Geometric Progression

Cutting thru complexity

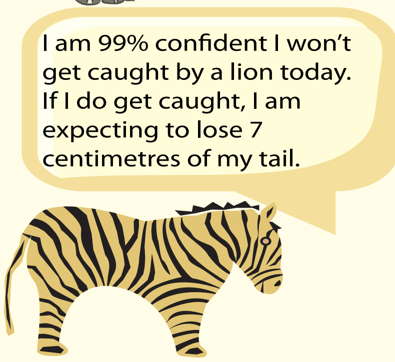
Intro to Market Risk Management & VAR

Overview

"*Order and simplification are the first steps toward mastery of a subject – the actual enemy is the unknown*" Thomas Mann, The Magic Mountain 1924. Market Risk Management has become a central role of Financial Institutions and even Corporates. Notwithstanding the importance of market risk management, it is not understood by many – this course intends to change that!

The course is very "***hands on***" and delegates will be running "***historical***" and "***Monte Carlo simulations***" themselves using live data with Excel. As a result, it is strongly recommended that delegates bring their own laptops. Please note that laptops are encouraged but are not compulsory - delegates who don't bring their own laptops will be able to follow along quite easily as all spreadsheets and data are provided on a DvD. The course starts off by looking at different ways of losing money and video /multimedia is used to show delegates where it has all gone wrong for different types of organisations in the past. The risk management framework is then put into perspective to understand where market risk fits into the big picture. We discuss all of the details of market risk management and VAR from:

- The impact of volatility and regulators (in particular the Basel Accord (very briefly));
- A risk management toolbox including measures of risk, return, probability, correlation & covariance and distributions etc;
- Implementing a historical simulation and a Monte Carlo simulation using Excel on a multi- asset portfolio;
- Stress testing and back testing;
- Risk mitigation and controls;
- Alternative methods of measuring risk including methods such as the Sharpe Ratio, Tracking error, Omega Ratio, Downside risk, Sortino ratio etc;
- Approximations & the Taylor series expansion;
- Approximation methods relating to interest rates, derivatives and time;
- Parametric VAR - the Delta Normal & Delta Gamma method;
- Weaknesses of VAR;
- Challenges for risk managers going into the future.



Please refer to the agenda for more info.

Geometric Progression is accredited as a provider of education and training by BANKSETA. Accreditation number: 557066.

We are a B-BBEE level four contributor. We have a B-BBEE procurement recognition level of 100%. The rating was performed by the Department of Trade and Industry (the DTI).

Contact Sandra at:
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Emergency Cell: 082 872 3812
Reg No: 2005\020493\23

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Level: From Introductory to Intermediate

Prerequisites

Please note, this course assumes delegates have an understanding of:

- The financial markets. Refer to the "Understanding the Financial markets course" at the website below for more info.
- The basics of using Excel.
- At least a Matric in maths.

Duration:

2 Days. (8h45 - 16h30)

Suitable for:

- Professionals, in particular Accountants;
- Business analysts ;
- Delegates registered to write CFA® exam, FRM® exam, PRM® exam;
- Investors;
- Regulators & Compliance Staff;
- Traders;
- Fund Managers & Trustees;
- Graduates and interns;
- Risk practitioners & managers;
- All Treasury staff from Back Office through to Front Office;
- Anyone seeking a greater insight into Risk management and VAR.

A certificate is available on request

Course details

Early Bird: ***R3,950 + vat = R4,503***
Normal Cost: ***R4,200 + vat = R4,788***

Early bird prices apply to any booking made more than 2 weeks before the course start date.

Group Booking Discounts:

3rd delegate & more gets 5% discount. Available for delegates from one organisation attending the same course.

When: 23rd & 24th June (JHB)

Venue (JHB): ***Glenhove Conference Centre, Melrose, JHB***

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CHARTERED FINANCIAL ANALYST CFA®

Agenda

1. The Need for Risk Management.

- Looking at the different ways of losing money;
- The Risk Management framework;
- Volatility;
- Lessons from the past (including both Bank and Corporate disasters);
- Regulators, Capital Adequacy and a brief overview of the Basel Accord.

Videos are used to supplement the material.

2. The Risk Management Toolbox.

- Measuring risk & return;
- Understanding probability and distributions;
- Diversification, correlation & covariance;
- Time aggregation and approximation;

All calculations are performed in Excel (no VBA required). Delegates will encouraged to follow along using there own laptops. Please note that laptops are encouraged but are not compulsory - delegates who don't bring laptops will be able to follow along quite easily and all spreadsheets are provided on a DvD.

3. Implementing VAR.

- Understanding what VAR is and what it means;
- Implementing a historical simulation using Excel on a diverse portfolio.
- Implementing a Monte Carlo simulation using Excel on a diverse portfolio.
- Stress testing and back testing.
- Excepted Tail Loss
- Risk mitigation and controls.
- The weaknesses of VAR.

Delegates will use live data provided, incorporating a portfolio of Forex positions, equities positions, derivative positions and interest-rate positions. Delegates will use Excel to calculate a historical VAR as well as put together a Monte Carlo simulation (without using VBA).

