STANDARD & POOR'S
Setting the Standard

Credit Assessment & Insurance Rating Process (Workshop A2)

Role of The Rating Agencies – The S&P Perspective

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The McGraw-Hill Companies

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David Anthony is a Director of Standard & Poor's Financial Services group in London and is the Regional Practice Leader for insurance criteria & training in Europe, the Middle East and Africa. He joined Standard & Poor's in March 1994 and was head of the insurance Interactive ratings team until 1999, at which time he assumed his current responsibilities.

David has been involved in insurance for 17 years, most recently in a ratings context with Standard & Poor's in London and, between May 1992 and March 1994, with Moody's Investors Service in New York. He also worked in insurance banking with Citibank, N.A. in London, where he was European Insurance Risk Manager and, prior to this, Senior Relationship Manager for Nordic insurance.

For the preceding 12 years, David's career was in international corporate and correspondent banking, working with Lloyd's Bank International, Al Saudi Banque and Credit Lyonnais in London, Brussels, Antwerp, Dubai, Bahrain, Cairo, Alexandria and Paris.

David holds a Bachelors degree in Political Science from the University of Birmingham and a Masters degree - MSc. (Econ.) - in Economic History from the University of London.

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Agenda

1. **Profile of Standard & Poor's and Its Ratings**
2. **The Insurance Rating Process**
3. **Conclusions**
4. **(More) Questions?**

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Standard & Poor's Mission Statement

'To Be The Global Leader In Providing Independent, Highly Valued Analytical Services And Information To The World's Financial Markets'

Note: No mention of ratings!

Profile of Standard & Poor's

- **220,000 ratings in total around the world**
- **Ratings on 3,500 insurers**
- **Ratings on 1,400 financial institutions**
- **200 Financial Services analysts globally**
- **35 analysts dedicated to insurance in Europe**

Competitive Advantage =

impartiality + reputation + coverage + global perspective

What Ratings Can Standard & Poor's Apply To Insurers?

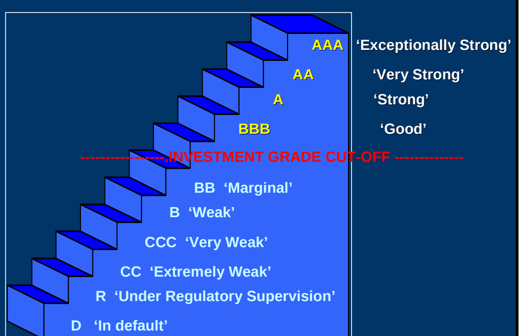
PUBLIC INFORMATION (Paid for by Subscribers)	INTERACTIVE (Paid for by Issuer)
Financial Strength (FSR)	**Financial Strength (FSR)** **Counterparty Credit (CCR)** **Medium & L/T Debt** **Commercial Paper** **Short-term FSR** **Financial Enhancement (FER)**

What is an Insurer Financial Strength Rating (IFSR)?

"…is a current opinion of…capacity to pay under insurance policies and contracts in accordance with their terms."

- **Prospective** rather than **historic** view
- **Does not take into account:**
  - Timeliness of payment
  - Imposition of surrender penalties or MVAs
  - Likelihood of the use of a defence to deny claims (though a Financial Enhancement Rating (FER) does)
- **Does implicitly take into account:**
  - Policyholders' reasonable expectations (PRE)

Standard & Poor's Rating Scale

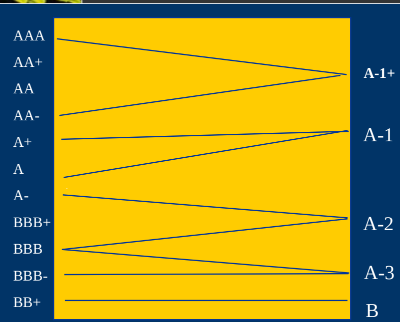


***NOTE**: Ratings can be further qualified through use of '+' and '-' suffixes*
Also, short-term ratings assigned as 'A-1+', 'A-1', 'A-2' and 'A-3'

