JUNE 18, 19, 20 AND 21, 2014 Mexico, City

- 4-day of educational experience for Traders, Fund Managers, Risk Managers, Quants and regulator with the most acknowledged authorities worldwide
- The most important Conference in LatAm with the participation of Traders, Fund Managers, Treasurers, Quants and Risk Managers.
- Learn from the big Practitioners the forefront techniques in Risk Management Modeling, Trading Strategies and Fund Managing.

KEYNOTE SPEAKER

Nick Leeson Former Barings Bank Trader





Marco Avellaneda





Toronto University



Columbia University/ Former Goldman Sachs



Elizabeth Ritter Chief of Staff and Senior Counsel at Commodity Futures Trading Commission (CFTC)



Ronald H. Filler New York Law School



Georgia Institute of Technology (Georgia Tech)



Suresh Sankaran **Managing Director** Kamakura Corporation



Izzy Nelken Super Computer Consulting



GaryDeWaal DeWaal and Associates LLC





Marcelo G. Cruz Marcos López De Prado Morgan Stanley Senior Managing Director **Guggenheim Partners**



Santiago Carrillo Quantitative Risk Research S.L.



Gunter Meissner Cassandra Capital Management



Edward Altman



Jon Gregory Solum Financial Partners LLP



Heleodoro Ruiz Banorte-IXE



Gustavo Fuertes PricewaterhouseCoopers (PWC)



Rafael García **Fundador SERFIEX**



José Diego Alarcón Jordi Payés Director del área Tecnología y nuevos **Actuarial SERFIEX** productos SERFIEX



Carlos Vallebueno Tesorero Corporativo **Banamex-CITI**



Luis Seco President and CEO of Sigma Analysis & Management Ltd



Abraham Izuierdo Credit & Liquidity Risk Associate Director Scotiabank México



Carlos Orta



Gerardo Zamudio **Asset Management**



John Soldevilla Analista Económico **GE Capital**



Oscar Sierra



José Alatorre Estructuración de Commodities Americas Barclays Capital NY



Erick Morales KPMG



Nicolás Olea Partner-Financial Risk Management KPMG



Antonio Villareal **Risk Consulting KPMG México**





RiskMathics, aware that the most important factors to develop and consolidate the Financial WHO SHOULD ATTEND? Markets are training and promoting a high level financial culture, will host for the third time in Mexico: "The Risk Management & Trading Conference", which will have the participation of leading authorities who have key roles in the global financial industry.

OBJECTIVES

One of the primary objectives of this Conference is to provide through Workshops, Presentations and Round Table Discussions the latest advances in Risk Management, Trading, Technology and Market Regulation, and to transmit all this knowledge by local and international authorities in the field.

Some other objectives of this Conference are to explain and show in detail the current situation and where the Global Financial Industry is heading, advances in Pricing, and how intermediaries and direct or indirect participants of markets need to be prepared to remain competitive in spite of the new challenges and paradigms that are present nowadays.

The Risk Management & Trading Conference is aim at Practitioners directly or indirectly involved in areas of trading, risk management, regulation, technology, and research & development of Stock Exchanges, Brokers, Brokerage Houses, Banks, Institutional Investors (Pension Funds, Mutual Funds, Insurance Companies, etc.), Hedge Funds, and Independent Investors.

It will be of particular relevance to:

- Chief Executive Officers of financial institutions and intermediaries
- Traders
- Risk Managers
- Consultants
- Regulators
- Technology managers and staff
- Analysts, Developers and Vendors of Front Office Trading Software
- Quants
- Scholars/Academics
- In general, any Practitioner involved in Trading, Risk and/or Finance

RISK MANAGEMENT WORKSHOPS

FINANCIAL CORRELATIONS - MODELS, TRADING, AND RISK-MANAGEMENT INCLUDES THE BASEL III CORRELATION FRAMEWORK	RISK AGGREGATION	RISK APPETITE	COUNTERPARTY RISK & CVA	CREDIT RISK & REGULATION	LIQUIDITY RISK
Gunter Meissner	Carlos Vallebueno	Gustavo Fuertes John	Jon Gregory		Suresh Sankaran
President of Derivatives Software	Tesorero	PriceWaterhouse Soldevilla	Solum Financial	John Hull	Managing Director
& CEO Cassandra Capital	Corporativo	Coopers GE Capital	D (11D	Toronto University	Kamakura Corporation
Management	Banamex-CITI	i GE capital			·

SYSTEMIC AND SOVEREIGN RISK

MARKET RISK	OPERA	TIONAL RISK	CORPORATE CREDIT SCORING MODELS AND PREDICTING CORPORATE CRISIS	CURRENT CONDITIONS AND OUTLOOK FOR GLOBAL CORPORATE AND SOVEREIGN CREDIT MARKETS	sc	DLVENCY	
Gerardo Zamudio Asset Manager	Santiago Carrillo QRR	Marcelo G. Cruz Global Head Morgan Stanley	Edward Stern So Business Universit	chool of New York	Rafael García Serfiex	José Diego Alarcón Serfiex	Jordi Payés Serfiex

TRADING AND QUANTITATIVE FINANCE WORKSHOPS

	DISPERSION STATISTICAL ARBITRAGE FOR OPTIONS AND SWAPS		ITATIONAL FINA QUANTS	INCE FOR	FIXED INCOME: TRADING & ARBITRAGING THE YIELD CURVE	LOW-FREQUENCY TRADERS IN A HIGH- FREQUENCY WORLD: A SURVIVAL GUIDE	MODELS FOR ARBITRAGING, HEDGING, TRADING & RISK MANAGEMENT	TRADING	VOLATILTY
Marco Avellan Courant Institut Mathematical Sci NYU and Senior F Finance Concept	e of Courant Institute of Mathematical Sciences, NYU and Senior Part II. Finance	Oscar Sierra	Emanuel Derman Columbia University-Former Goldman Sachs	Rohan Rao Georgia Institute of Technology (Georgia Tech)	Izzy Nelken Presidente y Fundador Super Computer Consulting	Marcos López De Prado Senior Managing Director Guggenheim Partners	Paul Wilmott	José Alatorre Estructuración de Commodities Americas Barclays Capital NY	Emanuel Derman Columbia University Former Goldman Sachs

ASSET AND TREASURY MANAGEMENT WORKSHOPS

•	MANAGEMENT (MANAGING AND G IN A HEDGE FUND)	TREASURY MANAGEMENT
Luis Seco Sigma Analysis & Management Ltd	Marcos López De Prado Senior Managing Director Guggenheim Partners	Suresh Sankaran Managing Director Kamakura Corporation

REGULATION

	DODD FRANK - EMIR: THE CHALLENGES OF SWAP DEALERS, CENTRAL COUNTERPARTIES, EXECUTION FACILITIES, TRADE REPOSITORIES AND END USERS TRADING SWAPS INTERNATIONALLY				GIPS® GLOBAL INVESTMENT PERFORMANCE STANDARDS	IFRS 9 (INTERNATI REPORTING S		
Carlos Oi CNBV	ta Heleodoro Ruiz Banorte-IXE	Abraham Izquierdo Scotiabank	Ron Filler New York Law School	Gary DeWaal President Gary DeWaal and Associates LLC	Elizabeth Ritter Chief of Staff and Senior Counsel at Commodity Futures Trading Commission (CFTC)	Erick Morales KPMG	Nicolás Olea KPMG	Antonio Villarreal KPMG

AN EXCLUSIVE
FOUR -DAY
CONFERENCE WITH
HIGH LEVEL GURUS
AND
WORKSHOPS

PANEL

SEMINAR

WORKSHOP

WORKSHOP

CONFERENCE

AGENDA DAY 1

WEDNESDAY, JUNE 18[™], 2014 Registration 7:00 AM - 8:00 AM Conference Breakfast: John Hull 8:00 AM - 9:30 AM THE FUTURE OF DERIVATIVES TRADING (Plenary Hall) ROOM 1 ROOM 4 ROOM 6 ROOM 7 PLENARY HALL ROOM 3 ROOM 5 ROOM 2 WORKSHOP TREASURY MANAGEMENT WORKSHOP TRADING VOLATILITY WORKSHOP RISK APPETITE CREDIT RISK, WORKSHOP **WORKSHOP** COUNTERPARTY RISK & CVA **MARKET** COMPUTATIONAL **RISK AND FINANCE FOR REGULATION** Jon Gregory Solum Financia **QUANTS** 10:00 AM - 12:00 PM Suresh Sankaran Managing Director Kamakura Corporation **Gustavo Fuertes** José Alatorre John Hull Partners LLP (Part I) Estructuración de Oscar Sierra (PWC) Toronto University Commodities Américas (Part I) Barclays Capital NY (Part I) (Part I) (Part I) (Part I) 12:00 PM - 12:30 PM **BREAK** CREDIT RISK, WORKSHOP COUNTERPARTY TREASURY MANAGEMENT TRADING VOLATILITY RISK APPETITE COMPUTATIONAL **MARKET FINANCE FOR** 12:30 PM - 2:30 PM **RISK AND** QUANTS **RISK & CVA** (Continue Part I) (Continue Part I) (Continue Part I) REGULATION (Continue Part I) (Continue Part I) (Continue Part I) FREE LUNCH 2:30 PM - 4:00 PM WORKSHOP FIXED INCOME: TRADING & ARBITRAGING THE YIELD CURVE WORKSHOP COUNTERPARTY RISK & CVA TREASURY MANAGEMENT TRADING VOLATILITY COMPUTATIONAL **WORKSHOP** CREDIT RISK, **MARKET FINANCE FOR APPETITE REGULACIÓN: QUANTS** (Continue Part I) (Continue Part I) DODD FRANK Y EMIR: THE CHALLENGES **RISK AND** (Continue Part I) REGULATION 4:00 PM - 5:00 PM (Continue Part I) (Continue Part I) OF SWAP DEALERS, CENTRAL (Continue Part I) COUNTERPARTIES, EXECUTION FACILITIES Izzy Nelken Presidente y Fundador TRADE REPOSITORIES Super Computer AND END USERS TRADING SWAPS INTERNATIONALLY (Part I) Gary DeWaal 5:00 PM - 6:00 PM Gary DeWaal and Associates LLC New York Law School Elizabeth Ritter Chief of Staff and Senio Counsel at Commodity Futures Trading Commission (CFTC) 6:00 PM - 7:00 PM WORKSHOP OPERATIONAL **WORKSHOP** (Part I) **WORKSHOP** WORKSHOP BASEL III. **SOLVENCY GLOBAL** DEVELO MENI INVESTMENT RISK José Diego Alarcón AND PERFORMANCE **IMPLEMENTATION** (Part I) STANDARDS Santiago Carrillo QRR (Part I) (GIPS®) Carlos Orta Comisión Nacional Bancaria y de Valores **Erick Morales** (Part I) (Part I) 7:00 PM - 8:00 PM 8:00 PM - 8:15 PM **BREAK** FIXED INCOME: TRADING & ARBITRAGING THE YIELD CURVE **OPERATIONAL GLOBAL SOLVENCY** BASEL III. PANEL: REGULATORY INVESTMENT PERFORMANCE STANDARDS DEVELOPMENT RISK (Continue Parte I) AND STRUCTURE AND (Continue Parte I) **MARKET TRENDS IMPLEMENTATION** 8:15 PM - 10:00 PM (GIPS®) IN THE GLOBAL (Continue Parte I) (Continue Parte I) MARKETS (Continue Parte I) Ron Filler, Gary DeWaal, John Hull, Sandy Frucher and Elizabeth Ritter

