Microsoft Corporation Capital Structure

Case Study

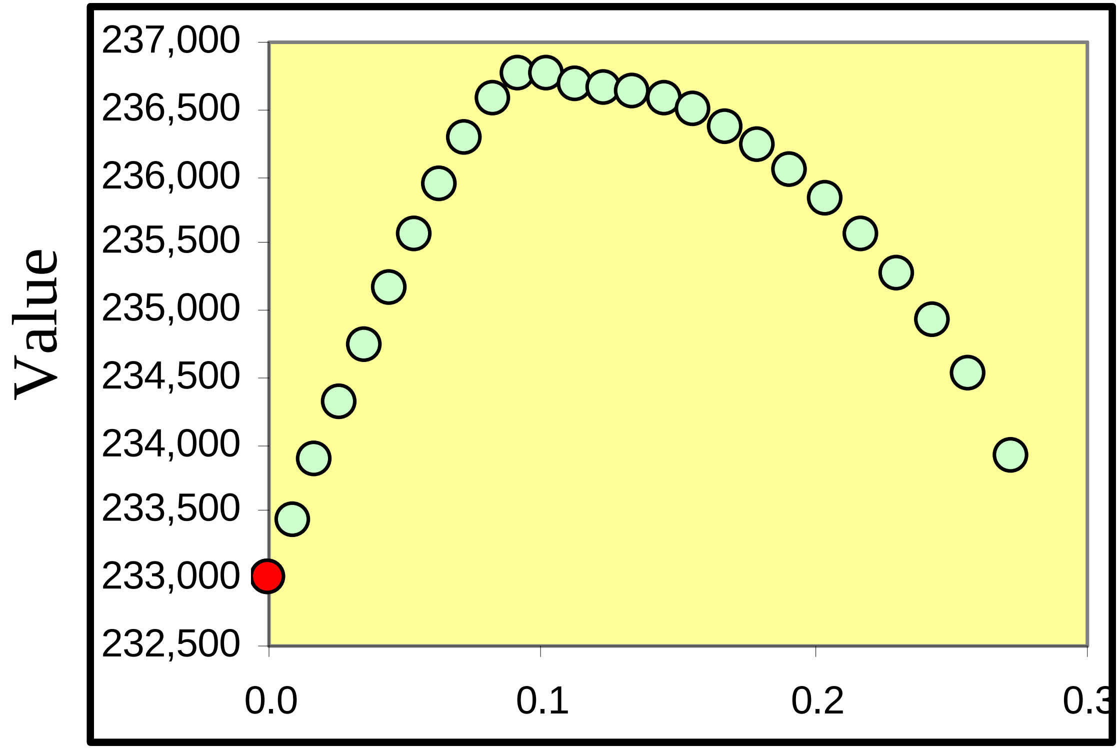
Financial Statement

- Simplified financial statement as of 3Q2008
- Market cap of $233B is used
- Debt of 0.01 is used so underlying program does not crash
- AAA Credit rating calculated at zero leverage

Company name	Microsoft Corp
TABLE I	
Income Statement	
Operating EBITDA	*24,548.0*
D&A	*-2,056.0*
EBIT	*22,492.0*
Other income	*1,322.0*
Gross interest expense	*0.0*
EBT	*23,814.0*
Tax	*-6,133.0*
Net profits	*17,681.0*
Balance Sheet	
Assets	*233,000.0*
Market equity	*233,000.0*
IB debt	*0.0*
Total liab. & equity	*233,000.0*

TABLE II	
Input/Output Parameters	
Effective tax rate	*26%*
Pre-tax cost of debt	*5.00%*
Implied spread	*0.24%*
Implied risk-free rate	*4.76%*
Implied rating	*AAA*
V = D+E	*233,000.0*
V* = D*+E	*233,000.0*
Vu*=(1-T)D*+E	*233,000.0*

Capital Structure Curve



Model output shows the company's "value" curve based on the financial statement shown on the previous page. This is the inverse of the *WACC* curve.

In the News

Microsoft plans debt issue, $40b share buyback[1]

- 23 September 2008 09:25AM

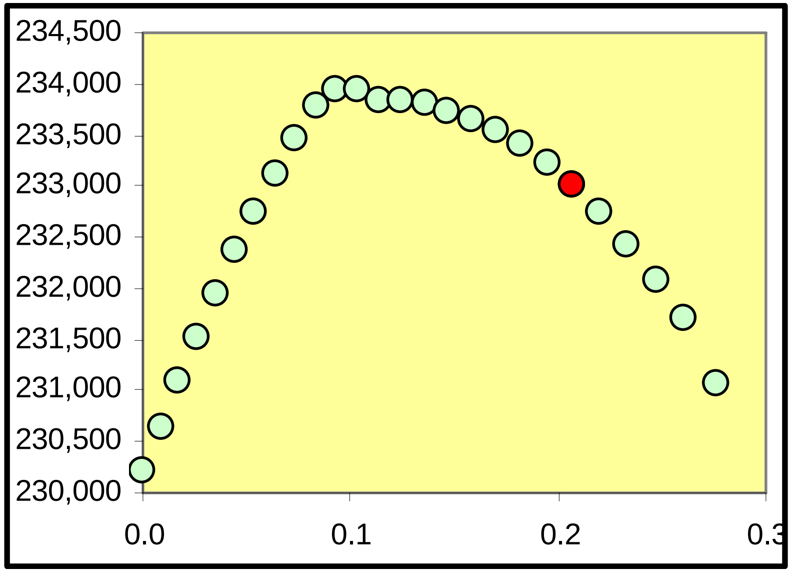
Microsoft plans to buy back its own stock, lift its dividend and issue commercial paper for the first time in the company's history.
Microsoft's announcement of a share buyback of up to US$40 billion was joined by that of top PC maker Hewlett-Packard, which announced a share buyback of its own.

