - Cash Flow From Operations.

FOCF - Free Operating Cash Flow, equals ($CFO - Capital\ Expenditures$).

DCF - Discretionary Cash Flow, equals ($FOCF - Dividends$).

Bestimmung des Anker Ratings



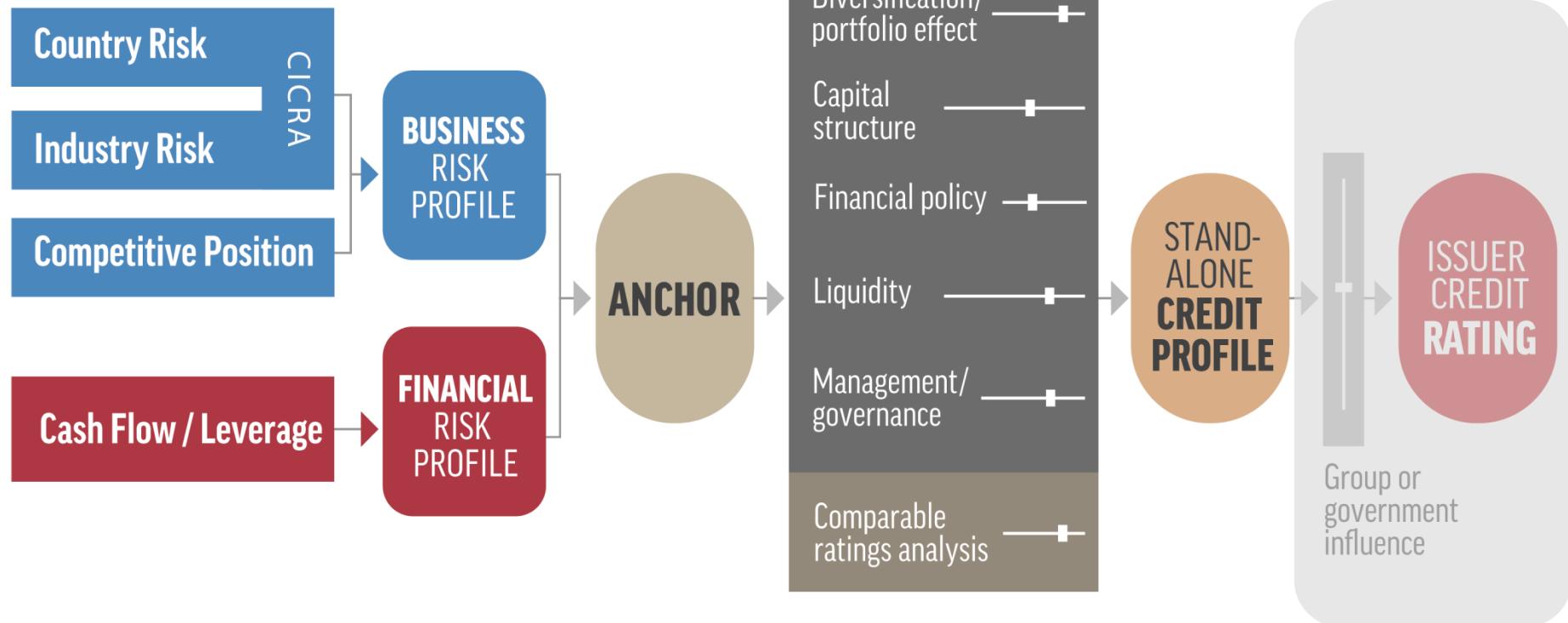
Business and Financial Risk Profile Matrix

Business Risk Profile	Financial Risk Profile					
	1 (Minimal)	2 (Modest)	3 (Intermediate)	4 (Significant)	5 (Aggressive)	6 (Highly Leveraged)
1 (Excellent)	aaa/aa+	aa	a+/a	a-	bbb	bbb-/bb+
2 (Strong)	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
3 (Satisfactory)	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+
4 (Fair)	bbb/bbb-	bbb-	bb+	bb	bb-	b
5 (Weak)	bb+	bb+	bb	bb-	b+	b/b-
6 (Vulnerable)	bb-	bb-	bb-/b+	b+	b	b-