AGENDA DAY 2

Thursday, JUNE 19[™], 2014

Conference Breakfast: Edward Altman SYSTEMIC AND SOVEREIGN RISK

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					(Plena	ary Hall)					
	ROOM 1	ROOM 2	ROOM 3	ROOM 4	ROOM 5	ROOM 6	ROOM 7	ROOM 8	ROOM 9	ROOM 10	PLENARY HALI
0:00 AM - 11:00 AM	WORKSHOP OPERATIONAL RISK Santiago Carrillo (Part II)	WORKSHOP TREASURY MANAGEMENT Suresh Sankaran (Part II)	WORKSHOP COMPUTATIONAL FINANCE FOR QUANTS Oscar Sierra (Part II)	WORKSHOP TRADING VOLATILITY José Alatorre (Part II)		WORKSHOP TRADING DISPERSION STRATEGIES AND RELATIVE VALUE FOR OPTIONS AND SWAPS Marco Avellaneda Courant Institute of Mathematical Sciences, NYU and Senior Partner,	WORKSHOP MARKET RISK Gerardo Zamudio Fund Manager Solum Financial Partners LLP (Part I)	WORKSHOP QUANTITATIVE MODELS FOR ARBITRAGING, HEDGING, TRADING & RISK MANAGEMENT Paul Wilmott (Parte I)	WORKSHOP RISK APPETITE Gustavo Fuertes PricewaterhouseCoopers (PWC) (Part II)	WORKSHOP IFRS 9 FINANCIAL SECURITIES (INTERNATIONAL FINANCIAL REPORTING STANDARD) Nicolás Olea Antonio Villarreal KPMG	WORKSHOP CURRENT CONDITIONS AND OUTLOO FOR GLOBAL CORPORATE AND SOVEREIC CREDIT MARKETS Edward Altman NYU
						Finance Concepts LLC				(Continue Part I)	
2:00 PM - 12:30 PM						BREAK					
2:30 PM - 2:30 PM	OPERATIONAL RISK (Continue Part II)	TREASURY MANAGEMENT (Continue Part II)	COMPUTATIONAL FINANCE FOR QUANTS (Continue Part II)	TRADING VOLATILITY (Continue Part II)		TRADING DISPERSION STRATEGIES AND RELATIVE VALUE FOR OPTIONS AND SWAPS (Continue)	MARKET RISK (Continue Part I)	QUANTITATIVE MODELS FOR ARBITRAGING, HEDGING, TRADING & RISK MANAGEMENT (Continue Part I)	RISK APPETITE (Continue Part II)	IFRS 9 INSTRUMENTOS FINANCIEROS (INTERNATIONAL FINANCIAL REPORTING STANDARD)	AND OUTLOOK
2:30 PM - 4:00 PM						FREE LUNCH					
4:00 PM - 5:00 PM	OPERATIONAL RISK (Continue Part II)	TREASURY MANAGEMENT (Continue Parte II)	COMPUTATIONAL FINANCE FOR QUANTS (Continue Part II)	TRADING VOLATILITY (Continue Part II)	FIXED INCOME: TRADING & ARBITRAGING THE YIELD CURVE Izzy Nelken Presidente y Fundador	TRADING DISPERSION STRATEGIES AND RELATIVE VALUE FOR OPTIONS AND SWAPS (Continue)	MARKET RISK (Continue Part I)	WORKSHOP BASEL III. DEVELOPMENT AND IMPLEMENTATION Carlos Orta CNBV (Part II)	CHALLENGES OF SWAP DEALERS, CENTRAL COUNTERPARTIES,	WORKSHOP COUNTERPARTY RISK & CVA Jon Gregory Solum Financial Partners LLP (Part II)	(
5:00 PM - 6:00 PM					Super Computer Consulting (Part II)				EXECUTION FACILITIES, TRADE REPOSITORIES AND END USERS TRADING SWAPS INTERNATIONALLY Gary DeWaal Ron Filler Elizabeth Ritter		
3:00 PM - 7:00 PM		WORKSHOP SOLVENCY José Diego Alarcón (Part II)		WORKSHOP GLOBAL INVESTMENT PERFORMANCE STANDARDS (GIPS®)					(Part II)		SCHEDULE: 6:30 PM - 8:0 THE FAILINGS BARINGS BAN RISK CONTRO HOW IT IS STI RELEVANT TOI
7:00 PM - 8:00 PM				Erick Morales KPMG							NICK
				(Part II)							LEESON
3:00 PM - 8:30 PM						BREAK					DANEL
:30 PM - 10:00 PM		SOLVENCY (Continue Parte II)		GLOBAL INVESTMENT PERFORMANCE STANDARDS (GIPS®) (Continue Parte II)	FIXED INCOME (Continue Parte II)		Chan	npagne	&	WORKSHOP COUNTERPARTY RISK & CVA (Continue Part II)	PANEL: RISK MANAGEMEN MEASURES AN CONTROLS IN THE FINANCIA INSTITUTIONS COULD BARINO HAPPEN AGAI Luis Seco, John Hull, N Lesson, Marcelo Cruz, P Wilmott, Emanuel Derm Marco Avellaneda, Edwa Altman
							Wine	Tasting			
·	•						10:00 P	npagne Tasting M-1:00 AM			

AGENDA DAY 3

FRIDAY, JUNE 20TH, 2014

					, JUNE 20	,				
	ROOM 1	ROOM 2	ROOM 3	ROOM 4	ROOM 5	ROOM 6	ROOM 7	ROOM 8	ROOM 9	ROOM 10
1:00 AM - 11:00 AM		WORKSHOP LIQUIDITY RISK Suresh Sankaran	WORKSHOP COMPUTATIONAL FINANCE FOR QUANTS Emanuel Derman (Part III) WORKSHOP	III CORRELATION	WORKSHOP HEDGE FUNDS RISK MANAGEMENT (MANAGING AND INVESTING IN A HEDGE FUND) Luis Seco Sigma Analysis &	WORKSHOP STATISTICAL ARBITRAGE	WORKSHOP MARKET RISK Gerardo Zamudio Global Asset Management	WORKSHOP QUANTITATIVE MODELS FOR ARBITRAGING, HEDGING, TRADING & RISK	WORKSHOP CORPORATE CREDIT SCORING MODELS AND PREDICTING CORPORATE CRISIS	WORKSHOP LOW-FREQUENC TRADERS IN A HIGH-FREQUENC WORLD: A SURVIV GUIDE
	Marcelo G. Cruz Global Head Morgan Stanley (Part III)	Managing Director Kamakura Corporation (Part I)	TRADING	FRAMEWORK Gunter Meissner President of Derivatives Software & CEO Cassandra Capital Management (Part I)	Management Ltd (Part I)	Marco Avellaneda Courant Institute NYU	(Part II)	MANAGEMENT Paul Wilmott (Part II)	Edward Altman NYU	Marcos López De Pra Head of Quantitative Trading Hess Energy Trading Company
:00 AM - 11:30 AM			COMPUTATIONAL	WORKSHOP	BRE			OLIANITITATINE		
1:30 AM - 1:30 PM	OPERATIONAL RISK (Continue Part III)	LIQUIDITY RISK (Continue Part I)	FINANCE FOR QUANTS	FINANCIAL CORRELATIONS - MODELS, TRADING, AND RISK-MANAGEMENT INCLUDES THE BASEL III CORRELATION FRAMEWORK (Continue Part I)	HEDGE FUNDS RISK MANAGEMENT (MANAGING AND INVESTING IN A HEDGE FUND) (Continue Part I)	STATISTICAL ARBITRAGE (Continue)	MARKET RISK (Continue Part II)	QUANTITATIVE MODELS FOR ARBITRAGING, HEDGING, TRADING & RISK MANAGEMENT (Continue Part II)	CORPORATE CREDIT SCORING MODELS AND PREDICTING CORPORATE CRISIS (Continue)	LOW-FREQUENC TRADERS IN A HIGH-FREQUENC WORLD: A SURVIVAL GUIDI (Continue)
1:30 PM - 3:00 PM					FREE L	LUNCH				
3:00 PM - 4:00 PM	OPERATIONAL RISK (Continue Part III)	LIQUIDITY RISK (Continue Part I)	COMPUTATIONAL FINANCE FOR QUANTS Rohan Rao Georgia Institute of Technology	CORRELATIONS -	HEDGE FUNDS RISK MANAGEMENT (MANAGING AND INVESTING IN A HEDGE FUND) (Continue Part I)	STATISTICAL ARBITRAGE (Continue)	MARKET RISK (Continue Part II)	QUANTITATIVE MODELS FOR ARBITRAGING, HEDGING, TRADING & RISK MANAGEMENT (Continue Part II)		LOW-FREQUENC' TRADERS IN A HIGH-FREQUENC' WORLD: A SURVIVAL GUIDE (Continue)
1:00 PM - 5:00 PM			(Georgia Tech) (Part IV)	(Common and)					WORKSHOP IFRS 9 -INSTRUMENTOS FINANCIEROS (INTERNATIONAL FINANCIAL	
5:00 PM - 6:00 PM					ı				REPORTING STANDARD) Nicolás Olea - Antonio Villarreal	
6:00 PM - 7:00 PM		WORKSHOP SOLVENCY Rafael García SERFIEX (Part III)		WORKSHOP GLOBAL INVESTMENT PERFORMANCE STANDARDS (GIPS®)				WORKSHOP RISK AGGREGATION Carlos Vallebueno Tesorero Corporativo Banamex-CITI	KPMG (Part II)	WORKSHOP BASEL III. DEVELOPMEN AND IMPLEMENTATIO
7:00 PM - 8:00 PM				Erick Morales KPMG (Part III)				(Part I)		Banorte-Ixe (Part III)
8:00 PM- 8:15 PM					BRE	AK				
8:15 PM - 9:00 PM		SOLVENCY (Continue Part III)		GLOBAL INVESTMENT PERFORMANCE STANDARDS (GIPS®)				RISK AGGREGATION (Continue Part I)		BASEL III. DEVELOPMENT AND IMPLEMENTATIO (Continue Part III)
):00 PM - 10:00 PM				(Continue Part III)						

























AGENDA DAY 4

FRIDAY ILINE 21ST 2014

TRIDAT, JUNE 21, 2014											
	ROOM 1	ROOM 2	ROOM 3	ROOM 4	ROOM 5	ROOM 6	ROOM 7	ROOM 8	ROOM 9	ROOM 10	ROOM 11
9:00 AM - 11:00 AM	WORKSHOP OPERATIONAL RISK	RISK Suresh Sankaran	WORKSHOP COMPUTATIONAL FINANCE FOR QU ANTS Rohan Rao	WORKSHOP FINANCIAL CORRELATIONS - MODELS, TRADING, AND RISK-MANAGEMENT INCLUDES	WORKSHOP HEDGE FUNDS RISK MANAGEMENT (MANAGING AND INVESTING IN A	WORKSHOP RISK APPETITE John Soldevilla	WORKSHOP MARKET RISK Gerardo Zamudio	WORKSHOP RISK AGGREGATION Carlos Vallebueno	WORKSHOP IFRS 9 -INSTRUMENTOS FINANCIEROS (INTERNATIONAL FINANCIAL REPORTING STANDARD)	WORKSHOP Basel III Development And Implementation	WORKSHO SOLVENO Jordi Payés SERFIEX
	Marcelo G. Cruz Global Head Morgan Stanley (Part IV)	Principal Operations Officer (Part II)	Georgia Institute of Technology (Georgia Tech) (Part IV)	THE BASEL III CORRELATION FRAMEWORK Gunter Meissner (Part II)	HEDGE FUND) Marcos López De Prado Head of Quantitative Trading Hess Energy Trading Company (Part II)	GE Capital (Part III)	Fund Manager Solum Financial Partners LLP (Part III)	Tesorero Corporativo Banamex-CITI (Part II)	Nicolás Olea / Antonio Villarreal KPMG (Part III)	Abraham Izquierdo ScotiaBank (Part IV)	(Part IV)
11:00 AM - 11:30 AM						BREAK					
11:30 AM - 1:30 PM	OPERATIONAL RISK	LIQUIDITY RISK	COMPUTATIONAL FINANCE FOR QU ANTS	FINANCIAL CORRELATIONS – MODELS, TRADING, AND RISK-MANAGEMENT INCLUDES THE BASEL	(MANAGING AND	RISK APPETITE	MARKET RISK	WORKSHOP RISK	IFRS 9 -INSTRUMENTOS FINANCIEROS (INTERNATIONAL FINANCIAL REPORTING	DEVELOPMENT AND	SOLVENC (Continue part IV
11.007.111	(Continue Part IV)	(Continue Part II)	(Continue Part IV)	III CORRELATION FRAMEWORK (Continue part II)	INVESTING IN A HEDGE FUND) (Continue part III)	(Continue part III)	(Continue part III)	AGGREGATION (Continue part II)	STANDARD) (Continue part III)	(Continue Part IV)	
1:30 PM - 3:00 PM						FREE LUNCH					
3:00 PM - 4:00 PM	OPERATIONAL RISK (Continue Part IV)	LIQUIDITY RISK (Continue Part II)	COMPUTATIONAL FINANCE FOR QU ANTS (Continue Part IV)	FINANCIAL CORRELATIONS - MODELS, TRADING, AND RISK-MANAGEMENT INCLUDES THE BASEL III CORRELATION FRAMEWORK	HEDGE FUNDS RISK MANAGEMENT (MANAGING AND INVESTING IN A HEDGE FUND)	RISK APPETITE (Continue Part III)	MARKET RISK (Continue part III)	WORKSHOP RISK AGGREGATION (Continue part II)	IFRS 9 -INSTRUMENTOS FINANCIEROS (INTERNATIONAL FINANCIAL REPORTING STANDARD) (Continue part III)	BASEL III DEVELOPMENT AND IMPLEMENTATION (Continue partiV)	SOLVENC (Continue part IV
4:00 PM - 5:00 PM				(Continue Part II)	(Continue PartIII)					(Continue partir)	

KEYNOTE SPEAKER

Panel: june 19[™] (Day 2) 6:30 PM – 8:00 PM

nick leeson

The Failings of Barings Bank & Risk Control; How It Is Still Relevant Today

Nick Leeson a.k.a. the "rogue trader" that broke Barings Bank is one of the UK's most sought-after speakers on the global speaking circuit. Curiosity, intrigue and sympathy have been the various reactions to this mans' incredible life story. The collapse of Barings and Nick Leeson's role in it is one of the most spectacular debacles in modern financial history.

How could one trader bring down the banking empire that had funded the Napoleonic Wars? Nick Leeson, the young gambler who found him self sucked into a terrifying spiral of loss, was a working class boy who lived high in an upper class world until his unchecked gambling caused the downfall of Barings, the Banker to the English Peerage and caused chaos in the Singaporean money market. Markets have always been cruel but rarely have they been so cruel, so swiftly and on such a grand a scale. Nick talks frankly about what happened, the lack of accounting safeguards, his capture and confinement for 9 months in a Frankfurt prison and being sentenced to 6 years by the Singapore court for forgery and cheating.

Nick speaks regularly at conferences and corporate dinners and has travelled extensively within Europe and to New Zealand, Russia, USA, Canada, Mexico, Australia, United Arab Emirates and South Africa in the process. The event usually comprises of a speech lasting between 35-45 minutes followed by an in-depth and candid Q&A session that can be tailored to your requirements.

