

ARMS

FINANCIAL SERIES 1996

**PRACTICAL HANDS-ON SESSIONS
A 3-day Intensive Seminar on**

**VALUE AT
RISK
&
INTERNAL
RISK
CONTROL**

- **Singapore**
March 4-6, Hyatt Regency
July 29-31, Hyatt Regency
- **Hong Kong**
April 10-12, Island Shangri-La
September 16-18, Conrad International
- **Manila**
April 15-17, Hyatt Regency
October 14-16, Hyatt Regency
- **Kuala Lumpur**
May 6-8, Shangri-La
November 13-15, Shangri-La
- **Bangkok**
May 13-15, Grand Hyatt Erawan
December 16-18, Grand Hyatt Erawan
- **Jakarta**
May 20-22, Shangri-La
December 2-4, Grand Hyatt
- **Taipei**
May 27-29, Far Eastern Plaza
August 26-28, Grand Hyatt

- Evaluate the current trends of Value-at-Risk in treasury operations
- Discover the approaches to evaluating and managing market risk
- Develop an effective management structure to control risk
- Methodologies for risk identification, measurement, monitoring & management
- Find out all about JP Morgan's RiskMetrics data sets & methodologies
- Prime yourself about the necessary fundamental background knowledge in finance, statistics, portfolio management theory & derivatives to understand the VaR concepts.
- Find out what software tools are available to fully implement VaR in your organisation
- Practice with hands-on experience with the latest VaR software
- Learn how to draft internal risk management policies and procedures for your organisation.
- Bring back spreadsheet utilities for implementing VaR in your office

Prepare yourself to become the competent Risk Manager of the 90's

The latest development in the risk management concept of the Value at Risk or VaR approach will undeniably transform the way global banking and financial institutions deal with risk and investment in the near future. The concept of internal risk management in a formal and systematic way is ground-breaking if not revolutionary. The VaR concept comes in at a time with extremely important regulatory initiatives that were first brought about by the G30 and subsequently by the European Union's CAD (Capital Adequacy Directives) and the latest BIS requirements. It is only a matter of time that these proposed changes will become mandatory in Asia. There is a global demand for all international banks to set up an internal VaR methodology to manage risk and to establish an independent risk management unit.

Given these regulatory changes, the significant question that the senior management will have to ask themselves now is whether they will be in a position to adapt and modify the existing financial institution's risk management culture to these new and rapid developments.

In response to this growing need to understand and implement the VaR approach, ARMS, with its leading professional expertise in risk management in Asia, has designed this 3-day in-depth practical workshop to specifically assist your financial institution in the change process that will be brought about by these regulatory requirements. Everything that you need to know about the VaR approach will be discussed in this seminar. In addition, the hands-on experience with real full-functioning software complementing JP Morgan's RiskMetrics data sets in the form of case study will positively be a value added advantage to all participants.

VALUE AT RISK & INTERNAL RISK CONTROL *

DAY 1

9.00am - 10.15am **NEW TRENDS IN RISK MANAGEMENT**

- The art & science of risk management
- The impact of increased financial volatilities
- The state of global risk management practices in the capital markets
- Available tools to manage financial risks
- Systems technology in risk management

10.15am - 10.30am Refreshments

10.30am - 12.00pm **VALUE AT RISK**

- From risk measurement to risk management
- Value at Risk in the framework of financial, treasury and investment management
- Calculating the DEaR & VaR
- Practical issues in measuring market risk
- VaR as a proxy for risk capital
- VaR for limit allocation, pricing & performance measurement
- SPAN vs VaR

12.00pm - 1.30pm Lunch

1.30pm - 3.00pm **BASIC FINANCIAL CONCEPTS FOR UNDERSTANDING RISK MANAGEMENT**

- Zero curves and discount factors
- Duration & convexity
- Forwards & futures pricing
- Swaps pricing
- Options pricing

3.00 - 3.30pm Refreshments

3.30pm - 5.00pm **ADVANCED SKILLS FOR RISK MANAGEMENT**

- The building blocks approach
- Unpackaging of structured derivatives
- Creation of synthetic instruments
- Reverse engineering of synthetics
- Exotic options
- Suggested VaR treatment

DAY 2

9.00am - 10.15am **STATISTICAL BACKGROUND FOR UNDERSTANDING VaR**

- Description of market price movements
 - Stochastic Process
- Expected returns, probability distributions and the statistical assumptions
- Defining benchmarks and the forecasting of future volatility and correlation
- Estimation of volatility and correlation in VaR
- The mathematical properties of covariance matrix in non-linear positions

10.15am - 10.30am Refreshments

10.30am - 12.00pm **PORTFOLIO MANAGEMENT THEORY BASICS AND THE IMPLICATION OF VaR**

- The Markowitz model
- The single index model
- Construction of an efficient portfolio
- The capital market line & the security market line
- Arbitrage pricing theory
- Measures of portfolio performance, Jensen's measure, Sharpe's measure & Treynor's measure
- Application of VaR in portfolio performance measurement
- Asset allocation based on VaR