Modifiers, Outlooks, CreditWatch and Debt Ratings

1. **All ratings except 'AAA' can be modified with ' + ' or ' – '**
2. **Medium-term direction (up to 2 years) of rating indicated by positive or negative Outlook**
3. **Short-term (90 day) uncertainty to rating indicated by 'Positive', 'Negative' or 'Developing' CreditWatch**
4. **We also rate short and long-term senior and subordinated debt of insurers and their holding companies, but these ratings are usually 'gapped' or 'notched' down from the IFSR**

Correlation Between Short-Term & Long-Term Ratings

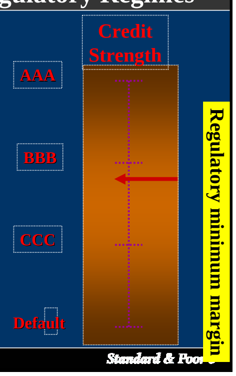


Rating Agencies v. Traditional Regulatory Regimes

- 'Black & White' v. A Spectrum of Outcomes?
- Prospective v. Historical Assessment
- Consolidated v. Stand-Alone Analysis

But steady convergence now with:-

1. Routine Use of Risk-Based Capital Modeling
2. Steady Move Towards Group Solvency
3. Embedding of Ratings in Regulation



FSA's 4 Statutory Objectives

1. Maintain Confidence in the UK Financial System
2. Promote Public Understanding of the Financial System
3. Secure the Right Degree of Protection for Consumers
4. Reduce Scope for Financial Crime

+ FSA's 'Principles of Sound Regulation':

i.e. use of resources; responsibility of management; proportionality; facilitation of innovation; UK competitiveness; minimisation of adverse effects of regulation; facilitation of competition

+ 'ARROW' + Integrated Prudential Sourcebook

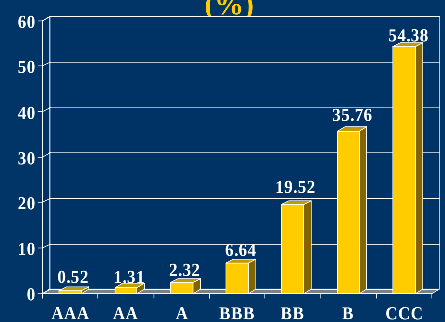
None of these really equate with the rating agency vocation of the provision of financial information and opinion so as to facilitate financial decision making!

...So neither regulators nor equity analysts we!

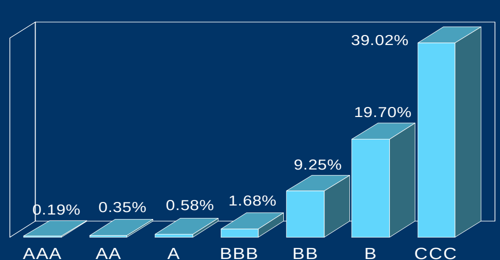
Where Do Insurers Need To Be On The Rating Scale?

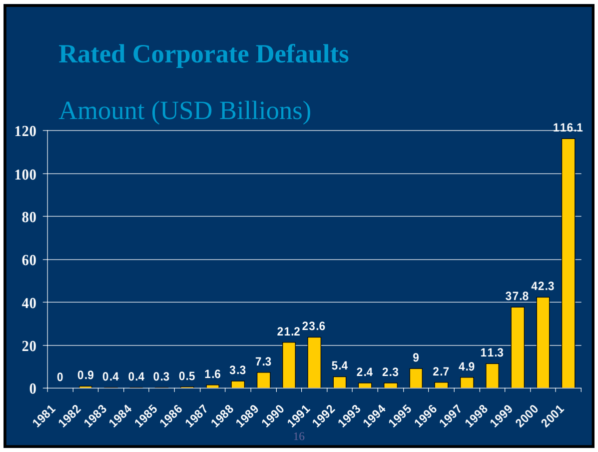
- AAA: Monoline Bond Insurance
- AA-Minus or Better: UK With Profits; Group Life; US GICs; Long-term Savings & Pensions; Life Reinsurance; Commercial Lines/Long-tail Liability, etc.
- A-Minus or Better: Non-life Reinsurance; Broker-Driven Business
- BBB-Minus or Better: Any issuer wishing to avoid non-investment grade status
- 'B' or Better: Non-Investment grade issuer selling its debt securities into wholesale markets
- 'C' or lower: A reinsurer actively seeking commutations!!