Nick Leeson also addresses university campuses and has spoken at the Oxford Union, Trinity College Dublin and the University College Cork.



This type of event represents a unique opportunity for people to meet and question the main participant in arguably one of the most memorable and significant banking scandals that the world has witnessed. The story also has a number of human interest aspects that will astound any audience so is not restricted to the world of suits and power lunches that he used to frequent.

The Build Up To 1995

The week before Nick Leeson disappeared he had kept throwing up at work.

Colleagues did not know why but were soon to find out.

The ego of a 28-year-old trader on the Singapore Monetary Exchange and the greed and stupidity of a 233-year-old bank had combined to destroy an investment empire and in the process stunned the world...

Nick Leeson's life started as a classic rags-to-riches tale. He was the working class son of a plasterer from a Watford council estate, who failed his final maths exam and left school with a mere handful of qualifications. Nonetheless, in the early 1980s, he landed a job as a clerk with royal bank Coutts, followed by a string of jobs with other banks, ending up with Barings, where he quickly made an impression and was promoted to the trading floor.

Before long, he was appointed manager of a new operation in futures markets on the Singapore Monetary Exchange (SIMEX) and was soon making millions for Barings by betting on the future direction of the Nikkei Index. His bosses back in London, who viewed with glee his large profits, trusted the whizzkid. Leeson and his wife Lisa seemed to have everything: a salary of £50,000 with bonuses of up to £150,000, weekends in exotic places, a smart apartment and frequent parties and to top it all they even seemed to be very much in love.

The job of a derivatives trader is akin to a bookie once removed, taking bets on people making bets and Leeson started by buying and selling the simplest kind of derivatives futures pegged to the Nikkei 225, the Japanese equivalent to the UK's FTSE 100. At the time the trader only had to put down a small percentage of the amount that was being traded, it was therefore easily possible for the money on the table to be exceeded many times by losses. However Leeson seemed to be infallible to Barings Chief Executives, by the end of 1993, he had made more than £10m - about 10% of total profit that year. Barings believed that it wasn't exposed to any losses because Leeson claimed that he was executing purchase orders on behalf of a client. What the company did not realise was that is was responsible for error account 88888 where Leeson hid his losses. This account had been set up to cover up a mistake made by an inexperienced team member, which led to a loss of £20,000. Leeson now used this account to cover his own mounting losses. In a fatal mistake, the bank allowed Leeson to remain Chief Trader while being responsible for settling his trades, a job that is usually split.

By December 1994 the red ink hidden in account 88888 totalled \$512 million. Getting increasingly desperate Leeson bet that the Nikkei index would not drop below 19,000 points. At the time this seemed reasonable as the Japanese economy was rebounding after a 30-month recession. Then on the 17th January 1995, a devastating earthquake measuring 7.2 hit the Japanese city of Kobe. The previously stable Nikkei index plummeted by 7% in a week. As the losses grew, Leeson requested extra funds to continue trading, hoping to extricate himself from the mess by more deals. Leeson was counting that there would be a post quake rebound and the Nikki would stabilise at 19,000. There was no hedges, no bets the other way to protect Barings' huge exposures. There was no rebound. Over three months he bought more than 20,000 futures contracts worth about \$180,000 each in a vain attempt to move the market. Some three quarters of the \$1.3 billion he lost Barrings resulted from these trades. When Barings executives discovered what had happened, they informed the Bank of England that Barings was effectively bust.

Two days before his 28th birthday Nicholas William Lesson went missing from Singapore on his desk he left a hurriedly scribbled not saying "I'm Sorry." He guessed he would be jailed for the fraud and in the hope of being locked up in the UK rather than the Far East; the couple went on the run. He went first to an exclusive resort in Borneo, and then to Frankfurt. The worlds most wanted man on the cover of every newspaper checked in on his flight to Europe using his own name and hiding beneath a baseball cap. The German authorities were alerted and the Police were there to greet Leeson as he touched down. On the news of Leesons arrest cheers erupted in the worlds futures markets.

In his wake he had wiped out the 233 year old Baring investment Bank, who proudly counted HM The Queen as a client. The \$1.3 billion dollars of liabilities he had run up was more than the entire capital and reserves of the bank. Investors saw their savings wiped out, and some 1,200 of Leeson's fellow employees lost their Jobs. Dutch bank ING agreed to assume nearly all of Barings' debt and acquired the bank for the princely sum of £1.

Who was to blame? Leeson definitely. He pleaded guilty to forging documents and misleading SIMEX, but as the dust settled from the Barrings collapse, the famous line from the Watergate prosecution was asked; "What did the President know, and when did he know it?" Although there is no doubt about Leesons deeds, could senior bank officials not have known of the rogue trader's actions? The Bank of England in its report concluded, that the hot shot trader had acted alone managing to pull the wool over his superiors eyes until it was too late to save the bank. It was certainly a fact that most of the old school really never understood or cared to master the complexities of derivatives trading.

But Barings could not totally escape blame, an internal memo dated in 1993 had warned the London headquarters about allowing Leeson to be both trader and settlement officer "We are in danger of setting up a system that will prove disastrous." Nothing was done. In January 1995 SIMEX expressed concern to the bank about Leesons dealings, but to no avail as the bank still wired him \$1 billon to continue his trading. A report by the Singapore authorities into the collapse regards with disbelief, the protestations by Leeson's superiors, all of who were forced to resign, that they knew nothing of error account 88888.

After his arrest in Germany he spent a few fraught months trying to escape extradition to Singapore. He failed and in December 1995 a court in Singapore sentenced him to six and a half years after pleading guilty to two counts of deceiving the bank's auditors and of cheating the Singapore exchange. Having served nearly nine months in Germany awaiting extradition, his sentence was backdated to March 2, 1995.

The fortunes of Leeson's personal life also seemed to mirror the peaks and troughs of his career. Lisa his wife got a job as an airhostess to be able to visit him regularly. She even helped him write his book, Rogue Trader. Their marriage at first survived the strain of being apart. But what Lisa could not abide were his revelations of his infidelity with Geisha girls, and she divorced him. Her remarriage — to another City trader served to further knock his spirit and he grew very depressed at losing his once-devoted wife.

Within months, Leeson was diagnosed as suffering from cancer of the colon, the disease that had killed his mother when he was only 20. From being a partying, good-time youngster who could abuse his body with heavy drinking, he was reduced to a ghost of a man. His weight plummeted and most of his hair fell out from chemotherapy. His father, a plasterer, has myeloma, diagnosed after Nick himself fell ill.

Prison itself was not exactly kind to the immune system; it was a hard existence, Nick being locked up with two others in a tiny cell 23 hours out of 24. All prisoners belonged to a gang, and cellmates were deliberately paired with a rival gang member to create tension and unrest, and when fights broke out you inevitably got drawn in. Nick Leeson slept on the rough concrete floor; breakfast was three slices of bread and the other meals, monotonous rice with a bit of chicken or vegetables. The worst period — worse even than cancer, Nick insists — was the seven months between March and October 1996, when Lisa's visits and daily letters dried up: "In prison you really need something to hang on to. That something was my relationship until suddenly I didn't know what was going on between Lisa and me. Eventually I wrote offering a divorce and after two weeks she replied, saying yes."

Time in prison passed so slowly that sometimes Nick retreated into the pages of crime thrillers to speed it up. In his exercise hour he ran round the prison basketball court. For Nick, the first indication that something was wrong came early in 1998: "I would get dizzy standing up and have to lean against the wall. The prison doctor just said I was getting old - I was 30 at the time! I then spent a month in solitary having refused to change cellmates yet again, just when the men sharing with me were getting on. When I came out people started to say how much weight I'd lost: for the first time in my life I could see my stomach muscles. I thought I looked pretty healthy!" A blood test revealed Nick was anaemic. He also started to have stomach pain, which his doctor put down to the iron tablets. It took a minor mutiny, risking more time in the punishment cells, before the doctor acknowledged he didn't know what more to do, and sent Nick to New Changi Hospital.

Nick Leeson's never going to be feted for services to banking: he's the first to own that the Rogue Trader tag will stay with him life-long. But he deserves due recognition as a master of endurance: coping with cancer is hard enough when you are supported by gentle nursing, soothing surroundings, friends, family, flowers and TLC. Nick had none of these — chained to the bed, with nothing to read, he had to appeal to slow-responding armed guards whenever he needed the bathroom.

Surgery was scheduled for August 11th. Ten days later he was back in his cell, sleeping on concrete and struggling to sit up as 38 staples had just been removed from his lengthy incision and his stomach muscles had been severed during surgery. However, his surgeon was one of the best in Singapore and his oncologist had studied at Cornell in New York and reportedly looked after President Lee Kuan Yu.

Nick Leeson was told that there was a 60 per cent chance of him surviving for five years. Chemotherapy — Nick was assured — would increase his chances by a further 10 per cent. Chemo lasted six months — five days on, three weeks off — and although he'd been warned he might feel very poorly, Nick weathered it well.

Finally released in the summer of 1999, and despite his return to the UK bringing a realisation that the high life had been swept away — he was effectively homeless and without a job — Nick enjoyed a fairly hedonistic first year seeing friends and family but also continuing his cancer treatment. Nick Leeson ran the 2000 London Marathon against medical advice. But he was determined to raise money for both Colon Cancer Concern and the Linda Jackson MacMillan Centre in Middlesex where his father's myeloma was treated.

Nick Leeson proved his resilience and has been able to capitalise on his experiences. He was paid a substantial fee for the newspaper serialisation of his book in The Mail. The story was also turned into a Hollywood film, Rogue Trader, starring Ewan McGregor and Anna Friel (Executive Produced by Sir David Frost). During 2001 he could be found at Middlesex University where he undertook a Psychology degree and Nick now spends most of his time presenting keynote talks to organisations around the world on Risk Management, Corporate Responsibility and Compliance, in addition to undertaking regular after-dinner speeches based on his unique life experiences.

With a psychology degree and a second marriage to Irish beautician Leona Tormay, (with her own children Kersty and Alex) after trying for a baby they were delighted when, in 2004, Leona gave birth to a baby boy. Nick comments; "I'm of the mindset that cancer must not take you over and control your life. I do believe that the more positive you are, the greater your chance of survival." his advice to others is never to bottle up stress as he himself did: "You need to talk and express yourself as I now do to Leona. With cancer as with other problems, it's amazing how adaptable human beings are, and you will be able to cope provided you keep a strong frame of mind."

RISK MANAGEMENT WORKSHOPS

FINANCIAL CORRELATIONS — MODELS, TRADING, AND RISK-MANAGEMENT INCLUDES THE BASEL II CORRELATION FRAMEWORK

GUNTER MEISSNER / President of Derivatives Software & CEO Cassandra Capital Management

After a lectureship in mathematics and statistics at the Economic Academy Kiel, Gunter Meissner PhD joined Deutsche Bank in 1990, trading interest rate futures, swaps and options in Frankfurt and New York. He became Head of Product Development in 1994, responsible for originating algorithms for new derivatives products, which at the time were Index Amortizing Swaps, Lookback Options, and Quanto Options and Bermuda Swaptions. In 1995/1996 Gunter was Head of Options at Deutsche Bank Tokyo. From 1997 to 2007 he was Professor of Finance at Hawaii Pacific University and from 2008 to 2013 Director of the financial engineering program at the University of Hawaii. Currently, Gunter is President of Derivatives Software (www. dersoft.com), Founder and CEO of Cassandra Capital Management, www.cassandracmcom, and Adjunct Professor of Mathematical Finance at NYU-Courant.

Gunter Meissner has published numerous papers on derivatives in international journals and is a frequent speaker at conferences and seminars. He is author of 5 books, including his forthcoming 2014 book on "Correlation Risk Modeling and Management - An Applied Guide including the Basel III Correlation Framework" (John Wiley).

Temas Generales:

- 1. What are Financial Correlations and why are they Critical in Finance?
- 1.1. Investments and Correlation
- 1.2. Trading and Correlation
- 1.3. Risk Management and Correlation
- 1.4. The Global Financial Crisis and Correlation
- 1.5. Regulation and Correlation
- 2. Correlation Trading: How can correlation and cointegration analysis support our trading
- 2.1. Autocorrelation of Stocks has changed!
- 2.2. Does the 'January barometer' and 'Sell in May and go away' still work?
- How to price and hedge Correlation Options
- 2.4. How to price and hedge Correlation Swaps
- 2.5. Latest developments in Dispersion trading and Statistical Arbitrage
- 3. Empirical Properties of Correlation: How do Correlations behave in the Real World?