Model Output – Scenario 1

New capital structure curve after a $40B debt-financed equity buyback

Table III	
Additional equity	-40,000
Addititonal debt	40,000
Total additional assets	***0***
% Impact on EBIT	***-1%***

Implied rating	***BBB***



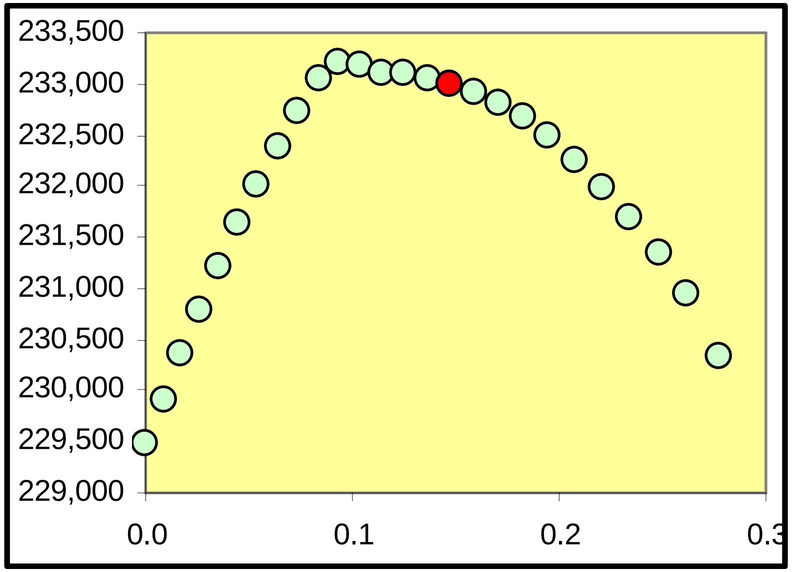
The model shows that $40B will push the capital structure beyond the optimal, giving it a new rating of BBB (red point in graph). There is also a slight drop in the EBIT due to the debt-equity swap. Will Microsoft be happy with this? Not very likely!

Model Output – Scenario 2

Examine different scenario of capital structure after a $30B debt-financed equity buyback

Table III	
Additional equity	-30,000
Addititonal debt	30,000
Total additional assets	***0***
% Impact on EBIT	***-2%***

Implied rating	***A-***



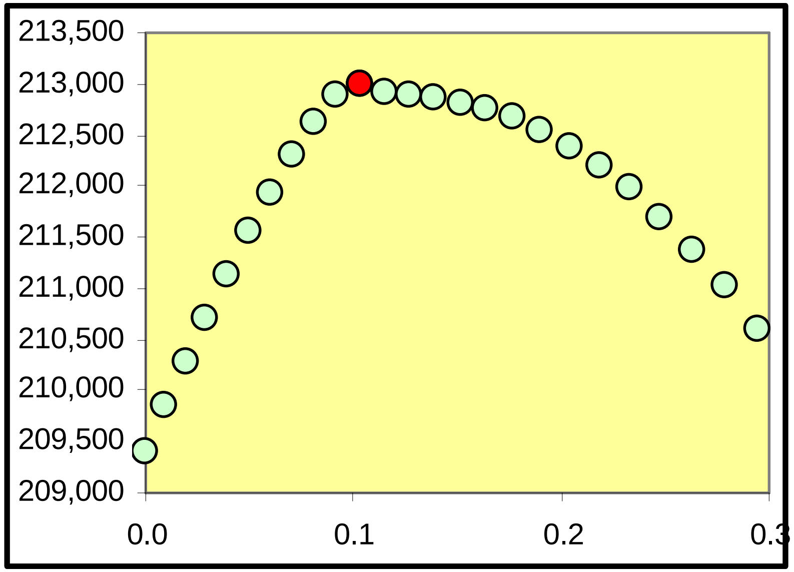
The model shows that $30B will push the capital structure closer to the optimal, giving it a new rating of A- (red point in graph). There is, again, a slight drop in EBIT because of the swap. In terms of getting closer to the optimal, $30B is perhaps a better amount to consider for Microsoft's objective, however it is still beyond optimal.

Model Output – Scenario 3

Capital structure curve after a $40B equity buyback financed by $20B debt issue + $20B cash

Table III	
Additional equity	-40,000
Additonal debt	20,000
Total additional assets	***-20,000***
% Impact on EBIT	***-10%***

Implied rating	***AA-***



This scenario will push the capital structure to the optimal, giving it a new rating of AA- (red point in graph). Given the large amount of cash in its balance sheet, this scenario is perhaps a better one to consider for Microsoft's objective, if it is to achieve optimal capital structure. In terms of EBIT, however, there is a significant drop of 10% due to contraction in size.

References

MS Excel Model for Microsoft Corp Case Study:

http://rdcohen.50megs.com/Case_Studies/Microsoft_Corp.xls

Methodology:

http://rdcohen.50megs.com/OCSabstract.htm

Other material at:

http://rdcohen.50megs.com/capstruct.htm