Course Director: Ralph Yiehmin Liu

Ralph Yiehmin Liu, MChE, MSE, Ph.D. Cand., MBA (Wharton Business School), is the Managing Director of **Advanced Risk Management Solutions (ARMS) Pte Ltd**, a Singapore-based consulting and financial training business in the area of treasury, equity investment, capital markets and derivatives. Previously he served as the Managing Director of **Chase Manhattan Asia Limited** in Hong Kong, where he set up an FX and interest rate structured derivatives business for its Asian operations. He also built a structured FX options and derivatives business in Asia for the **Union Bank of Switzerland** headquartered in Singapore. Prior to moving back to Asia, Ralph had many years of experience running FX options and the interest rate swaps & equity derivatives business with major investment (**Morgan Stanley**) and money center (Chemical) banks on Wall Street. Ralph also had an extensive experience as a user of interest rate and FX derivatives when he managed derivatives trading at AT&T and Equitable Life in New York. Ralph has been an active writer/contributor for many well-known finance journals & publications.

In Malaysia, ARMS is actively involved with the futures exchanges and their member firms through many consultancy and training projects. ARMS is also responsible for conducting the Malaysian Futures and Options Registered Representative (MFORR) course.



Ralph Yiehmin Liu
Managing Director

Guest Speaker: Mark B. Garman for Singapore & Hong Kong venue only

Mark B. Garman is an Emeritus Professor of Finance at the Haas School of Business Administration, University of California. He holds a Ph.D. in Systems Sciences (a combined computer science, optimization and industrial administration program) from Carnegie-Mellon University and did his undergraduate work in Physics at Stanford University. Professor Garman served as Associate Dean of Academic Affairs at the Berkeley Business School (1983-86). His research interests include arbitrage, options, volatility measurement, duration-related risk measures, foreign exchange and computational methods in financial engineering. He has been professionally involved with foreign currency options since 1979, and has more recently published works on perpetual currency options, lookback options, swap-rate and volatility immunization of currency options, and the expected time-to-exercise of American currency options. Dr. Garman formerly served as founder and Chairman of Capital Market Technology, Inc., a Berkeley-based risk manager of currency and commodity hedges, serving corporates, investment managers, and underwriters. He is now the principal of Financial Engineering Associates, Inc., a provider of spreadsheet add-ins for exotic derivatives, interest rate and equity options, Monte Carlo applications, Value-at-Risk and library software, and consulting services related to options and derivatives theory.

Hands-on Workshop

ARMS' team of financial engineers will guide you through the technical aspects of the practical hands-on sessions and assist you in evaluating the currently available software for VaR calculation.

*** VALUE AT RISK & INTERNAL RISK CONTROL**

12.00pm - 1.30pm **Lunch**

1.30pm - 3.15pm **CASHFLOW MAPPING AND OTHER CHOICES IN VAR**

- Risk integration goals of VaR
- Shredding vs. Mapping
- Cardinality and degrees of freedom in cashflow maps
- Duration, VaR and NPV preservation in cashflow maps

3.15pm - 3.30pm **Refreshments**

3.30pm - 4.15pm **REGULATORY ISSUES IN A RISK MANAGEMENT FRAMEWORK**

- G30 recommendations
- Clarifying the BIS position
- Examining the impact of capital adequacy requirements
- Comparing the definition and specification of market risk management under CAD and BIS
- Examining the impact of the CAD and BIS proposals on market risk management

4.15pm - 5.00pm **TREASURY RISK CONTROL POLICY & PROCEDURES**

- Independent risk management unit and the responsibilities of Risk Managers
- Reporting structure and senior management supervision
- Treasury products limits specification
- Managing credit, market, operation, liquidity, legal & people risks

DAY 3

9.00am - 10.15am **HANDS ON EXPERIENCE WITH JP MORGAN RiskMetrics**

- Downloading the RiskMetrics data from the Internet

- Navigating through JP Morgan's RiskMetrics Excel spreadsheets
- Conventional spreadsheet programme applications for portfolio risk analysis

10.15am - 10.30am **Refreshments**

10.30am - 12.00pm **ADVANCED APPLICATIONS OF JP MORGAN'S RiskMetrics**

- Identifying risk positions
- Sensitivity and risk reduction analysis
- Production of a risk management report
- Utilising third-party spreadsheet add-in functions & templates for cash-flow decomposition and mapping
- Evaluating currently available software for VaR calculation

12.00pm - 1.30pm **Lunch**

1.30pm - 3.15pm **VALUE AT RISK DIAGNOSIS OF A MULTI-CURRENCY PORTFOLIO**

- Basic analysis of a multi-currency portfolio
- Advanced analysis & understanding Value at Risk in practice
- Tailoring for stress events
- What makes one VaR model better than others