- 3.1. How do equity correlations behave in a recession, normal economic period, strong expansion?
- Do equity correlations exhibit mean reversion?
- 3.3. Do equity correlations exhibit autocorrelation?
- 3.4. How are equity correlations distributed?
- 4. How can we quantify financial Correlations? An Overview of Models. Some models will be presented and distributed, others will be programmed in the workshop.
- The Pearson correlation approach and its limitations for finance
- Correlating Brownian motions (Heston 1993)
- The Binomial Correlation model (Lucas 1995)
- Copulas (Sklar 1959, Li 2000)
- 4.5. Limitations of the Gaussian Copula
- Is there a "Black-Scholes-Merton" correlation model?
- 5. Should we model financial Correlations with a Stochastic Process?
- 5.1. If so, which stochastic process?
- 5.2. The Buraschi et al 2010 model and the Lu Meissner 2013 model
- 6. Quantifying Market Correlation Risk and Credit Correlation Risk
- 6.1. The correlation risk parameters Cora and Gora
- 6.2. Cora and Gora in Market Risk Management and Credit Risk Management
- 6.3. Cora and Gora in VaR
- 7. Correlation and Basel III accord
- Basel's Credit Value at Risk (CVAR) approach Too simplistic?
- CVA (Credit Value Adjustment) approach without WWR (Wrong Way Risk) in the Basel accord
- CVA (Credit Value Adjustment) approach with WWR (Wrong Way Risk) in the Basel accord
- How does the Basel accord treat double defaults?
- Debt Value Adjustment (DVA): If something sounds too good to be true...
- 7.6. Funding Value Adjustment (FVA)
- 8. The Future of Correlation Modeling
- 9. "Numerical Finance": Solving problems numerically with the help of GPU's (Graphical Processing Units)
- 9.1. Benefits and Limitations of GPU's
- 9.2. Stochastic Processes, Neural Networks, Fuzzy Logic, Genetic Algorithms, Chaos Theory, Bayesian Probabilities - Which one is the most promising?



RISK AGGREGATION

CARLOS VALLEBUENO / Treasurer Banamex-CITI

In many banks, aggregate risk is defined using a rollup or risk aggregation model; capital, as when Banamex joined Citigroup. From then on he was Head of the Market Risk Management well as capital allocation, is based on the aggregate risk model. The aggregate risk is the basis Area for the financial group, as well as Global Risk Manager. for defining a bank's economic capital, and is used in value-based management such as riskadjusted performance management.

In practice, different approaches to risk aggregation can be considered to be either one of two types: top-down or bottom-up aggregation. In the top-down aggregation, risk is measured on the sub-risk level such as market risk, credit risk and operational risk; subsequently, risk is Main Topics: aggregated and allocated using a model of risk aggregation.

Expositor:

Carlos has worked in Banamex since 1985, he started out in the Corporate Banking area as Managing Director, and subsequently he was Head of the Banamex financial subsidiaries: leasing, factoring and financing sells of automotive distributors. During that time he was also Head of Financial Projects and Head of the Capital Markets Origination for Corporate Banking.

As a result of the Mexican's financial crisis in 1995, the bank asked him to develop the function of Risk Manager for Banamex and its subsidiaries, which he conducted and managed until 2001

From 2011, he left the responsibility as Market Risk Manager to develop the function of Head of Capital Management to complement his responsibilities as Global Risk Manager.

Carlos is Mechanical Engineering and has a Masters in Management and Finance.

- 1. Quantitative principles in risk aggregation
- 2. Risk metrics and capital use
- 3. Accounting and economic aggregation
- 4. Aggregation management objectives and effective metrics



RISK APPETITE

PART I

GUSTAVO I. FUERTES SÁNCHEZ / PricewaterhouseCoopers (PWC)

University of Mexico UNAM (graduated with honors), specializing in Finance. His lines of research center on Financial Risk Management, Financial Regulation and Risk Models.

He also received a MSc degree in Financial Risk Management from ICMA Center, University of Reading (England); and a BS in Economics from Metropolitan Autonomous University (Mexico) and a BS in Management from Universidad La Salle (Mexico). Gustavo is a regular professor of the Financial Risk Management course in the School of Banking and Commerce Postgraduate Division (Mexico) and Coordinator of the Financial Markets School in the same Institution. He also is a postgraduate lecturer in the Universidad Panamericana (Financial Risk Management) and ITESM CCM (Introduction to Risk Management). Previously, in the Universidad La Salle he taught the courses Microeconomics, Macroeconomics and Stock Markets and was Coordinator of the Economics and Business Development department from 2000 to 2003. He has been panelist, independent reviewer of academic documents and frequent speaker in various academic and professional forums, as well as occasional collaborator in the El Financiero and El Economista newspapers.

His professional experience is centered in topics related to Financial Risks; currently he is Managing Director of Risk Analytics & Portfolio Management in GE Capital Americas (financial arm of General Electric Co.).

Previously, he was Capital Markets Director in Deloitte Mexico, where he was in charge of

Gustavo holds a PhD of Science in Business Administration from the National Autonomous Financial Risk management, as well as of the hedge strategies implementation with Derivatives Financial Products. Before this assignation, he worked during 8 years in HSBC Mexico. In this Financial Institution, his last assignment was Head of Risk Strategies of the bank and its subsidiaries, as well as Head of the implementation of Economic Capital and Stress Tests projects. He was also Head of credit portfolio Management, execution of the Sectorial Risk studies, Treasury portfolio valuation and the implementation of the Financial Control strategy of the Sarbanes-Oxley Law.

Temas Generales:

- 1. Portfolio Management and Risk Appetite articulation
- 1.1. Defining risk appetite
- 1.2. Considerations for defining the risk appetite strategy
- 1.3. Risk appetite articulation approaches
- 1.4. Benefits of the risk appetite implementation process
- 1.5. Actual situation of the risk appetite industry and success stories
- 2. Techniques for establishing risk appetite strategies
- 2.1. Risk aggregation approaches: top-down, bottom-up and hybrid approaches
- 2.2. Risk-adjusted return measurement: components, metrics and its importance for the decision making process
- 2.3. The election of the capital measures and the diversification effects
- 2.4. The capital allocation process: marginal approaches, Euler principle and the effects under various risk measures. Exposure limit determination for the articulation of risk appetite: regulatory environment, performance metrics, risk methodologies and dependence effects



PART II

JOHN SOLDEVILLA / Economic Analyst GE Capital

John Soldevilla currently is Economic and Risk Analyst in GE Capital. Previously, he was Main Topics: Economic Analyst, sectorial Risk and "Risk Appetite" in HSBC for 16 years. John received a Masters of Planification and Development from CIDE (Center for Economic Research and Education) and has been Professor of prestigious Universities including Anáhuac del Norte University, UDLA, UNAM, La Salle, among others.

- 1. Economic aspects of the global markets
- 1.1. Local and global economic environment
- 1.2. Impact of the global environment in Mexico
- 1.3. Portfolio characteristics of the Mexican banking
- 2. Sectorial risk
- 2.1. Sectorial Economy
- 2.2. Industry risk rating
- 2.3. Sectorial risk appetite: Growth limits and concentration



COUNTERPARTY RISK & CVA

JON GREGORY / Solum Financial Partners LLP

Dr Jon Gregory is a partner at Solum Financial Partners LLP and specialises in counterparty risk and CVA related consulting and advisory projects. He has worked on many aspects of credit risk in his career, being previously with Barclays Capital, BNP Paribas and Citigroup. He is author of the book "Counterparty Credit Risk: The new challenge for global financial markets", now in its second edition. Jon holds a PhD from Cambridge University.

Main Topics:

- Introduction to CVA
- 1.1. History and definitions
- 1.2. Accounting and regulatory capital rules
- 1.3. Quantifying CVA
- 1.4. CVA and valuation
- 2. Credit exposure
- 2.1. Credit limits
- 2.2. Defining credit exposure
- Expected exposure (EE), potential future exposure (PFE) and expected positive exposure
- 2.4. Typical exposure profiles
- 2.5. Mitigating credit exposure
- Example: examples of EE, PFE, EPE and the impact of netting and collateral
- 3. Methodology for simulating exposure
- 3.1. Simple approaches
- 3.2. Overview of simulation methodology
- 3.3. Example
- 3.4. Aggregation and the impact of netting
- 3.5. Incremental exposure
- 3.6. Marginal exposure
- •Example: quantifying the impact of netting on credit exposure

- 4. Quantifying credit exposure in the presence of risk mitigants
- 4.1. Impact of terminations / resets
- 4.2. Call and return calculations
- 4.3. The margin period of risk
- 4.4. Post processing
- 4.5. Impact of collateral on exposure examples
- Example: implementing collateral calculation to calculate call and return amounts and simulating the impact of collateral on exposure
- Default and credit spreads
- 5.1. Defining default probability
- 5.2. Historical data
- 5.3. Market-implied default probabilities
- 5.4. Recovery rates
- 5.5. Mapping methods
- Workshop: calculating default probability from CDS quotes
- 6. Credit value adjustment (CVA)
- 6.1. Example the CVA of a swap
- 6.2. CVA formulas
- 6.3. CVA and risk neutrality
- 6.4. Examples
- 6.5. Incremental and marginal CVA
- · Example: computing CVA using approximate and more accurate methods. Computing incremental CVA
- 7. Debt Value Adjustment (DVA)
- 7.1. CVA for collateralised positions
- 7.2. Bilateral CVA and DVA
- 7.3. Correlation and closeout assumptions
- 7.4. Monetising DVA

- Example: computing CVA in the presence of netting and collateral and computing DVA
- 8. Counterparty risk capital requirements
- 8.1. Default risk capital charge
- 8.2. PFE at the portfolio level
- 8.3. Basel III modifications (IMM)
- 8.4. Basel III and CVA VAR
- 8.5. CVA VAR example
- Workshop: computing the alpha factor for various difference credit portfolios
- Funding and valuation
- 9.1. Rationale
- 9.2. OIS discounting
- Funding value adjustment (FVA)
- 9.4. Optimisation of CVA, DVA, funding and regulatory capital
- Example: example calculation of FVA (LVA)
- 10. Wrong-way risk
- 10.1. Examples and empirical evidence

- 10.2. Portfolio wrong-way risk
- Trade-level wrong-way risk
- 10.4. The impact of collateral and DVA
- Example: simple wrong-way risk model and simple CDS counterparty risk calculation
- 11. Central Counterparties
- 11.1. Multilateral netting
- 11.2. The mechanics of trading through a CCP
- Margining and the loss waterfall
- 11.4. Important CCP questions
- 11.5. CCP capital charges
- 12. Managing CVA volatility
- 12.1. How to manage CVA
- 12.2. Dynamic hedging and CVA Greeks
- 12.3. Correlation and cross gamma
- 12.4. DVA and the "basis book" approach
- 13. Final thoughts and finish

CREDIT RISK, MARKET RISK AND REGULATION

JOHN HULL / Toronto University

John Hull is the Maple Financial Professor of Derivatives and Risk Management at the Joseph L. Rotman School of Management, University of Toronto. He is an internationally recognized authority on derivatives and risk management. He was, with Alan White, one of the winners of the Nikko-LOR research competition for his work on the Hull-White interest rate model and was in 1999 voted Financial Engineer of the Year by the International Association of Financial Engineers. He has acted as consultant to many North American, Japanese, and European financial institutions. He has won many teaching awards, including University of Toronto's prestigious Northrop Frye Award.

John Hull has written three books: "Risk Management and Financial Institutions" (now in its 3rd edition), "Options, Futures, and Other Derivatives" (now in its 8th edition) and "Fundamentals of Futures and Options Markets" (now in its 7th edition). The books have been translated into many languages and are widely used in trading rooms throughout the world, as well as in the classroom.

Dr. Hull is co-director of Rotman's Master of Finance Program. In addition to the University of Toronto, Dr. Hull has taught at York University, University of British Columbia, New York University, Cranfield University, and London Business School. He is an Associate Editor of nine academic journals.

Main Topics:

- 1. Market Risk
- 1.1. VaR vs. expected shortfall vs. other measures
- 1.2. Historical simulation and its extensions
- 1.3. Stress testing and stressed VaR
- 1.4. Tail risk and extreme value theory
- Credit Risk
- 2.1. Estimating default probabilities
- 2.2. CVA and DVA
- 2.3. Copulas are and how they are used
- 3. Regulation
- New capital requirements for credit and market risk



LIQUIDITY RISK

SURESH SANKARAN / Managing Director Kamakura Corporation

A liquidity risk efficient measurement is fundamental to the management of every financial **Outline:** operation within the Financial Institutions (Banks, Pension Funds, Insurances, etc). This ground-breaking course will teach you the best proactive and effective methods for measuring, managing and hedging this type of risk in today's turbulent market environment.

This workshop will also teach participants to create, in a practical way, the liquidity risk dynamics, implement and create processes that are followed in the best financial institutions with regard to "Market and Funding Liquidity" and "Liquidity Contingency Planning", including the recent incorporation of Basel III regarding Liquidity Risk.

Expositor:

Suresh Sankaran is the Principal Operations Officer with the global IFC Access to Finance (A2F) Risk Management Advisory team based in Washington DC, and provides technical expertise to support projects with all types of financial institutions on risk management. He provides assistance to all regions on various facets of risk management, is responsible for the positioning of risk management in the forefront of developing markets, and working closely with financial institutions to assess their risk management capabilities. Before joining the IFC, Sankaran was the country head for Kamakura Corporation providing strategic consulting services in financial risk management to financial institutions in Europe, Middle East, Asia, and Africa. He specialised in credit risk, market risk, liquidity, ALM, economic capital allocation routines and integrated risk processes. His responsibilities were to provide niche consulting services to internationally active banks on advanced integrated risk management techniques.

Sankaran has been involved in financial advisory assignments including both risk management and mergers and acquisitions. He has worked on assignments with organisations affected in the European crisis, in a major derivatives dispute between two global derivatives houses, for several Central Banks, Governments of OECD countries and many of the world's largest financial institutions. Sankaran's banking expertise stems from his work in ABN AMRO as finance and risk manager, and with HSBC in its Treasury, Risk, and MIS divisions. He started his professional career with KPMG in their financial risk consulting division.