Im Falle zweier möglicher Ergebnisse in der Tabelle wird wie folgt entschieden:

- Die komparative Stärke des Geschäftsrisikoprofil für Finanzrisikoprofile 4 oder besser
- Die komparative Stärke des Finanzrisikoprofils im Falle eines Finanzrisikoprofiles von 5 oder 6

Modifiers



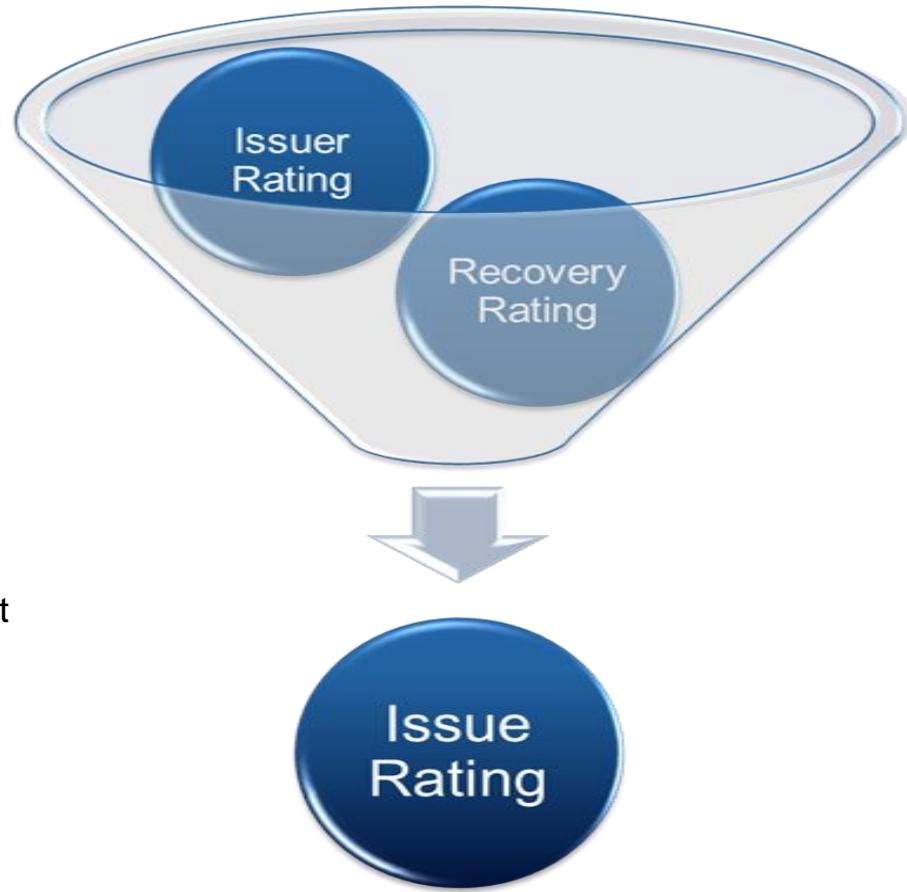
Emmissionsratings im Spekulativen Bereich

Unternehmensrating (Issuer Rating)

- Fähigkeit und Bereitschaft die finanziellen Verpflichtungen zu erfüllen
- 'Reine' Verlustwahrscheinlichkeit (PD)

Recovery Rating

- Schätzung des zu erwartenden Recovery Wertes des analysierten Finanzierungsintstrument
- 'Reine' Meinung zum möglichen Ausfallverlust (LGD)



Anleihenrating (Issue Rating)

- Kombination von PD and LGD

Ratings 4.0

Digitalisierung und Artificial Intelligence – Technologische Disruption

Einfluss auf die
Geschäftsmodelle
von gerateten
Unternehmen

AI (Augmented
Intelligence) –
Big Data Analyse

Kommunikation –
Integriert,
Persönlich

Innovation

Wie verändern sich Geschäftsmodelle?

