From:	Constant Contact [support@constantcontact.com]
Sent:	Saturday, September 05, 2009 10:45 AM
To:	benjamin.t.solomon@quantumrisk.com
Subject:	Your email Modeling in the Real World has been sent

Constant Contact

Email Confirmation

Dear Benjamin Solomon,

Your email, named Sep 04 2009 Modeling in the Real World, was sent on 09/05/2009 around 12:45 PM EDT.

Below is a copy of the HTML version your contacts received. Don't forget, you can easily monitor the effectiveness of your email by visiting the Reports area of your Constant Contact home page for real-time metrics and stats.

Subject: Modeling in the Real World

QuantumRisk by the spirit

Strategy, Business Reengineering, Financial & Loss/Risk Modeling

Modeling in the Real World

September 2009

Dear Benjamin,

Based on very specific questions (below) from colleagues, clients, and prospective clients, September's newsletter theme is ***Modeling in the Real World***.

QuantumRisk is a management consulting firm looking to expand its network of clients and associates. The two questions addressed below give you a good idea of the nature of the problems QuantumRisk can solve.

If you would like to retain our services or would like to refer a potential client, do contact me at 303-618-2800.

Sincerely,

Ben

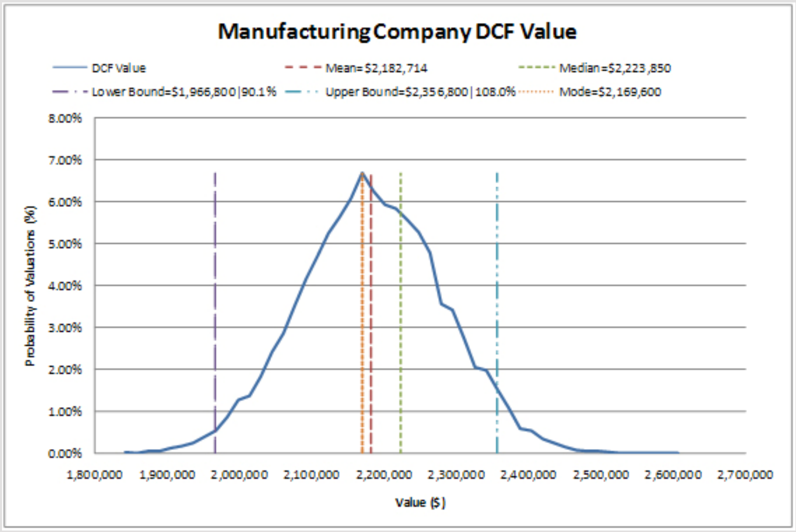
Benjamin T Solomon, *BSc, Dip OR, MAOR, MBS(Banking & Finance)*

Managing Principal
[QuantumRisk LLC]
Twitter: [QuantumRisk]
LinkedIn: [Ben7Solomon]

P.S. I have taken the liberty to add you to my email list. If you prefer not to recieve this monthly newsletter, please do unsubscribe below.

How much of a premium can I ask, for my company?

Sensitivity Analysis *by Ben Solomon*



QuantumRisk just completed a value sensitivity analysis for an M&A client in the North-East, and wanted to share some thoughts on this project.

1. 10,000 scenarios were generated to analyze the sensitivity of DCF valuation to variations in the financial statements.
2. The models were based on 7 years of historical monthly data.
3. In DCF valuation there are two types of sensitivity analyses.
    3.1 To determine how economic forces affect DCF valuations, and
    3.2 To determine the sell-side premium or buy-side discount.
4. The North-East study graphed above illustrates premium/discount sensitivity.
5. The max. sell-side premium is 8% and the min. buy-side discount is 10%.
6. The premium & discount is not symmetrical.

In this study QuantumRisk recommended several real changes to the M&A client's business as the economic sensitivity analyses suggested that the potential value of the company was 2x that shown above.

Doubling your valuation based on real changes to your business processes is something we all like to see. Right?

What is the shape of the statistical distribution of returns?

Long Tailed, Fat Tailed *by Benjamin Solomon*

Returns are almost always long tailed distributions. Depending on the circumstances, they can have negative long tails, positive long tails or both.

I have also observed that with small samples the distribution can change markedly from sample to sample. And in many cases the long tails disappear! This can be a severe problem. The concern here is if you don't know the true population distribution, how do you model it correctly?

Handling all these variations can be quite a challenge, if you don't have the experience or the expertise.

In residential mortgages it is generally accepted that losses have Lognormal distributions that are fat-tailed compared to the Normal distributions, and thus have much longer tails than the Normal.

What is generally not known is that commercial property losses are not Lognormal. In my 2007-2008 study of 220,000 CMBS assets from the Intex database, I found that CMBS losses obey a Gamma distribution.

Note that depending on the data even 100 data points can be considered small. One important reason why Normal can be used. If you are measuring the average of many small samples, than Normal gives a good fit. However, you have to make the distinction that you are working with averages and not the return statistic itself.

Benjamin Solomon
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303-618-2800

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