- 1. Understanding the nature of liquidity risk
- 1.1. The universe of investable instruments
- Pools of liquidity and illiquid assets
- 1.3. Market conventions
- Repo and the funding of illiquid instruments
- Liquidation and "fire-sales"
- 1.6. Liquidity risk in banking, securities trading and insurance
- 2. Building and implementing a framework for liquidity management
- 2.1. Mismatch approach
- 2.2. Internal controls for liquidity risk management: stress testing and scenario analysis
- Double default and the analysis of collateralized transactions
- 2.4. Basel II and III liquidity risk
- 3. Liquidity contingency planning
- 3.1. The need for contingency planning how to build and implement a contingency planning
- 3.2. Crisis management plans and market collapses for assets and liabilities
- 3.3. Internal and external communications
- 4. Liquidity stress-testing
- 4.1. Why liquidity stress tests?
- 4.2. General considerations
- Empiricism versus rocket science
- Current stress test priorities
- 4.5. Additional considerations
- 5. Liquidity risk in the context of an active Treasury
- 5.1. Metrics and measures of liquidity risk
- Liquidity gap analysis and the bank's liquidity profile
- Expected and unexpected loss analysis in the presence of illiquidity
- Liquidity management policy
- 5.5. Regulatory requirements for liquidity management
- Measuring market risk Liquidity adjusted Value at risk (LVaR)
- 6.1. Definitions
- 6.2. Using liquidity-adjusted VAR to manage risk

- 6.3. Limitations of standard VAR measures to assess liquidity
- 7. The incorporation of credit in the liquidity risk framework
- 7.1. Cash-flows adjusted for credit
- 7.2. The recovery process
- 7.3. Credit in funding and market liquidity

- 7.4. Credit-adjusted liquidity analytics
 - 8. Northern Rock A case study on liquidity
 - 8.1. 8.1. What caused the failure of Northern Rock
 - 8.2. 8.2. The history of Northern Wreck

 - 8.3. 8.3. An exemplary case of Liquidity Risk



MARKET RISK

GERARDO ZAMUDIO / Asset Manager

Before joining HSBC Global Asset Management Mexico in 2012, Gerardo served as Chief Risk Officer in Banco Madrid Asset Management in Mexico and Risk Manager in Banca Privada d' Andorra in Mexico.

Before that, Gerardo served, during 8 years, as Senior Consultant in Risk Consult, a consulting firm specializing in the development and implementation of solutions for Financial Risk Management. During this stage, he worked with several financial institutions such as Pension Funds, Mutual Funds, Insurance Companies, Corporate Treasuries, among others, in the development, implementation and evaluation of risk management solutions. Gerardo holds a BA in Computer and Information Sciences from Universidad La Salle ULSA (Mexico), Postgraduate degree in Corporate Finance from Universidad La Salle ULSA (Mexico), MBA from the Instituto Tecnológico Autónomo de México ITAM (México). He is certified as Chief Risk Officer for Financial Institutions by AMIB and as Advisor in Investment Strategies by AMIB.

Main Topics:

- Introduction and Fundamental Concepts
- 1.1. Overview of Market Risk Management in Banks, Investment Portfolios and Non-financial
- 1.2. Economic definition and Value-at-risk Mathematics
- 1.3. Essential concepts behind the VaR
- 1.4. Linear and non-linear Instruments and Risk Factors identification
- 1.5. Coherent risk measurements
- 2. Parametric Linear Methods for the VaR Valuation
- 2.1. Normal VaR Formula

- 2.2. Position Mapping and the Interest Rates VaR
- Main Components Analysis and VaR Determination
- Risk MetricsTM Methodology
- 2.5. Alternative Mixes and Distributions in the VaR Valuation
- Incremental VaR and Conditional VaR
- 3. Historic Simulation and Montecarlo Simulation
- The Historic Model with Equal Weighting
- Introduction to Volatility Updating by Hull and White
- The Hybrid Approach by Boudoukh, Richardson and Whitelaw
- Approaches based on the Extreme Value Theory
- Cornish-Fisher Expansion 3.5.
- Path Generation for Prices and Interest Rates
- 3.7. Monte Carlo VaR in a Multivariate context
- 4. VaR for Portfolios compound with non-linear instruments
- 4.1. Delta Approach and Delta Normal VaR
- The Gamma effect and the Delta Gamma VaR
- 4.3. Full-Valuation Method
- 4.4. Capturing the non-normality and Spreading to Vega Risk
- 5. Monitoring Instruments and VaR Evaluation
- Regulatory Guidelines for the Market Risk Models Analysis
- Evaluation Methods based on Econometric Techniques
- 5.3. Tests based on Probability Distributions
- 6. Additional Techniques (Stress Testing)
- Generation and Election of the Extreme Scenario
- Regulatory Guidelines and Principles regarding Stress Testing
- Scenario Analysis, Sensibility Analysis and Alternative Methods



OPERATIONAL RISK

PART I

SANTIAGO CARRILLO / Quantitative Risk Research S.L.

Santiago Carrillo holds a PhD in Science from the University Pierre et Marie Curie of Paris and by the Complutense University (sobresaliente cum laude).

Currently he is Director of RiskLab-Madrid, an I+D+i group of the Autonomous University of Madrid. He is also Partner and Manager of Quantitative Risk Research S.L. (www.qrr.es).

Santiago has an extensive experience in the development of advanced solutions in market and credit risk; specifically, he has been a consultant for various financial institutions throughout the world on Operational Risk.

Main Topics:

- 1. What is operational risk?
- 1.1. Initial approach to operational risk
- 1.2. Databases of operational risk 1.3. Basel II and Basel III definition
- 1.4. Operational risk and other risks
- 2. A framework for the treatment of operational risk
- 2.1. Business lines and risk types
- Severity and frequency
- 2.3. Risk classification
- Internal databases of operational risk
- 3.1. Internal databases design
- 3.2. Its usefulness for management
- 4. Approaches and methodologies
- 4.1. Top-down models and bottom-up models
- 4.2. Different approaches: risk indicators, causal nets and actuarial models
- 4.3. Expected loss and unexpected loss
- 5. Basel II and III
- 5.1. The three pillars
- 5.2. Basic model (critical analysis)
- 5.3. Standard model and standard alternative model (critical analysis)
- 5.4. A useful model for training purposes: the IMA model
- 5.5. Loss distribution approach: basic concepts
- 5.6. Critique of the use of the Pareto distribution
- 6. Economic capital allocation 6.1. The capital allocation as a management element
- 6.2. The Euler method
- 7. Qualitative Approaches 7.1. Qualitative Adjustments

- - 8. External databases 8.1. What is called Basel II and what changes does Basel III incorporate?

7.2. Scorecard Approach

- 8.2. What consortiums to turn to?
- 8.3. The thresholds role 8.4. External data scale: necessity and procedures
- 8.5. Bayesian Simulations
- 8.6. Stress testing and back testing
- 9. Operational risk prevention
- 9.1. Control methods
- 9.2. Use of insurance
- 10. Practical approach for mapping out risks
- 10.1. Process analysis
- 10.2. Risk events
- 10.3. Risk maps and their classification
- 11. Scorecard approach in practice
- 11.1. A concrete example
- 11.2. Building an operation risk Scoring
- 11.3. Factors affecting
- 11.4. Project perimeter of a successful Scorecard
- 12. Risk Indicators
- 12.1. Operational risk indicators
- 12.2. KRIs and KRDs
- 12.3. Indicators aggregation and alarm levels
- 12.4. How to approach a KRI's project
- 13. Organizational aspects
- 13.1. The senior management role
- 13.2. The importance of an operational risk management
- 13.3. Other actors
- 14. Workshops
- 14.1. The IMA model
- 14.2. Supervision approaches 14.3. A severity frequency adjustment demo in practice with OpVision
- 14.4. A legal risk model
 - a. Defining legal risk
 - b. The legal risk costs
 - c. Toward a legal rating?



Marcelo Cruz is the Editor-in-Chief of The Journal of Operational Risk and adjunct professor at Main Topics: the New York University. He is also the Global Head of Operational Risk Analytics at Morgan Stanley. Previously, he was an associate Partner at McKinsey & Co, Chief Risk Officer of Aviva PLC, and Global Head of Operational Risk at Lehman Brothers. Marcelo was the Managing Director and Founder of RiskMaths, a boutique consultancy focused on risk management and

Marcelo also worked on UBS AG, the Swiss bank, for 3 years as Head of Operational Risk having worked in London and New York. Before UBS he also worked as a Chief Economist/ Strategist for an investment bank and as a derivatives trader for JP Morgan where he was in charge of structuring and trading OTC products.

Marcelo Cruz is recognized worldwide in the financial industry as a leader in operational risk and one of the top names in risk management. He is a member of the board of many publications and industry associations. He is a sought-after speaker in many seminars and conferences in several countries. He wrote the first academic article on operational risk in 1998 and has published many articles on the subject since then. He wrote the best seller book on operational risk "Modeling, Measuring and Hedging Operational Risk", Wiley 2002. He wrote/ edited other books in risk management. He also participates in other books with other top names in risk management. He was a member of the Industry Technical Working Group that helped to develop the new Basel Accord. He was also a Trustee of the Board of GARP and currently sits on the Research Committee of PRMIA.

He holds a PhD in Mathematics from the Imperial College in London, a M.Sc. in Financial Mathematics, an MBA and a B.Sc. in Economics.

- 1. Fundamentals of Risk Management
- 1.1. How culture impacts risk framework
- 1.2. Developing risk frameworks in emerging markets
- 1.3. Measuring market and credit risks
- 2. Building an operational risk database
- 2.1. Setting up a loss database
- 2.2. Using external losses in your framework
- Developing and running scenario analysis
- 2.4. How Key Risk Indicators and Key Performance
- 2.5. Indicators are important in OR
- 3. Measuring and modeling operational risk
- 3.1. Building the operational Value at Risk using the Loss Distribution Approach (LDA)
- 3.2. Assessing frequency and severity distributions
- 3.3. Heavy-tail distributions and Extreme Value Theory
- 3.4. Causal models and making OR similar to market and credit risks
- 4. Advanced topics in operational risk
- 4.1. Hedging operational risk using insurance and derivatives
- Stress testing
- 4.3. Six sigma and quality programs in OR
- 5. Business Case # 1- 'Setting up an operational risk function in a mortgage lender"
- 6. Business Case # 2 Part A First National City Credit Card Division and Part B -Smith Thompson Investment Bank



SYSTEMIC AND SOVEREIGN RISK

EDWARD I. ALTMAN / Stern School of Business New York University (NYU)

PART I

CORPORATE CREDIT SCORING MODELS AND PREDICTING CORPORATE CRISIS

Edward I. Altman is the Max L. Heine Professor of Finance at the Stern School of Business, recent works on Bankruptcy, Credit Risk and High Yield Junk Bonds (2002), Recovery Risk New York University. He is the Director of Research in Credit and Debt Markets at the NYU (2005), Corporate Financial Distress & Bankruptcy (3rd ed., 2005) and Managing Credit Risk Salomon Center for the Study of Financial Institutions. Prior to serving in his present position, (2nd ed. 2008). His work has appeared in many languages including French, German, Italian, Professor Altman chaired the Stern School's MBA Program for 12 years. He has been a visiting Japanese, Korean, Portuguese and Spanish. Professor at the Hautes Etudes Commerciales and Université de Paris-Dauphine in France, at the Pontificia Catolica Universidade in Rio de Janeiro, at the Australian Graduate School of Management in Sydney, Luigi Bocconi University in Milan and CEMFI in Madrid. Dr. Altman was named to the Max L. Heine endowed professorship at Stern in 1988.

bonds, distressed debt and credit risk analysis. He was named Laureate 1984 by the Hautes before the U.S. Congress, the New York State Senate and several other government and Etudes Commerciales Foundation in Paris for his accumulated works on corporate distress regulatory organizations and is a Director and a member of the Advisory Board of a number prediction models and procedures for firm financial rehabilitation and awarded the Graham of corporate, publishing, academic and financial institutions. He has been Chairman of the & Dodd Scroll for 1985 by the Financial Analysts Federation for his work on Default Rates on Academic Council of the Turnaround Management Association since 2002. Dr. Altman is High Yield Corporate Debt and was named "Profesor Honorario" by the University of Buenos Chairman Emeritus and a member of the Board of Trustees of the InterSchool Orchestras Aires in 1996. He is currently an advisor to the Centrale dei Bilanci in Italy and to several foreign of New York and a founding member of the Board of Trustees of the Museum of American central banks. Professor Altman is also the Chairman of the Academic Advisory Council of the Finance. Turnaround Management Association. He received his MBA and Ph.D. in Finance from the University of California, Los Angeles. He was inducted into the Fixed Income Analysts Society Hall of Fame in 2001, President of the Financial Management Association (2003) and a FMA 1. Current conditions in credit markets and the outlook for corporate defaults Fellow in 2004 and was amongst the inaugural inductees into the Turnaround Management 2. A tale of three periods for credit markets Association's Hall of Fame in 2008. In 2005, Prof. Altman was named one of the "100 Most 3. The credit crisis- How long will the recession last? Influential People in Finance" by the Treasury & Risk Management magazine.