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Criteria | Financial Institutions | Banks:

Banks: Rating Methodology Article

November 8, 2011

(Editor's Note: We published this article on July 27, 2010, to incorporate several nonmaterial updates. See the "Revisions And Updates" section for details.)

- This article supersedes those articles listed in Appendix A.
- The criteria constitute specific methodologies and assumptions under "Principles Of Credit Ratings," published Feb. 16, 2011.
- The criteria represent a significant change and aim to enhance the company-financial institutions with ratings in other sectors (see "Understanding Standard Definitions," published June 3, 2009). The criteria are designed to improve ratings globally.
- The criteria articulate the steps in developing the stand-alone credit profile credit rating (ICR) for a bank, including a consideration of the potential for a support from the bank's parent group or sovereign government. The criteria emphasize on economic risk and industry risk in setting the starting point or anchor for the ICR. The criteria also consider the role of management, risk management, risk position, and others, to determine the SACF (see "Stand-Alone Component Of A Rating," published Oct. 1, 2010). Lastly, the criteria apply institution's support framework, including both potential government support group support (see chart 1).
- The criteria place the SACF for an average bank in developed economies in the lowercase letters to intentionally differentiate these credit profile credit ratings. As a result, only banks with stronger business positions, and sufficient to withstand a scenario of severe or extreme stress without reliance support, may be assigned higher SACPs. The potential for any extraordinary support will be factored into the ICR after the SACF has been determined.
- The criteria limit rating movements on banks as a result of cyclical changes will still be possible. But such a bank would have to possess credit characteristics capitalization levels, that are significantly stronger than those maintained since pre-2007.

I. SCOPE OF THE CRITERIA

- The criteria apply to ratings on retail, commercial, and corporate and investment banking. The definition of a bank is broad and includes the larger broker-dealers, mortgage banks, credit unions, building societies, and custody banks. The criteria do

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Criteria | Financial Institutions | General:

Nonbank Financial Institutions I

December 9, 2014

(Editor's Note: We republished this article on March 12, 2010, to implement a corporate credit profile update superseded by "Risk-Adjusted Capital Framework Methodology," published July 26, 2017, and update the "Revisions And Updates" section for details.)

- Standard & Poor's Ratings Services is revising its methodology for assigning issuer credit rating (ICR) for a bank, including a consideration of the potential for a support from the bank's parent group or sovereign government. The criteria emphasize on economic risk and industry risk in setting the starting point or anchor for the ICR. The criteria also consider the role of management, risk management, risk position, and others, to determine the SACF (see "Stand-Alone Component Of A Rating," published Oct. 1, 2010). Lastly, the criteria apply institution's support framework, including both potential government support group support (see chart 1).
- These criteria articulate the steps in developing the stand-alone credit profile (the unsupported group credit profile for a group) to derive the ICR on an NBFI. They standard & poor's bank criteria (see Banks: Rating Methodology And Assumptions Nov. 9, 2011) in many ways, in placing heightened emphasis on economic risk in setting the starting point or anchor, in rating an institution. We also notch from the anchor for entity-specific factors, such as business position, and earnings stability, and also consider the role of management, risk management, risk position, and others, to determine the SACF (see "Stand-Alone Component Of A Rating," published Oct. 1, 2010). In certain cases, a low factor or "weak," may cap the SACF or unsupported GCP. Lastly, the criteria apply our extraordinary support or intervention, including from a related government or entity from a source external to the group, such as a government. In this case, we refer to the SACF, as well as the unsupported GCP, which applies when dominated by an NBFI. For guidance on how to apply these criteria, see "Assuming Industry Stress Test Analysis Under Nonbank Financial Institutions Rating Methodology," published March 22, 2010.

