

Use case # 3	Possible objectives	Examples of outcome
Who wants this simple – yet powerful - tool ? The Head of Corporate Credit Committee and/or high-caliber corporate bankers..	Secure <b>COMPETITIVE</b> <b>EDGE in corporate loan underwriting business</b>	Grant the Bank’s VIP corporate clients greater financial flexibility thru tailor-made financial covenants. At the same time, watch out for expensive potential covenant busters.

**What if you could increase your VIP corporate clients financial flexibility – and even profitability –by granting them a 3.6 NetDebt-to-Ebitda covenant instead of an “automatic” 3.5 times?**

First good piece of news : by doing this you help your VIP corporate clients increase their financial flexibility and debt capacity. This means a lot to their CEOs : more M&A, more Capex, more working capital... Second good piece of news : you can also announce your VIP corporate clients that this means additional Return On Invested Capital – ROIC. This also means a lot and to a lot of people, starting – of course – with your VIP clients’ shareholders. Third REAL good piece of news : you have probably won the origination / underwriting contest, by making a REAL difference... And, this means a lot to YOU.

Cumulative probability of Breach of Covenant and Quality of Hedge						
2 YEAR Revolver Credit Facility Covenant = NetDebt/Ebitda always below :	BENIGN Scenario Probabilities			STRESSED Probabilities		
	x 3.50	x 3.60	Hedge Quality	x 3.50	x 3.60	Hedge Quality
BP P.L.C. (LSE:BP.)	8.09%	7.01%	87%	36.42%	33.80%	93%
CHEVRON CORPORATION (NYSE:CVX)	1.87%	1.76%	94%	9.74%	9.34%	96%
ENI S.P.A. (BIT:ENI)	1.25%	1.22%	98%	7.18%	6.97%	97%
EXXON MOBIL CORPORATION (NYSE:XOM)	1.80%	1.73%	96%	8.85%	8.53%	96%
HUSKY ENERGY INC. (TSX:HSE)	3.02%	2.95%	98%	9.56%	9.40%	98%
OCCIDENTAL PETROLEUM CORPORATION (NYSE:OXY)	2.44%	2.35%	96%	11.32%	10.78%	95%
REPSOL, S.A. (BME:REP)	2.29%	2.08%	91%	10.13%	9.73%	96%
ROYAL DUTCH SHELL PLC (ENXTAM:RDSA)	3.03%	2.78%	92%	13.51%	12.77%	95%
STATOIL ASA (OB:STL)	0.17%	0.16%	94%	3.18%	3.07%	97%
SUNCOR ENERGY INC. (TSX:SU)	2.92%	2.74%	94%	11.17%	10.75%	96%
TOTAL S.A. (ENXTPA:FP)	0.84%	0.78%	93%	6.35%	6.04%	95%

**What does it mean from the bank’s perspective, for instance on a 2-year Revolver Credit Facility ?**

For instance, **ALGOSAVE proprietary Probability of Breach of covenant** shows that, granting additional leeway to BP PLC means that the Bank keeps 87% of the quality of its covenant bankruptcy protection. Indeed, the probability of breaching a x3.5 NetDebt to EBITDA covenant stands at 8.09% and drops to 7.01% (a 13% drop) at x3.6. This means that the Bank “misses” 13% of the total covenant breaching events when granting a x3.6 instead of a x3.5 turn of leverage covenant. In ALGOSAVE stressed macro economic scenario, the Bank keeps 93% of the quality of its early warning bankruptcy protection. **This marked difference in probability of breach of covenant** is not found in the case of Exxon. In both case, the quality of the covenant bankruptcy hedge is kept at 96%. Hence although granting a x3.6 turn of leverage covenant – instead of a x3.5 – to BP PLC might be questionable, it is almost a “no brainer” in the case of Exxon Mobil.

**Beside gaining a competitive edge, knowing the probability of clients potentially breaching their covenants simply protects the Bank’s P&L.**

As illustrated in the here-above table, behind the “one-size-fit-all” x3.5 NetDebt-to-EBITDA covenant, hides a broad range of probability of breaching this covenant within the next 2 years : from Statoil 3.18% to BP. PLC 36.42% going thru Royal Dutch Shell 13.51%. This diversity reflects a boiling reality of different degrees of operating and financial leverage, free cash flow volatility, sensitivity to macro economic scenario, and many other parameters.

Endowed with ALGOSAVE proprietary probability of Breach of Covenant, credit and risk management committees **build a watch list of possible covenant busters**. This simple – yet powerful – radar tool guides them to take action before a sudden breach of covenant hits P&L (and for IFRS9 reporting entities, a breach of covenant triggers an immediate hit to P&L). **They have seen it coming.**