3.15pm - 3.30pm **Refreshments**

3.30pm - 4.45pm **VALUE AT RISK CASE STUDY**

- Participants will be assigned a case study using the VaR approach introduced during the course

4.45pm - 5.00pm **SUMMARY AND CONCLUSION**

Advanced Risk Management Solutions Pte Ltd

VALUE AT RISK & INTERNAL RISK CONTROL

REGISTRATION FORM

Please submit to **ADVANCED RISK MANAGEMENT SOLUTIONS PTE LTD, TANGLIN P O BOX 391, SINGAPORE 912414.**

Tel:(65) 734-9803/04; Fax:(65) 734-0392

Ref VAR/0396 A B C D E F G H J K L M N P Q R S T U V W X

Name _____ Name _____

Designation _____ Designation _____

Department _____ Department _____

Name of Company _____

Telephone _____ Fax _____ Address _____

Name & Title of Approving Manager _____ Postal code _____

My cheque/draft for _____ participants each totalling to _____ is enclosed.

Please put me on your mailing list. Please delete me from your mailing list.

(Please photocopy for additional delegates)

REGISTRATION INFORMATION

Dates & Venue

Country	Dates 1996	Hotel	Tel	Fax
Singapore	4-6 March	Hyatt Regency, Singapore	(65) 738-1234	(65) 732-1696
	29-31 July			
Hong Kong	10-12 April	Island Shangri-La, Hong Kong	(852) 2877-3838	(852) 2521-8742
	16-18 Sept	Conrade International	(852) 2521-3838	(852) 2521-3888
Manila	15-17 April 14-16 October	Hyatt Regency, Manila	(63-2) 833-1234	(63-2) 833-5913
Kuala Lumpur	6-8 May 13-15 November	Shangri-La, Kuala Lumpur	(60-3) 232-2388	(60-3) 230-1514
Bangkok	13-15 May 16-18 December	Grand Hyatt Erawan, Bangkok	(66-2) 254-1234	(66-2)254-6308
Jakarta	20-22 May	Shangri-La, Jakarta	(62-21) 570-7440	(62-21) 570-3530
	2-4 December	Grand Hyatt, Jakarta	(62-21) 390-1234	(62-21) 390-6426
Taipei	27-29 May	Grand Hyatt, Taipei	(886-2) 720-1234	(886-2) 720-1111
	26-28 August			

Attendance is limited and only pre-paid participants will be guaranteed a place

Seminar Fees : in Singapore Dollars

includes refreshments, lunch and one set of course material.

Singapore	Taipei	Hong Kong	Manila
\$2,900*	\$2,900	\$2,900	\$2,900
Kuala Lumpur	Bangkok	Jakarta	
\$2,900	\$2,900	\$2,900	

*+ 3% GST for Singapore Venue only

Early Registration

For registrations with payments received one month before the respective seminar, the fee will be reduced by 10%.

How to Register

Fax the completed registration form to (65)734-0392.

Mail the Registration Form with your cheque made out to **Advanced Risk Management Solutions Pte Ltd**, Tanglin PO Box 391, Singapore 912414. Telephone Bookings are considered confirmed but must be followed up in writing. Tel: (65) 734 9803/04.

Payments

1. Either bank draft or cheque made payable to **Advanced Risk Management Solutions Pte Ltd**". All payments must be made in **Singapore Dollars**.
2. Telegraphic transfer to **DBS Bank Singapore, 6 Shenton Way, DBS Building, Singapore 068809. Swift Destination : DBS SS GSG, Name: Advanced Risk Management Solutions Pte Ltd, Account #65-04560-5.** Bank charges are to be deducted participating by the organisations' own accounts, and the full fee must be received by the organisers. Please quote VAR/0396 on the advice when remitting payment.

3. Credit Card

Please debit my

Amex Visa Mastercard

Card No.

Signature _____ Expiry Date _____

Participants are encouraged to pay either by bank draft, cheque or T T.

Confirmation

All paid registrations will be confirmed in writing and participants will be forwarded joining instructions. Cancellations received in writing one month before the actual seminar will be refunded less S\$200 administration fee. Thereafter, cancellations are not refundable although participants can be substituted at any time. **Registration fees for spaces booked or invoiced ONE MONTH BEFORE** the respective event are still payable in full in the event of non-attendance, even if communicated to the organisers.

Enquiries

All enquiries, bookings, payments and changes to delegate information should be directed to **Advanced Risk Management Solutions Pte Ltd** at the above numbers and/or address.

Documentation

Seminar documentation is available for purchase after the respective event. Please contact our office staff for more details at Tel no: (65) 734-9803/04.

Accommodation

A special room rate has been extended to all delegates in the respective hotels. Hotel charges are at the participant's own account. Reservations can be made directly with the respective hotels. Please quote the seminar when registering.

TELEPHONE: (65) 734 - 9803/04

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