Professor Altman was one of the founders and an Executive Editor of the international publication, the Journal of Banking and Finance and Advisory Editor of a publisher series, the John Wiley Frontiers in Finance Series. He has published or edited two-dozen books and over 130 articles in scholarly finance, accounting and economic journals. He was the editor of the Handbook of Corporate Finance and the Handbook of Financial Markets and Institutions and the author of a number of recent books, including Distressed Securities; and his most

Dr. Altman's primary areas of research include bankruptcy analysis and prediction, credit and lending policies, risk management and regulation in banking, corporate finance and capital markets. He has been a consultant to several government agencies, major financial and accounting institutions and industrial companies and has lectured to executives in North Dr. Altman has an international reputation as an expert on corporate bankruptcy, high yield America, South America, Europe, Australia-New Zealand, Asia and Africa. He has testified

Temas Generales:

- 4. Predicting defaults and recoveries using mortality rate and market based models
- 5. The distressed debt market
- 6. Predicting corporate distress using a fundamental credit risk model
- 7. Converting a credit risk model into estimates for the probability of default and loss given default
- 8. Applications in Emerging Markets

PART II

CURRENT CONDITIONS AND OUTLOOK FOR GLOBAL CORPORATE AND SOVEREIGN CREDIT MARKETS



SOLVENCY

PART I

AFAEL GARCÍA / SERFIEX

Rafael García received a Business Science degree from ICADE. He started out his professional career as a financial analyst and portfolio manager in GVC and Santander Bank. In 1993 he founded SERFIEX, software firm and consulting leader in Spain in financial Risk Management solutions. He has coordinated more than 150 projects of financial risk measurement, control and management in banks, fund managers and insurance companies.



PART II

José diego Alarcón / Serfiex

José Diego received a Business Science degree from the Complutense University (Madrid). In 1993 he co-founded SERFIEX, software firm and consulting leader in Spain in financial Risk Management solutions. He is the responsible partner of the technology and new products creation areas. He is author of the book: "Las mejores prácticas en asesoramiento y gestión de inversiones".



PART III

JORDI PAYÉS / SERFIEX

Jordi received an Actuary and Financial Sciences and MBA degrees from ESADE. He has held various positions in Caixa Sabadell Vida (Head of the technical area), Mercer Group (Risk and ALM knowledge manager) and in Willis (employee benefits director).

Currently he is Head of the Actuarial area in SERFIEX since 2007. He has conducted more than 30 projects regarding actuarial liabilities, best estimate measurement and technical risk measurement of life and non-life products in insurance companies.

Main Topics:

- 1. Introduction to Solvency
- 1.1. Risk-based Regulatory Capital Models
- 1.2. Basel II and Basel III
- 1.3. Risk exposure, weighting coefficient, risk-weighted assets
- 1.4. Basic concepts for Solvency: financial surplus and risk of the financial surplus (expected loss with a specified probability level in a specified temporary horizon). VaR concept
- 1.5. Solvency and ALM (Asset and Liability Management)
- 1.6. Quantitative requirements: Pillar I
 - a. Assets and liabilities valuation
 - b. Risk measurement
 - c. Solvency Capital Requirement (SCR)
 - d. Standard formula and internal models
- 1.7. Qualitative requirements and supervision: Pillar II
 - a. Corporate governance
 - b. Organizational structure of the entities
 - c. Policies and Procedures Documents
- 1.8. Information Requirements: Pillar III
- 1.9. Solvency and Financial Condition Report (SFCR)
- 1.10. Regular Supervisory Reporting (RSR)
- 1.11. ORSA Own Risk Solvency Assessment
- 1.12. New statistical and accountable documentation and QRT (Quantitative Reporting Templates)
- 1.13. What is the QIS (Quantitative Impact Study)? Which are the Technical Specifications?
- 1.14. Roadmap and Solvency II calendar in Europe
- 2. Solvency in Mexico
- 2.1. Law of Insurance and Bonding Institutions (LISF)
- 2.2. Corporate Governance (art. 69 and 72)
 - a. Organizational structure and roles segregation
 - b. Comprehensive Risk Management Function
 - c. Internal control system
 - d. Internal audit function
 - e. Audit Committee
 - f. Actuarial function
 - g. Obligations of the Management Board
 - h. Obligations of the different areas of an entity
- 2.3. Technical reserves (art. 216 and 219)
 - a. Better estimation of the technical reserves
 - b. Risk Margin
 - c. Better actuarial practices regarding optionality, bailouts, profit sharing, inflation, expenses, adjusted reinsurance
 - d. Discounting flows, risk-free interest rates, adjusted solvency
 - e. Certification of the entity actuary and expert opinion of the independent actuary
 - f. Monthly calculation, information requirements, databases structure
- 2.4. Calculation of the solvency capital requirement (art. 232 and 240) a. Unexpected losses at a 99.5% over a one year period
 - b. General formula
 - c. Internal Models
 - d. Transfer and risk reduction techniques
 - e. Calculation periodicity, information structure, traceability, industrialization
- 2.5. Risk modules for the general formula
 - a. Risk modules of life underwriting
 - b. Risk modules of damage insurance underwriting
 - c. Risk modules of accident and illness underwriting
 - d. Market risk modules: interest types, exchange rates, exchange, property
 - e. Risk module of assets and liabilities mismatch
 - f. Liquidity risk module

- g. Credit and counterparty risk modules
- h. Concentration risk modules
- i. Operational risk modules 2.6. Investments (art. 247 and 255)
 - a. Investment policies
 - b. Products catalogue
 - c. Legal limits and particular limits
 - d. Investments Committee
- 2.7. Other complementary topics
 - a. Periodical Own Risk Solvency Assessment (ORSA) (art. 69)
 - b. Admissible Equity (art. 241 and 244)
 - c. Dynamic Solvency Testing (art. 245 and 246)
- 2.8. Specific aspects of the LISF different from those of Solvency II
- 3. Risk measurement and solvency capital calculation
- 3.1. Risk exposure, information disaggregation
- 3.2. Risk measurement (mathematical and probabilistic, absolute and relative, aggregated and disaggregated)
- Value at Risk (VaR) analysis
- 3.4. Different VaR approaches: historic, parametric, Montecarlo
- Commonly used sigma standards and temporal horizons
- Stress tests and Worst Case Scenarios
- 3.7. Standard Solvency Models
- 3.8. Financial risks: market, counterparty, liquidity, concentration
- Actuarial risks: life, non-life
- Other risks: operational, legal, business, operations settlement
- 3.11. Risk-based regulatory capital models
- 3.12. Risk control
- 3.13. Basic Solvency Capital Requirement (BSCR) + Operational risk = Solvency Capital Requirement (SCR)
- SCR and MCR (Minimum Capital Requirement)
- 3.15. Solvency internal models
- 4. Non-technical assets and liabilities valuation
- 4.1. Investment valuation: mark-to-market vs mark-to-model
- 4.2. Case study of usual assets in the insurer portfolio 4.3. Zero coupon curve and risk-free interest rate curve
- 4.4. Special treatment for liquid bonds: credit spread
- 4.5. Complex financial structures and SPV (Special Purpose Vehicle). Basic valuation
- 4.6. Interest rate and credit derivatives. Basic valuation methodologies
- 4.7. Look-through analysis
- 4.8. Credit ratings
- 4.9. Financial surplus
- 4.10. Deterministic ALM vs stochastic ALM
- 4.11. Investment segmentation by branch and product
- 4.12. Investment risk sources. Exposition and mapping
- 4.13. Organization of the information: asset attributes, valuation inputs, risk measure inputs, BSCR modules inputs
- Data supply from third parties (Bloomberg, Reuters, etc...)
- 4.15. Investment databases structure for a Solvency project
- Actuarial liabilities valuation
- 5.1. Technical provisions valuation. Life: Segmentation, Best Estimate Liability (BEL) and possible simplifications
- Flow projections
- 5.3. Recoverable amount
- 5.4. Risk Margin
- 5.5. Liability risk-free discount interest rates
- 5.6. Countercyclical premium 5.7. Matching Premium

- 5.8. Technical provisions Non-Life: segmentation, BEL and possible simplifications
- 5.9. Non-life BEL treatment: PPNC, PRC, PTP, RBNS, IBNR
- 5.10. Non-life BEL: statistical methods
- 5.11. Stochastic simulation for Life and Non-life
- 5.12. Risk sources for Life and Non-life provisions
- 5.13. Databases structure of Life and Non-life actuarial liabilities for a Solvency project
- 5.14. Stochastic projections: Valuation of the benefits sharing options and anticipated bailout in life and retirement products
- 6. Standard modules of market and counterparty risks
- 6.1. Interest rate risk
- 6.2. Credit spread risk
- 6.3. Concentration risk
- 6.4. Exchange, currency and property risk
- 6.5. Countercyclical premium risk
- 6.6. Counterparty risk
- 6.7. Risk aggregation; correlation matrices
- 7. Standard modules of life underwriting risk
- 7.1. Mortality risk
- 7.2. Longevity risk
- 7.3. Disability / morbidity risk
- 7.4. Expense risk
- 7.5. Falls Risk
- 7.6. Catastrophic risk
- 7.7. Extended methods and simplify methods
- 7.8. Loss absorption of the technical provisions and deferred taxes
- 7.9. Risk aggregation; correlation matrices
- 8. Standard modules of non-life underwriting risk
- 8.1. Statistical models for the technical provision valuation
- 8.2. Premium risk and non-life and health reserve
 - a. Volume measures
 - b. Standard deviation

- c. Geographical diversification
- d. Aggregation
- 8.3. Portfolio losses risk
- 8.4. Catastrophic risk
- 8.5. Risk aggregation; correlation matrices
- 9. Operational risk in Solvency9.1. Operations risk: by operations volume from premiums and technical reserves
- 9.2. Operational processes risk
- 9.3. Legal risk
- 9.4. Technological risk
- 9.5. Strategic and corporate risk. Not included in the Standard Formula
- 9.6. Reputational risk. Not included in the Standard Formula
- 9.7. Standard module of operational risk
- 10. Key success factors of a Solvency Project
- 10.1. Previous planning of the roadmap
 - a. Actual situation diagnosis
 - b. Alternatives to evolve from actual situation to the established framework by the LISF
 - c. Implementation: Action Plan and Audit Plan
- 10.2. Appropriate human resources: training
- 10.3. Organization of the information: heterogeneity management
- Appropriate technological resources: traceability, replicability, industrialization, no obsolescence
- 10.5. Documentation
- 10.6. Monitoring and control
- 11. Beyond Solvency
- 11.1. ORSA
- 11.2. Stochastic ALM
- 11.3. From Solvency to a better strategic decision making
- 11.4. Resources allocation
- 11.5. Maximization of the financial surplus
- 11.6. Allocation of risk limits

TRADING AND QUANTITATIVE FINANCE WORKSHOPS



STATISTICAL ARBITRAGE

MARCO AVELLANEDA / Courant Institute of Mathematical Sciences, NYU and Senior Partner, Finance Concepts LL

Marco Avellaneda was named 2010 Quant of the Year by RISK Magazine. He has been involved in teaching, developing and practicing quantitative finance for the last 15 years. He worked at Banque Indosuez as Consultant in FX Derivatives, then as a Vice-President in Fixed-Income Research at Morgan Stanley, as Quant Strategist at Gargolye Strategic Investments, as Head of Volatility Arbitrage at Capital Fund Management, where he created the Nimbus Fund, and as Quant Equity Portfolio Manager at the Galleon Group. His interests — both practical and theoretical — are unabashedly focused on quantitative alpha generation.

He is known in academic finance as the inventor of the Uncertain Volatility model, for developing model-calibration algorithms using Weighted Monte Carlo/ Max Entropy, for the theory behind dispersion trading, and for his more recent works on statistical arbitrage in the US equities market, high-frequency trading and price forecasting. A faculty member at the Courant Institute since "before the internet", he teaches classes in Stochastic Calculus, Riskmanagement and Portfolio Theory, PDEs in Finance and Quantitative Investment Strategies.

He is in the editorial boards of Communications on Pure and Applied Mathematics, the International Journal for Theoretical and Applied Finance and Quantitative Finance and coauthored the textbook "Quantitative Modeling of Derivative Securities".

Main Topics:

STATISTICAL ARBITRAGE

1. US Equities and Exchange Traded Funds: a quant Perspective

- 1.1. PCA and factor analysis of large-scale correlation
- 1.2. Matrices
- 1.3. Extracting factors from market correlations
- 1.4. Systematic volatility, idiosyncratic volatility and their variation in time
- 2. Exchange Traded Funds
- 2.1. Exchange-traded funds (ETF's): review
- 2.2. ETF's as risk factors
- 2.3. Leveraged ETF's and Volatility ETF's
- 3. Pairs-trading, mean-reversion, co integration
- 3.1. Pairs trading: theoretical framework
- 3.2. Leveraged ETF's pairs trading
- 3.3. VIX ETF pairs trading
- 3.4. Stock/sector ETF pairs trading
- 4. Statistical Arbitrage
- 4.1. Portfolio construction
- 4.2. Leverage & financing considerations
- 4.3. Dynamic risk-management: limiting systematic risk
- 4.4. Practical considerations
- 5. Historical Results via backtesting
- 5.1. Late 1990s
- 5.2. 2002-2007: How the subprime crisis affected statistical arbitrage
- 5.3. +2008-2010: The future of medium-frequency statistical arbitrage
- +Q&A opportunity for further technical questions

TRADING DISPERSION STRATEGIES AND RELATIVE VALUE FOR OPTIONS AND SWAPS

MARCO AVELLANEDA / Courant Institute of Mathematical Sciences, NYU and Senior Partner, Finance Concepts LI

Temas Generales:

- 1. Trading Correlations
- 2. ETF's
- 3. Relative Value between Fixed Income Curves (Treasuries Vs LIBOR)
- 4. Trading CDS Indices (CDX)
- 5. Dispersion Trading with Corporate Bonds



COMPUTATIONAL FINANCE FOR QUANTS

PART I

OSCAR SIERRA

Currently, the trends present in the markets and the speed in which they are being implemented **Main Topics:** are really astounding. From the birth of new complex Financial Products to the use of the famous "Black Boxes" (Algorithmic Trading) and the implementation of the "High Frequency Trading" for operating and executing orders in milliseconds. All of this has resulted in an increasing need for financial intermediaries (Buy Side and Sell Side) to count with human capital with skills and solid knowledge in Mathematics, Statistics, Programming, Finance and Markets. Nowadays, they are known as QUANTS.