SCOPE OF THE CRITERIA

- These criteria apply to securities firms and financial companies, which we collect as NBFI.
- Securities firms (or brokers) include regional and independent securities firms, as well as retail- and wholesale-focused broker-dealers, which typically do not have organizational hierarchies, or, if they do, the bank is not a main factor in the business. These firms benefit from prudential bank regulation, but lending is a minor portion of the Securities firms that benefit from prudential bank regulation and have substantive operations, are global, large, and complex, are typically not in scope, they are under our bank criteria.

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Criteria | Corporates | General:

Corporate Methodology

November 19, 2013

(Editor's Note: We republished this article following our periodic review completed on Oct. 11, 2017. See the "Updates" section for details. On April 22, 2018, we updated the definition of a financial sponsor-owned company in the contact information.)

- These criteria present Standard & Poor's Ratings Services methodology for rating corporate industry risk in setting the starting point or anchor, in rating an institution. We also notch from the anchor for entity-specific factors, such as business position, and earnings stability, and also consider the role of management, risk management, risk position, and others, to determine the SACF (see "Stand-Alone Component Of A Rating," published Oct. 1, 2010). Lastly, the criteria apply our extraordinary support or intervention, including from a related government or entity from a source external to the group, such as a government. In this case, we refer to the SACF, as well as the unsupported GCP, which applies when dominated by an NBFI. For guidance on how to apply these criteria, see "Assuming Industry Stress Test Analysis Under Nonbank Financial Institutions Rating Methodology," published March 22, 2010.

SUMMARY OF THE CRITERIA

- The criteria describe the methodology we use to determine the SACF and ICR for corporate industry companies and utilities. Our assessment reflects these companies' business profiles, their financial risk profiles, and other factors that may modify the SACF (see "General Criteria: Stand-Alone Credit Profiles: One Component Of A Rating," published 2010, for the definition of SACF). The criteria provide clarity on how we determine an ICR and ICR are more specific in detailing the various factors of the analysis. The criteria provide clear guidance on how we use these factors as part of determining an issuer's Standard & Poor's intends for these criteria to provide the market with a framework for our approach to fundamental analysis of corporate credit risks.
- The business risk profile comprises the risk and return potential for a company in the markets in which it participates, the competitive climate within those markets (its industry risk), within those markets, and the competitive advantages and disadvantages that it has within those markets (its competitive position). The business risk profile affects the financial risk that a company can bear at a given SACF level and constitutes the four company's expected economic success. We combine our assessments of industry risk, and competitive position to determine the assessment for a corporation's business profile.
- The financial risk profile is the outcome of decisions that management makes in the business risk profile and its financial tolerance. It includes decisions about to which management seeks funding for the company and how it constructs its balance sheet. The relationship of the cash flows the organization can achieve, given its business profile, to the company's financial obligations. The criteria use cash flow/leverage as determine a corporate issuer's financial risk profile assessment.

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Criteria | Financial Institutions | Finance Companies:
Key Credit Factors For Financial Services Finance Companies

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 - C. Competitive Position
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 - A. Accounting And Analytical Adjustments
 - B. Cash Flow/Leverage
- Part III: Modifiers

WWW.STANDARDANDPOORS.COM/RATINGSDIRECT

DECEMBER 9, 2014 1

Zusammenarbeit von Analysten unterschiedlicher Bereiche bei der Analyse wird zunehmend wichtiger: Neue Risiken wie Cyber Risk etc.

S&P Global
Ratings

Mit welchen Tools werden Analysten arbeiten?