4. Some other portfolio risk measures.

- Looking at other methods of measuring risk (in particular for fund managers) and how these methods can be used by all financial organisations.
- Methods such as the Sharpe Ratio, Tracking error, Omega Ratio, Downside risk, Sortino ratio, skewness, kurtosis, drawdown etc will be discussed.

Again, all methods will be demonstrated using Excel with live data.

5. Approximation VAR methods (Parametric VAR).

- Why approximate?
- The normal distribution and the lognormal distribution;
- The Taylor series expansion.
- Approximation methods relating to interest rates, derivatives and time.
- A brief overview of the "Greeks".
- Delta Normal method
- Delta Gamma method.
- The pitfalls of approximation.
- Putting it all together using Excel.

Delegates will learn how to generate a parametric VAR of a multi-asset portfolio using Excel.

6. Challenges for risk managers going into the future.

- The state of the world economy;
- The business and generation mind-shift;
- Discussion forum;

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Tutor: Mark Raffaelli CFA,FRM

Mark graduated with a Bachelor of Commerce from the University of Natal, South Africa in 1990. He is a CFA Charterholder and a member of the CFA Institute. He is also a fellow member of the Global Association of Risk Professionals (GARP) and has the Financial Risk Manager (FRM) qualification. Mark's extensive experience ranges from trading in Spot & Derivative Products and Consulting to the development of Risk Models, Pricing Software and Trading Systems. Those who have been to Mark's courses will know about his passion for the financial markets and ability to cut through jargon, simplify technical issues and provide real life examples. He has been nicknamed the "*Steve Irwin of the financial markets*".

What makes Geometric Progression different from other providers:

- We don't regurgitate traditional textbooks; instead we share real life experiences.
- We explain all the products as they relate to your own lives in plain English.
- We look at how the products are used by the professionals and how you could use them yourselves to make money.
- We are one of the few providers globally that also runs courses on the more intricate aspects of the financial markets e.g. stochastic mathematics, matrices etc.
- We love multimedia and include video and film in our courses.

We also offer practical training e.g. we teach people how to trade as if they were on the desk so that they get a turn to find out what it is like. Excel and computer examples are used where required.

Things delegates have said about this course:

- "Excellent! Congratulations to Mark"
- "I enjoyed the course, it made a difference in my understanding of Risk."
- "Thanks for a very informative course. I particularly loved the videos."
- "Well done and keep it up. Very informative & insightful."
- "Good Intro and very good notes, a great value for money course."
- "The course was great! It was exactly what I expected from it."
- "Makes much more sense now. Mark is a very captivating and knowledgeable trainer"
- "I have learned a lot. The Excel implementation of real data was brilliant"

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CHARTERED FINANCIAL ANALYST

Terms and Conditions

Customer Information:
Fees include all the tuition, course file, lunches and refreshments for the duration of the course. Geometric Progression is not responsible for covering airfares or other travel costs incurred by registrants. Delegates will be responsible for their own accommodation and transport.

Disclaimer:
Geometric Progression reserves the right to change or cancel any part of the training courses due to unforeseen circumstances.

Cancellations:
If you cancel more than 10 working days before the course date, there is no cancellation fee. If you cancel between 2 and 10 days before the course date, a cancellation fee of 50% will be charged. Any cancellation less than 2 days before the course date will result in the full fee being charged.

Substitutions:
Registered delegates may be substituted at any time prior to the seminar without incurring any additional fee. Please inform Geometric Progression of the change.

Payments:
Payments must be made prior to the running of the event unless otherwise agreed with Geometric Progression.

Confirmation:
All registrations will be deemed confirmed and subject to these Terms and Conditions. Any disabled individual desiring auxiliary aid for this conference should notify Geometric Progression at least one week prior to the conference in writing, fax or email.

PLEASE NOTE:
Geometric Progression reserves the right to refuse admission where evidence of full payment cannot be shown. Should you require an original VAT INVOICE to requisition payment, please contact us on (0861) 000 615.

Geometric Progression reserves the right to cancel the course. Registered delegates will be notified and a full refund will be made.

Geometric Progression

Email to: sandra@geometricprogression.co.za or
Fax to: (+27 11) 252 8089

Booking Form

Course:______________________________Date of Course:____________________

DELEGATE 1

First & Last Name:____

Designation:____

Company: ________ __________________________ Department: ___________________

Tel:_________________________Fax:_______________Cell phone:___________________

Email:_______________________________________VAT Registration No:______________

Postal Address____

Special Dietary requirements (pls circle) None Kosher Halaal Vegetarian

DELEGATE 2

First & Last Name:____

Designation:____

Company: _____________________________________ Department: _______ _______

Tel:_________________________Fax:_______________Cell phone:____________ _______

Email:_______________________________________VAT Registration No:______________

Postal Address____

Special Dietary requirements (pls circle) None Kosher Halaal Vegetarian

DELEGATE 3

First & Last Name:____ _______

Designation:____

Company: _____________________________________ Department: ______________

Tel:_________________________Fax:_______________Cell phone:___________________

Email:_______________________________________VAT Registration No:______________

Postal Address____

Special Dietary requirements (pls circle) None Kosher Halaal Vegetarian

Authorised By: ………………………………………………………….. Date:……………………………………….

Signature: …………………………………………………………