The international and local financial firms are increasingly looking for QUANTS who are capable of implementing tools that really help to improve the processes in the areas of Trading, Risk Management and Back and Middle Office; as an example, in "High Frequency Trading", development of Algorithms and Trading Strategies for Brokerage Houses and Banks, for Databases Management, among other multiple possibilities.

Objective

The Course Computational Finance for Quants aims to provide the necessary techniques and knowledge for Programming, Finance and Markets to design and implement solutions in the financial areas of Trading (Algo Trading, High Frequency Trading, Arbitrage Strategies), Risk Management (Models), Treasury, Database Management, Programming, etc.; thus, to improve and to optimize processes in the institutions.

PART II

EMANUEL DERMAN / Columbia University-Former Goldman Sachs

Emanuel Derman Emanuel Derman is Professor at Columbia University, where he directs their program in financial engineering. His latest book is Models Behaving Badly: Why Confusing Illusion with Reality Can Lead to Disasters, On Wall Street and in Life, one of Business Week's top ten books of 2011. He is also the author of My Life As A Quant, also one of Business Week's top ten of 2004, in which he introduced the guant world to a wide audience.

He was born in South Africa but has lived most of his professional life in Manhattan, where he has made contributions to several fields. He started out as a theoretical physicist, doing research on unified theories of elementary particle interactions. At AT&T Bell Laboratories in the 1980s he developed programming languages for business modelling. From 1985 to 2002 he worked on Wall Street, running quantitative strategies research groups in fixed income, equities and risk management, and was appointed a managing director at Goldman Sachs & Co. in 1997. The financial models he developed there, the Black Derman Toy interest rate model and the Derman-Kani local volatility model, have become widely used industry standards.

In his 1996 article Model Risk Derman pointed out the dangers that inevitably accompany the use of models, a theme he developed in My Life as a Quant. Among his awards and honors, he was named the SunGard/ IAFE Financial Engineer of the Year in 2000. He has a PhD in theoretical physics from Columbia University and is the author of numerous articles in elementary particle physics, computer science, and finance. He writes a fortnightly column called Models Behaving Badly for the Frankfurter Allgemeine Zeitung

Main Topics:

An Introduction to the Volatility Smile

- 1. The Principles of Financial Modeling
- 1.1. The foundations of financial theory and valuation
- The theory of dynamic hedging



PART III

ROHAN RAO / Georgia Institute of Technology (Georgia Tech)

G.S Rohan Rao is currently pursuing a PhD in Finance at Georgia Institute of Technology Main Topics: (Georgia Tech). His current research work is in the electricity markets jointly with a Professor from the School of Industrial and Systems Engineering at Georgia Tech. He also has a Masters in Quantitative and Computational Finance from Georgia Tech and a BTech degree in Engineering Physics from Indian Institute of Technology, Bombay (IIT-Bombay) - one of the premier institutes for technology in India. He also has 2 years of work experience in the financial industry working with Bank of America in their Quantitative Finance group dealing with global structured products.

He has extensive experience with modelers and solvers like Matlab, R and GAMs and programming languages like C and Java. Some of his current interests include investing and trading in volatility and implementation of numerical methods in pricing derivatives.

- Matlab[®] Basics
- 1.1. Matlab® Basics focuses mainly in how the program works, using basic functions and developing its own programs. Matlab® Basics makes emphasis in the programming language, as an easy-to-learn tool, especially for junior programmers.
- 2. Applied Random Numbers
- 2.1. Random numbers is probably the most powerful theory which has a broad application in the financial industry, to such an extent that without this theory, today it will be difficult to imagine the financial Markets modelling.
- 3. Random numbers in stocks
- 4. Interest rates models
- 5. Volatility
- 5.1. Volatility calculation, an important topic because this parameter is critical in the valuation of most of the option contracts.
 - a. Historic Volatility
 - b. Implied Volatility
- 6. Technical Analysis in an investment portfolio, the case of the Relative Strength Index (RSI)
- 6.1. Through time, the technical analysis has been declared as a practice that lacks of theoretical fundamentals making it unreliable; this section pretends to present the case of the RSI index applied to an investment portfolio, moreover, applied to different industries, so it may be supported theoretically.
- 2. Option Valuation
- 2.1. The theory of dynamic replication
- 2.2. P&L (profit and loss) of options trading
- 3. Introduction to the Implied Volatility Smile
- 3.1. The smile in various markets
- 3.2. The difficulties the smile presents for trading desks and for theorists
- 3.3. Reasons for a smile
- 4. Implied Distributions Extracted from the Smile
- 4.1. Static replication of path-independent exotic options with vanilla options
- 5. Approximate Static Replication of path-dependent exotic options with vanilla options
- 6. Local Volatility Models/ Implied Trees
- 6.1. Derman-Kani binomial local volatility trees
- 6.2. Dupire equation
- 6.3. How to build an implied tree from options prices
- 7. The Consequences of Local Volatility Models
- 7.1. The local volatility surface
- The relationship between local and implied volatility
- Estimating the deltas of vanilla options in the presence of the smile
- Estimating the values of exotic options
- 8. Stochastic Volatility Models
- 8.1. The effect of changes in volatility in the Black-Scholes formula
- The SABR model
- The PDE for option value under stochastic volatility
- 8.4. The mixing formula for option value under stochastic volatility
- 8.5. Estimating the smile in stochastic volatility models
- 9. Jump-Diffusion Models
- 9.1. Are they reasonable, and if so, when?
- 9.2. The Merton jump-diffusion model and its solution
- 9.3. Estimating the smile in jump-diffusion model

- Binomial Trees (Matlab®)
- 2. Montecarlo simulations (Matlab®)
- 3. Pricing a basket of non-path dependent options, pricing Asian options, pricing path dependent options using lattice methods (Matlab®)
- 4. Implied Trees and Volatility Smile using market prices (Matlab®)
- 5. Implementation of a variance swap using market prices and calculating the VIX index
- 6. Time series analysis (GARCH) and dealing with real high frequency data and market microstructure (R and SAS)
- 7. High-frequency volatility estimates (R and SAS)
- 8. Lee and Ready algorithm, Model for price changes, Duration models (R)
- 9. Vwap & Twap strategies



FIXED INCOME: TRADING & ARBITRAGING THE YIELD CURVE

IZZY NELKEN / Presidente y Fundador Super Computer Consulting

President of Super Computer Consulting, Inc. in Northbrook, Illinois. Super Computer Consulting Inc. specializes in complex derivatives, structured products, risk management and hedge funds. Izzy holds a Ph.D. in Computer Science from Rutgers University and was on the faculty at the University of Toronto. Izzy's firm has many consulting clients including several ETF's regulatory bodies, major broker-dealers, large and medium sized banks as well as hedge funds. Izzy is a lecturer at the prestigious mathematics department at the University of Chicago.

He teaches numerous courses and seminars around the world on a variety of topics. Izzy's seminars are known for being non-mathematical. Instead they combine cutting edge analytics with real world applications and intuitive examples. Izzy is a member of the Chicago Board Options Exchange New Products Committee. He is author of "Implementing Credit Derivatives" (McGraw Hill, 1999) and "Pricing, Hedging and Trading Exotic Options" (McGraw Hill, 1999) and is also editor and co-author of many other publications the most recent of which is "Volatility as an Asset Class" (Risk Books, 2007).

Main Topics

The Term Structure of Interest Rates

- 1. We discuss many types of interest rates and how they are derived from each other
- 1.1. Par bond yield curve
 - a. Construction with benchmark bonds and linear interpolation
 - b. Construction with a universe and exponential cubic splines
- 1.2. The zero coupon curve
- 1.3. Corporate curves and spreads
- 1.4. What does the spread really measure?
- 1.5. Forward curve
- 1.6. The Libor interest rate curve
- 1.7. Does volatility affect the curve?
- 1.8. Derivation of one curve from another
 - a. Bond stripping and reconstitution
 - b. Gap and Multigap analysis
- Workshop: review various curves especially US, Mexico, Brazil

Duration and Convexity

- 2. Duration and convexity analysis for structured notes
- 2.1. Duration
- 2.2. Convexity
- 2.3. How are they used?
- 2.4. Setting duration and convexity targets
- · Discussion: "the benter the better"

Long only strat egies

- 3. Here we study portfolio construction strategies
- 3.1. Bullet structures
- 3.2. Ladders

- 3.3. Barbells
- 3.4. Liquidity considerations
- · Workshop: Using analytical tools to find "high probability trades" Bond

- 4. A review of bond ETF's
- 4.1. ETF to become long bonds
- 4.2. ETF to become short bonds
- 4.3. The crucial but overlooked difference between ETFs and ETNs
- 4.4. Leveraged ETF the UltraShorts and Triple Bear notes
- · Workshop: Using charts to find high probability long-short relative value trades

Derivatives

- 5. Options on US Treasury Bond Futures
- 5.1. Call and Put options on US Treasury bond futures
- 5.2. Different strategies using options and futures
- 5.3. Potential and risk in option trading
- · Workshop: How to place on the trade that reflects your view

Inflation linked bonds

- 6. TIPS Inflation linked securities
- 6.1. What are TIPS?
- 6.2. The implied inflation curve
- 6.3. A review of the TIPS strategy in 2008

Brazil – Mexico - USA

- 7. Compare and contrast the countries
- 7.1. What are the curves showing?
- 7.2. Reading the curves
- · Discussion: Trading opportunities between the countries

Corporate bonds and credit spreads

- 8. Higher yields with increased risks
- 8.1. Corporate bonds in US Brazil Mexico
- 8.2. Credit ratings and yields
- 8.3. NR SRO (Nationally Recognized Statistical Rating Organizations) The credit ratings
- Workshop: Examples of corporate bonds in US, Mexico and Brazil Past trades which were successful

The future

9. The future of the bond market



LOW-FREQUENCY TRADERS IN A HIGH- FREQUENCY WORLD: A SURVIVAL GUIDE

MARCOS LÓPEZ DE PRADO / Senior Managing Director Guggenheim Partners

Marcos López de Prado is Senior Managing Director at Guggenheim Partners. He is also Main Topics a Research Affiliate at Lawrence Berkeley National Laboratory's Computational Research

1. The PIN Theory Division (U.S. Department of Energy's Office of Science)

Before that, Marcos was Head of Quantitative Trading & Research at Hess Energy Trading Company (the trading arm of Hess Corporation, a Fortune 100 company) and Head of Global Quantitative Research at Tudor Investment Corporation. In addition to his 15+ years of trading and investment management experience at some of the largest corporations, he has received several academic appointments, including Postdoctoral Research Fellow of RCC at Harvard University and Visiting Scholar at Cornell University. Marcos earned a Ph.D. in Financial Economics (2003), a second Ph.D. in Mathematical Finance (2011) from Complutense University, is a recipient of the National Award for Excellence in Academic Performance by the Government of Spain (National Valedictorian, 1998) among other awards, and was admitted into American Mensa with a perfect test score.

Marcos is the co-inventor of three international patent applications on High Frequency Trading. He has collaborated with ~30 leading academics, resulting in some of the most read papers in Finance (SSRN), three textbooks, publications in the top Mathematical Finance journals, etc. Marcos has an Erdös #3 and an Einstein #4 according to the American Mathematical Society.

- 2. Is speed the real issue?
- 3. What is the new paradigm?
- 4. Volume time vs. Chrono time
- 5. Little known species you should be aware of
- 5.1. Predatory algorithms
- 6. Estimating PIN in High Frequency
- 7. Bulk Volume Classification
- 8. Bulk Volume Classification vs. Tick Rule
- 9. Does the PIN Theory work in practice? 21
- 10. Forecasting (and understanding) Volatility
- 11. Forecasting Toxicity-induced volatility
- 12. What can Low Frequency Traders do?

QUANTITATIVE MODELS FOR ARBITRAGING, HEDGING, TRADING & RISK MANAGEMENT

Paul Wilmott is a financial consultant, specialized in derivatives, risk management and Dr. Wilmott is the owner of www.wilmott.com, the popular quantitative finance community He is a member of the Physics in Finance Committee of the Institute of Physics, and is on the Quantitative Finance. editorial boards of several academic journals.

Paul studied mathematics at St Catherine's College, Oxford, where he obtained his Ph.D. He founded the Program in Mathematical Finance at Oxford University and the journal Applied Mathematical Finance. He is the author of Paul Wilmott Introduces Quantitative Finance (Wiley 2007), Paul Wilmott on Quantitative Finance (Wiley 2006) and other financial textbooks. He has written over 100 research articles on finance and mathematics.