Average Default Rates
Average Cumulative 15-Year Default Rates (%)



Average Cumulative 5-Year Probability of Default





Default Rates by Industry

SECTOR	No. of obligors	No. of defaults	Default rate %
Aerospace/Automotive/Capital goods/metal	1095	166	15.16
High tech/Computers/Office equipment	410	43	10.49
Consumer/Service sector	1,330	243	18.27
Leisure time/Media	796	135	16.96
Health care/Chemicals	576	64	11.11
Forest/Building products/Home builders	380	48	12.63
Energy/Natural resources	549	69	12.57
Utilities	900	19	2.11
Telecommunications	454	55	13.11
Transportation	421	54	12.83
Financial Institutions (i.e. banks)	1,903	66	3.47
Insurance / real estate	**955**	**29**	**3.04**
Totals	9,769	991	10.14

So How On Earth Does S&P Assess Financial Strength?

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The S&P Insurance Analytical 'Template' – We Sub-Rate Each Factor

1. Industry Risk
2. Competitive Position
3. Management & Strategy
4. Operating Performance (inc. 'quality of earnings')
5. Investments
6. Liquidity
7. Capitalisation (inc. 'quality of capital', reinsurance, reserving & risk-based capitalisation)
8. Financial Flexibility

Industry Risk

By class of business, sector, territory:

- Competitiveness
- Ease of entry
- Substitute products
- Liability tail
- Social inflation
- Risk of catastrophic loss
- Economic considerations
- Regulatory, legal and accounting environment

Competitive Position

Capacity To Continue To Generate Premium At Economic Rates:

- Competitive strengths / weaknesses?
- Overall Diversification – too little, too much or just right?
- Past (5 years) and likely future (3 years) growth rates
- Distribution
- Product range by lines of business
- Market shares of main and subsidiary operations
- Geographic diversification
- Organisational and legal structures

Management & Corporate Strategy

Quality of Management

- Professionalism & Prudence?
- Technical Strengths & Weaknesses?
- Depth & Breadth?
- Operational Controls? MIS?

Appropriateness of Strategy

- Financial Strategies
- Realistic? Coherent?

Corporate Governance & Accounting

- Is Corporate Governance Robust? Is accounting transparent?

Operating Performance I

How successfully does the company convert its competitive strengths into earnings? Is capital strengthening dependent upon retained earnings?

Is Profit Maximisation The Real Driver of Management?

- *What measures of performance does management employ?*
- *What hurdle rates of return are expected?*

Quality of Earnings

- Diversity?
- Volatility?

Underlying Profitability

- Non-life returns adjusted for loss reserve strength
- Life using annual increment in embedded value as well as ROA, etc.
- Total return of annual increase in net assets
- Are profits derived from both underwriting and investment activities?

Operating Performance II

- Loss, expense, combined and other operating ratios
- Commission ratios
- Other expense levels
- Investment return
  - Income
  - Realised gains
  - Unrealised gains
- Return on revenue (non-life business)
- Return on assets (life business)
- Return on equity / Return on capital employed
- (Earnings Adequacy Model)

Investments

- Asset allocation
- Credit quality of bonds
- Percentage exposure to equity instruments
- Asset diversification/concentrations
- Valuation bases and “hidden values”
- Strategy re the realisation of capital gains
- Asset/liability management
- Use of derivatives

Liquidity I

Analyse:

- First tier: Underwriting/operating cash flows
- Second tier: Liquidity of investment portfolio
- Third tier: Committed funding facilities
- Cash-flow statements

Consider:

- Impact of adverse investment market conditions
- Response to major loss and catastrophe scenarios
- Cash & marketable securities as % of technical reserves

Liquidity II

(Euros 000’s)	----- Year ending 31 December ---		
Cash Flow Model	**2003**	**2002**	**2001**
Net written premiums	14,554.0	15,231.2	14,006.7
Net claims paid	(10,246.3)	(10,443.0)	(9,158.2)
Acquisition costs	(2,919.0)	(3,060.1)	(2,750.3)
General expenses	(1,603.6)	(1,663.3)	(1,857.8)
U/W cash flow	(214.9)	64.8	240.4
Net inv. inc.	1,651.1	1,591.2	1,348.3
Realised gains/losses	1,276.0	398.3	281.6
Tax	(423.1)	(223.6)	(219.7)
Total cash flow	2,289.1	1,830.7	1,650.6
U/W cash-flow ratio	**98.5%**	**100.4%**	**101.7%**
Total cash-flow ratio	**115.7%**	**112.0%**	**111.8%**