S&P Global sieht Chancen mit Augmented Intelligence - Anatech

Manual
Research

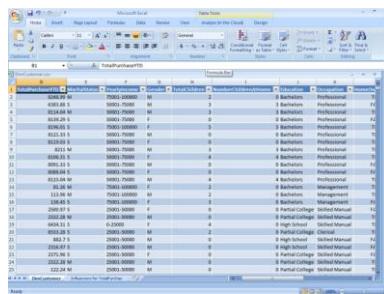


Simple
Calculations

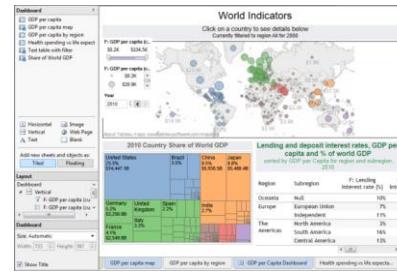


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Ratings

Excel: Charts,
Simple Stats,
Forecasts



Connect Multiple
Data Sources:
Enhanced Statistics



Advanced Statistics
connecting multiple in
and outside sources

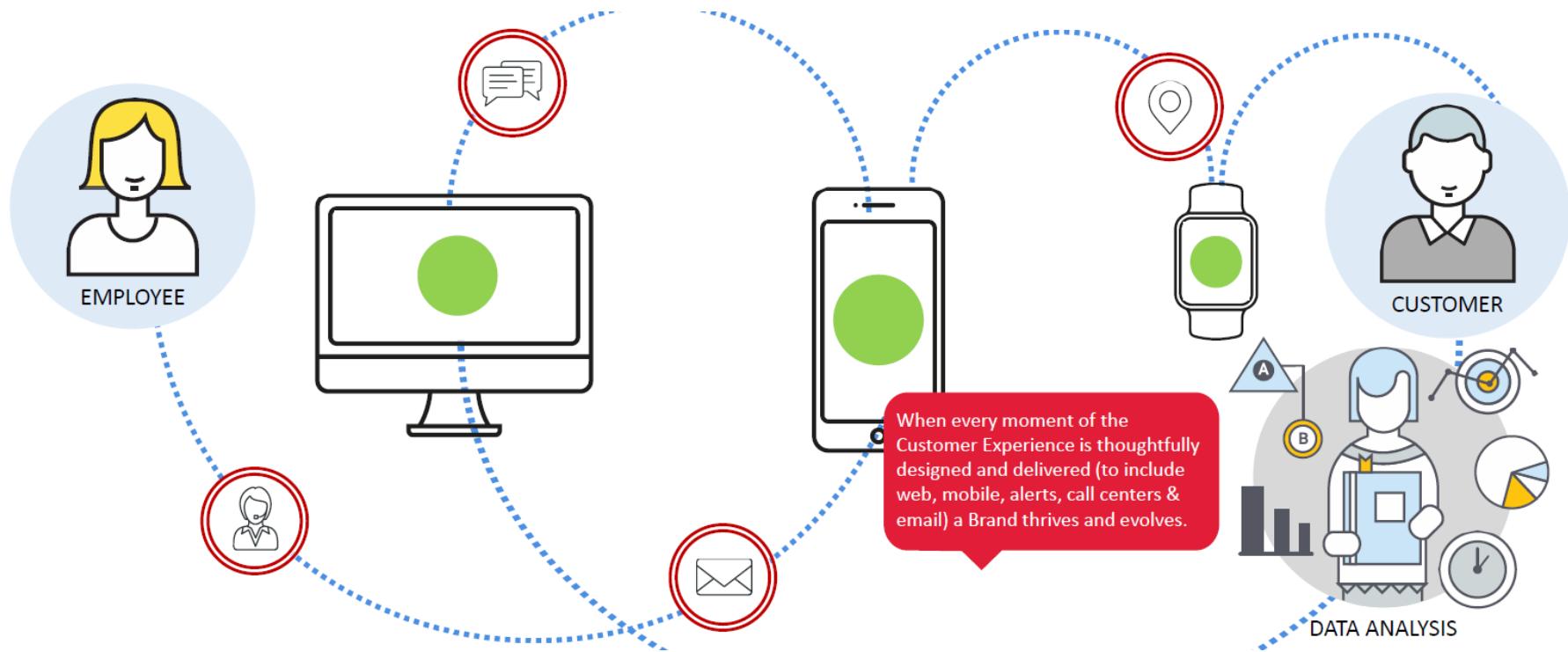


Die Bedeutung von Digital Literacy für den Veränderungsprozess in Unternehmen

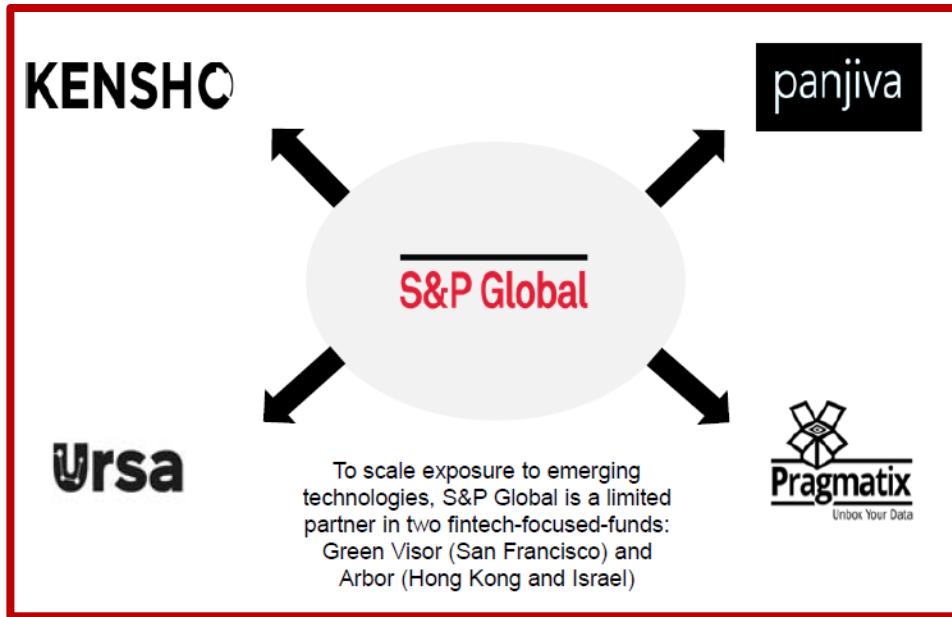
digital literacy =
digital tool knowledge +
critical thinking + social
engagement

Digital Experience für Kunden

Alle Bereiche sollten vernetzt sein für eine erfolgreiche Umsetzung



S&P Global: Externe und Interne Aktivitäten



7-8

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Juli/August 2018
9. Jahrgang

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Ratings 360- Neue Platform für Emittenten (Live)

S&P Global Market Intelligence Ratings360™

Dashboard Ratings Non-Ratings Peers Counterparties Economic Research Product Solutions Investor Sentiment

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My Rating AA-

Issuer Credit Rating Foreign Currency LT Outlook Stable

Top Headlines

Most Recent Company Related Peers Counterparties

Banking Industry Country Risk Assessment Update Published For December 2018

Nikola G Swann | Dezember 28, 2018 23:03 CET

TORONTO (S&P Global Ratings) Dec. 28, 2018—S&P Global Ratings has published its “Banking Industry Country Risk Assessment Update: December 2018.” This article presents updates to S&P Global Ratings’ views on the 91 banking systems that it currently reviews under its Banking Industry Country Risk Assessment (BICRA) methodology. We also present government support assessments, as well as economic and industry risk trends, for those banking systems. Since we last published this report on Nov. 23, 2...

Video

360 Risk Dashboard

E4/0 Green Evaluation E1/86 ESG Evaluation Cyber Risk Assessment

These are non-ratings scores.

Economic Research | Germany

Summary Sovereign Risk Economic Conditions More ▾

Summary

We expect Germany to preserve strong budgetary and external positions during 2018–2021 amid solid, albeit moderating growth rates. We are affirming our ‘AAA’ long-term and ‘A+’ short-term sovereign credit ratings on Germany. The outlook is stable.

More ▶

Join The Green Finance Boom

Index Value S&P 500 S&P 1200

2018-10-09 2018-10-31 2018-11-28 2018-12-28

LAST CHANGE % CHANGE

	LAST	CHANGE	% CHANGE
S&P 500 Financials	398.82	2.92	0.74↑
S&P Global 1200 Financials Index USD	1,219.64	(1.43)	(0.12)↓

Ratings Distribution

Peers Counterparties

FOREIGN CURRENCY LOCAL CURRENCY

Issuer Credit Rating (Long Term)

To change, turn on or off footer: Inset > Header & Footer > Enter / change text > Click Apply All.

RD - Neue Platform für Investoren (In Progress)

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CREATE ALERT ▾ ADD TO ▾ PRINT EXPORT ▾

PayPal Holdings Inc. | RESEARCH

September 26, 2018

Rationale

Business Risk

- Operates one of the largest online payments systems and digital payments platforms globally
- Highly scalable business model
- Strong growth prospects in online and digital payments
- Narrow product focus (payment processing)--that is, limited diversification

Financial Risk

- Strong cash flow generator
- Still-low leverage despite an increasingly aggressive financial policy
- Below-average operating margin (compared with other financial market infrastructure companies)

Clearing and Settlement Risk

- Lower risk on the U.S. retail loan book following the transaction with Synchrony
- Planned expansion of the merchant loan book

Company Description

PayPal is an online payments system that operates one of the largest digital payments platforms globally. It helps people and businesses accept and make payments online in more than 200 markets worldwide and more than 100 different currencies. PayPal was spun off by eBay into a separate, publicly traded company and started trading on the NASDAQ on July 20, 2015. There are essentially four different ways to transact through PayPal:

- The payment networks such as Visa or MasterCard;
- A customer's bank account;
- Cash deposited to and held with PayPal; and
- A consumer credit through PayPal's Credit program (through Synchrony as the lender in the U.S.)

Regulation

Technically, PayPal is not considered a bank because it does not engage in fractional reserve banking. That said, we consider PayPal a quasi-regulated entity. For example, its Luxembourg entity has a banking license, and in the U.S. it is registered with the Treasury Department as a money services business and licensed in 48 states. PayPal operates very close to the highly regulated banking environment, which at least in part extends to its own operations and conduct.

READ MORE

BBB+ / STABLE / A-2

Issuer Credit Rating

COMPANY DESCRIPTION

PayPal is an online payments system that operates one of the largest digital payments platforms globally. It helps people and businesses accept and make payments online in more than 200 markets worldwide and more than 100 different currencies. PayPal was spun off by eBay into a separate, publicly traded company and started trading on the NASDAQ on July 20, 2015.

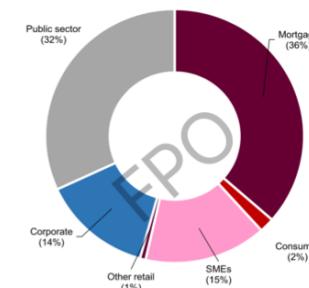
RATINGS SCORE SNAPSHOT

Last Updated Date: 12/05/2018

Business Risk: Satisfactory (3)	Low(2)
Country risk	Low(2)
Industry risk	Satisfactory (3)
Competitive position	Minimal (1)
Financial risk	a-
Preliminary anchor	-1
Clearing and settlemt risk	Anchor: bbb+
Modifiers	

Quick Chart View

Loan Book By Sector (June 2018)



Source: Belfius Bank
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Chancen der Digitalisierung für Ratings 4.0



Bessere Informationsaufbereitung für die Entscheidungsfindung – Augmented Intelligence



Mehr Transparenz und Erklärung von kausalen Zusammenhängen



Möglichkeit von Scenario Analysen mit komplexen Zusammenhängen



Effizienzsteigerungen für Kunden und Unternehmen



Innovationen



Zeitnahe Entscheidungen



Bessere Integration in Arbeitsprozesse von Investoren und Unternehmen



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