Capital Adequacy

Focus On Consolidated Capitalisation

- **Capital planning**
- **Core capital v. total capital**
- **Quality of Capital (use of debt capital)**
- **Risk-based capitalisation**

- **Loss reserve adequacy**
- **Reinsurance protection**

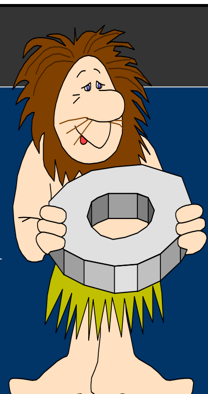
Financial Flexibility

WHAT IF MORE CAPITAL IS REQUIRED?

- Support from parent group?
- Support from shareholders?
- Support from banks?
- Support from capital markets?
- Demutualise/downstream holding company?
- Subordinated debt capital to support solvency margin?
- Securitisation?
- Sell out to the highest bidder?

Conclusion: We take considerable comfort when insurers are perceived to have strong financial flexibility relative to likely needs

Risk-Based Capital Model in Europe



Approach to Risk-Based Capitalisation

- Adjust reported capital onto more realistic economic basis (Total Adjusted Capital - "TAC")
- TAC then reduced by 'charges' for credit risk and investment market volatility risk to give Risk Adjusted Capital ("RAC")
- RAC level of capital is compared with a base level of capital required to support operations at a triple-B (good) level
- Capital adequacy ratio determined

Risk Adjusted Capital Model – The Basic Elements

+ Reported capital		X	T
+ Equity-type reserves		X	A
+ Eligible hybrid equity		X	C*
+/- Asset and liability adjustments		X	
Risk Adjusted Capital (RAC) =	(A)	X	
Required Capital By Line of Business (for 'BBB') =	(B)	X	
Capital Adequacy Ratio (CAR)=	(A/B)	X%	

*TAC = Total Adjusted Capital = Total Economic Capital + Eligible Hybrid Equity

Premium Charges (%)

Class of business	Direct	Reinsurance Prop.	Reinsurance Non-prop.
Health	12	12	18
Accident	18	18	27
Motor	12	12	18
Marine/aviation/etc.	17	17	26
Property	19	19	30
Liability	27	27	29
Pecuniary	18	18	27
Credit	75	75	115
Finite	n/a	n/a	4

Reserve Charges (%)

Class of business	Direct	Reinsurance Prop.	Reinsurance Non-prop.
Health	5	5	5
Accident	28	28	28
Motor	12	12	12
Marine/aviation/etc	16	16	16
Property	22	22	28
Liability	10	10	10
Pecuniary	28	28	28
Credit	25	25	25
Finite	n/a	n/a	6

Life Reserve Risk

- Charges based on reserves
- Regulatory Minimum Margin (RMM) levels are conservative for Life
- 'BBB' capital adequacy at 125% of R.M.M. (i.e. 5% of mathematical reserves)
  - except certain unit-linked business

A Composite Insurance Company Ltd.

AVAILABLE CAPITAL	Euro MM's	REQUIRED CAPITAL	Euro MM's
Published shareholders' equity	750	Non-life net premium risks at 12 - 75%	550
Minority interests	150	Non-life net reserve risks at 5 - 28%	150
Surplus value of investments	250	Reinsurance written at 18 - 30%	50
Goodwill at 50% max. 25	(25)	Life reserve risk at 5%	
General & equalisation reserves	250	Unit-trust funds under management at	1
Redundancy/(deficiency) on tech. reserves	(150)	Bank subsidiary at 8% of assets	20
Non-life Deferred Acquisition Costs at 0%	0		
Life DAC at 50% max	250		
Uncalled capital at 50% max.	0		
Adjusted Capital before Hybrid Equity	1,475		
Ssubordinated, equity-like perpetual note	50		
A. TOTAL ADJUSTED CAPITAL (TAC)	1,525	D. REQUIRED CAPITAL FOR 'BBB'	796
Charge re default risk on bonds at 1 - 5%	(50)		
Charge re interest risk on bonds at 1 - 5%	(35)		
Volatility risk re shares at 15%	(200)		
Credit risk re preference shares 6%	0		
Credit risk re mortgage loans at 2%	(2)		
Volatility risk re property at 18%	(50)		
Investment concentration (>10% of TAC)	0		
Portfolio size factor if <Euros 400mm.	0		
Reinsurance receivables risk	(20)		
Other non-invested asset risk	(5)		
B. Total prudential charges	(362)	'Surplus' (AVAILABL/REQUIRED) (C - D)	367
C. RISK ADJUSTED CAPITAL (RAC)	1,163	Capital Adequacy Ratio (CAR)	146.1%

Capital Adequacy Matrix

Above 175%	AAA	Extremely strong
150%-175%	AA	Very strong
125%-150%	A	Strong
100%-125%	BBB	Good
Below 100%	BB or lower	Vulnerable

Capital Adequacy Ratio (C.A.R.) = $\frac{\text{Available Capital}}{\text{Required Capital}}$

Assessing Reinsurers

- S&P applies the same basic analytical template as just discussed
- For the larger reinsurers writing considerable volumes of financial risk, we adopt an exposure based approach to solvency analysis
- Re structured financial risks, we analyse each transaction individually, earmark capital accordingly, and give credit where appropriate for covariance

Risk & Risk Reduction

S&P Does Not Provide Consultancy But The Rating Conclusion May Improve If The Subject Company Displays A Number of The Following:

- A thorough understanding of market dynamics
- Tangible competitive strengths
- Controlled rates of growth to stay within prudent financial parameters
- Improved level and/or quality of capitalisation
- Improved use of reinsurance
- Sustainably improved operating performance through more selective underwriting and/or through appropriate pricing

Classifying The Subsidiaries

Subsidiaries Are Analysed Against Our Perception of Strategic Status Within Group (as derived from our understanding of group strategy)

- **Core Subsidiaries**
- **Strategically Important Subsidiaries**
- **Non-Strategic Subsidiaries**

Core

'Core' means a subsidiary must display most of the following:

- **Significant proportion (>5%) of group capital**
- **Capitalised to within 1 grade of group 'CAR'**
- Operating in lines integral to group strategy
- Same name or branding as parent
- Operating as a division - only separate for legal, regulatory or fiscal reasons
- Sale by the parent is inconceivable
- At least 51% voting control by parent group
- Reasonably successful at what it does
- Demonstrated parental support in past

ALL Core entities carry the same (group) rating

Strategically Important Subsidiaries

- Core characteristics, except size or capital
- Capitalised to at least a 'BBB' RBC level
- Important but operationally stand alone
- Different name from parent
- History of support
- Sale unlikely but finite group commitment
- All significant acquisitions in first year, at least
- Shares same customers/distribution as parent

Stand-alone rating plus one category (i.e. 3 notches) of support

Not Strategically Important Subsidiaries

- Not eligible for Core or 'S.I. Status
- Not prudently (i.e. BBB) capitalised
- Might be sold in near term
- Unprofitable, turnaround unlikely, limited support
- Ancillary business to rest of group
- Start-ups (i.e. a track-record of less than 5 years)

Stand-alone rating only (or at most 1 notch with a strong and plausible letter of comfort)

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ACCEPTED FORMS OF EXPLICIT SUPPORT

- Guarantees
- Comprehensive, Long-term Stop-loss Reinsurance
- Occasionally, Net Worth Maintenance Agreements...

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Conclusions

1. Rating agencies merely provide an opinion that we hope is of use and value to ratings users and rated companies
2. The rating process is robust in order to be fair and globally consistent
3. Analytical integrity is a given, we hope! (loss of reputation would put us out of business!)
4. There is no such thing as a 'bad' rating, merely degrees of risk. We are certainly <u>not</u> saying that every company needs a triple-'A' rating nor that every policyholder requires triple-'A' security!

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More Questions..?

Perhaps a few observations re health insurance..??

End???

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