Paul Wilmott was a founding partner of the volatility arbitrage hedge fund Caissa Capital which managed \$170million. His responsibilities included forecasting, derivatives pricing, and risk management.

quantitative finance. He has worked with many leading US and European financial institutions. website, the quant magazine Wilmott and is the Course Director for the Certificate in

Main Topics

- 1. Finance fundamentals
- 2. A dozen lessons in common sense for the quantitative professional
- 3. Valuation and hedging understanding, really understanding, the basics
- 4. Volatility arbitrage the most important lesson the books don't tell you
- 5. Major model errors
- 6. Volatility modelling the good, the bad and the ugly
- 7. Fear and greed
- 8. Extreme markets saving your tail



PAUL WILMOTT

RADING VOLATILITY

PART I

JOSÉ ALATORRE / Structure Commodity Products for LatAm

José Alatorre works with the Commodities and Currencies team in Barclays in NY. José is in charge of developing quantitative strategies, relative value in volatility and correlation in the commodity and currency markets. He also works with the structuring team; he develops solutions for Canadian, American and primarily Latin American clients. Some of these solutions are the creation of indices, exotic options and strategies using derivatives.

Previously, José worked in Afore Banamex coordinating the analysis area. Some of his functions were: the portfolio optimization, development of strategies across various assets, economic analysis and CKDs.

José holds a Master of Science degree in Financial Engineering from the Columbia University in NY, and has a degree in Actuarial Science from the ITAM.

Main Topics:

Volatility concepts and parametric models

- 1. Realized volatility and implied volatility
- 2. Remembering Black and Scholes
- 3. Trading Volatility
- 3.1. Delta hedging, trading realized volatility
 - a.P&L
 - b. How to Hedge
 - Implied volatilities
 - Expected volatilities
- 4. Meaning and origin of the Skew and Smile
- 5. Variance and volatility swap
- 5.1. Strategy to replicate a variance swap
- 5.2. Examples of pricing and MTM
- 6. Trading Skew
- 6.1. Sticky Delta
- 6.2. Sticky Strike
- 6.3. Local Volatility 7. VIX and volatility indices
- 7.1. VIX Futures
- 7.2. VIX Options
- 7.3. VIX ETFs

- 7.4. Risk Premium in Volatility
- 8. Volatility Parametric Models. Implementation
- 8.1. GARCH
- 8.2. GJR
- 8.3. E-GARCH

Consistent volatility models

- 9. Local volatility models
- 9.1. Modelling variable volatility in time and spot
- 9.2. Binomial model of local volatility
- 9.3. Relationship between local volatility and implicit volatility
- 9.4. Implied trees and calibration (Exercise)
- 10. Curve calibration
- 10.1. What is an arbitrage-free curve?
- 11. Spread timetables
- 12. Spreads Butterfly
- 12.1. Calibration of smiles and term structure curves using SVI
- 12.2. Calibration of the Mexbol curve (Exercise)

Stochastic volatility models

- 13. What is a stochastic volatility model?
- 14. Heston Process
- 15. Heston Characteristic Ecuation
- 16. Milstein Discretization
- 17. Simulation of stochastic volatility models. MatLab®
- 18. Variance Swaps in Stochastic Volatility Models
- 19. Valuation of stochastic volatility models using Fourier techniques
- 19.1. Definition of the Fourier Transform
- 19.2. Definition of the characteristic function
- 19.3. Accumulated distribution of the characteristic function
- 19.4. Options valuation application
- 19.5. Payoffs
- 19.6. Integration
- 19.7. Fast Fourier Transform
- 19.8. Fractional Fourier Transform
- 20. Matlab® Application (Exercise)



PART II

EMANUEL DERMAN / Columbia University-Former Goldman Sachs

Main Topics:

An Introduction to the Volatility Smile

- 1. The Principles of Financial Modeling
- 1.1. The foundations of financial theory and valuation
- 1.2. The theory of dynamic hedging.
- 2. Option Valuation
- 2.1. The theory of dynamic replication
- 2.2. P&L (profit and loss) of options trading
- 3. Introduction to the Implied Volatility Smile
- 3.1. The smile in various markets
- 3.2. The difficulties the smile presents for trading desks and for theorists
- 3.3. Reasons for a smile
- 4. Implied Distri butions Extracted from the Smile
- 4.1. Static replication of path-independent exotic options with vanilla options
- 5. Approximate Static Replication of path -dependent exotic options with vanilla options
- 6. Local Volatility Models/ Implied Trees

- 6.1. Derman-Kani binomial local volatility trees
- 6.2. Dupire equation
- 6.3. How to build an implied tree from options prices
- 7. The Consequences of Loca I Volati lity Models
- 7.1. The local volatility surface
- 7.2. The relationship between local and implied volatility
- 7.3. Estimating the deltas of vanilla options in the presence of the smile
- 7.4. Estimating the values of exotic options
- 8. Stochastic Volati lity Models
- 8.1. The effect of changes in volatility in the Black-Scholes formula
- 8.2. The SABR model
- 8.3. The PDE for option value under stochastic volatility
- 8.4. The mixing formula for option value under stochastic volatility
- 8.5. Estimating the smile in stochastic volatility models
- 9. Jump-Diffusion Models
 - 9.1. Are they reasonable, and if so, when?
 - 9.2. The Merton jump-diffusion model and its solution
- 9.3. Estimating the smile in jump-diffusion model

ASSET AND TREASURY MANAGEMENT WORKSHOPS

HEDGE FUNDS RISK MANAGEMENT (MANAGING AND INVESTING IN A HEDGE FUND) PART I



Luis Seco is a Professor in the Department of Mathematics and of the Rotman School of Management at the University of Toronto; in addition, he is the director of the RiskLab at the University of Toronto, a risk management research laboratory which conducts R&D activities in collaboration with the companies in the financial sector and professional organizations.

He is also the President and Chief Executive Officer of Sigma Analysis & Management Ltd., a portfolio management firm that specializes in investments in hedge funds and related structures. He has authored numerous articles in different areas of investing and risk management and spoken at a lengthy list of conferences and professional gatherings worldwide.

A Doctorate from Princeton University, he has worked for the California Institute of Technology and held visiting positions at leading Universities and research institutes around the world. He is a fellow of the Fields Institute.

Main Topics:

- 1. Review of hedge fund and structured products hedge funds
- 1.1. Databases
- 1.2. Indices
- 2. Fund of Funds
- 2.1. Types of Fund of Funds
- 2.2. Risk-based Pros and Cons3. Cppi and traditional options
- 3.1. Definitions
- 3.2. Qualitative Properties
- 4. Guaranteed notes
- 4.1. Definitions
- 4.2. Qualitative Properties
- 4.3. Related Credit Derivatives (CFO's) and Associated
- 5. Credit Ratings
- 6. Risks per Strategy
- 6.1. Equity Strategies
- 6.2. Fixed Income Strategies6.3. MBS Strategies

- 6.4. Global Macro Strategies
- 6.5. Managed Futures
- 6.6. Risk Arbitrage, Event Driven, Distressed Strategies
 - 6.7. Convertible and Relative Value Arbitrage Strategies
- 6.8. Other Strategies
- 7. Quantitative market risk assessment (part 1)
- 7.1. Correlation, Diversification, Volatility Reduction and the Greeks
- 7.2. Measuring Return, Return Distributions
- 7.3. Basic Risk Measures
- 7.4. Ratios and Risk Adjusted Return Measures (Sharpe, Omega, etc.)
- 7.5. Styles and Clusters
- 7.6. VaR, Measures, Extreme Values and Stress Testing
- 8. Quantitative market risk assessment (part 2)
- 8.1. Models and Model Risk
- 8.2. Extreme Values and Stress Testing
- 8.3. Active Management of Multiple Managers
- 9. Qualitative diligence
- 9.1. Valuation, Policies and Procedures
- 9.2. Administration
- 9.3. Risk Monitoring, Oversight, Documentation
- 9.4. Reporting and Transparency
- 9.5. Return Attribution
- 9.6. Transaction Practices
- 9.7. Continuity and Disaster Planning
- 9.8. Anti-Money Laundering and Compliance
- 9.9. Code of Ethics
- 9.10. Fiduciary Responsibilities (to and by Investors)
- 9.11. Model Validation
- 10. Structured Products Risk Management
- 10.1. Market Sensitivities
- 10.2. Credit and Liquidity Risk
- 10.3. Ratings
- 11. Case studies



PART II



TREASURY MANAGEMENT

SURESH SANKARAN / Managing Director Kamakura Corporation

Main Topics:

Overview - Cash Management

- Introduction and Overview
- 1.1. Treasury's role
- 1.2. Players in and around treasury
- 2. Treasury Strategies
- 2.1. Setting an overall strategy
- 2.2. Potential strategic problems
- 3. Managing cash
- 3.1. Daily cash position
- 3.2. Managing information
- 4. Managing Working Capital Introduction and Overview
- 4.1. Elements of working capital
- 4.2. Working capital processes
- 4.3. Working capital strategies

Treasury, Liquidity & Risk Management

- 5. Cash Flow Forecasting
- 5.1. Need for forecasting
- 5.2. Approaches and horizons
- 5.3. Avoiding common errors
- 2. Managing Risk and Relationships

- Managing Financial Risk
- 6.1. Establishing risk strategies
- 6.2. Using risk instruments
- 6.3. Measuring risk management performance
- 4. Funds Transfer Pricing (FTP)
 - 6.4. Methodologies
 - 6.5. Approaches
 - 6.6. Treasury as a funding centre
 - 6.7. Managing risk through FTP processes
- 6.8. Case study
- 5. Liquidity Management
- 6.9. Liquidity management strategy
- 6.10. Liquidity management tools
- 6.11. Liquidity contingency plans
- 6.12. Case study
- Getting to grips with Risk Management
- 6.13. Interest rate risk management
- 6.14. Currency risk management
- 6.15. VaR
- The rules of risk management

REGULATION



BASEL III. DEVELOPMENT AND IMPLEMENTATION

PART I

CARLOS ORTA / Comisión Nacional Bancaria y de Valores (CNBV

Carlos Orta received a BS in Economics from the National Autonomous University of Mexico Carlos is executive member of various working groups of international Organizations who UNAM and has a Masters in Money, Banking and Finance from the Birmingham University set the regulatory standards (Basel Committee, International Organization of Securities in England. Furthermore, he has various Diplomas and has studied specialized courses in Commissions and Financial Stability Board). Mexico and abroad

Currently, he is CEO of Regulatory Development in the National Banking and Securities Commission, where he is in charge of the development of regulatory projects for the entities subject to the CNBV supervision on accounting, stock markets, prudential and structural matters.



PART II

HELEODORO RUIZ / Banorte-IXE

Over 25 years of banking experience with strong emphasis in risk management and information Main Topics: technology, including Market, Operational and Credit Risk Management, developing statistical and judgmental risk rating and credit scoring models, significant experience in loan portfolio management and strategic planning to create economic value added.

Heleodoro Ruiz is advisor of different banks in Latin-America and has been conference speaker for some universities and banking associations on topics such as Banking, Finance, Basel and Enterprise Risk Management in America, Europe and Asia.

In the academic field is an MBA Guest Professor at IPADE Business School and ITESM at Global MBA program and the International Financial Risk Management Seminar, has authored a number of articles on Banking, Finance and Risk Management.

President of the Credit Commission at Mexican Banking Association, member of the board at International Bank in Texas USA, member of the Board Trans Union Credit Bureau Mexico. Member of the Board Dun & Bradstreet bureau Mexico.

Heleodoro Ruiz is Deputy Chief Risk Officer in Banorte Financial Group since 1997, and since 2005 represents Mexican Banking Association to implement Basel in Mexico.

Education:

- Risk Management Harvard Business School
- MBA IPADE Business School
- Bachelor in Computer Sciences National Autonomous University of Mexico UNAM

- Background
- 1.1. From Basel I to Basel II
- 1.2. Evolution of the National and International Regulation
- 1.3. Basel II Pillars
- 1.4. Main changes from Basel II to Basel III
- 1.5. Basel III objectives
- 2. Basel III Mexican Regulation
- Basel III CNBV (National Banking and Securities Commission) Regulation Summary Implementation dates
- 2.3. Main challenges
- 3. Basel III Venture Capital Type
- 3.1. Capital Estimation
- 3.2. Credit Risk
- 3.3. Market Risk
- 3.4. Operational Risk
- 3.5. Liquidity Risk
- 3.6. Conclusions



PART III

ABRAHAM IZQUIERDO / Scotiabank México

Abraham Izquierdo is Financial Risk Manager: Certified by the Global Association of Risk His main topics of interest are: Market Risk, Liquidity Risk, Basel III, Credit and Counterparty Professionals. He holds a B.A. in Economics, a MBA, a Master's degree in Finance and a Risk, Credit Value Adjustment, Credit Default Swaps, Volatility Models and Skews, Financial Master's degree in Risk Management from the ITAM (Autonomous Technological Institute of Econometrics and Extreme Values Theory.

Currently he is Credit, Counterparty & Liquidity Risk Director in Scotiabank Mexico, where he led the development and implementation of Credit Risk Models AIRB for Basel II, the development and implementation of the Liquidity Risk Guideline of Basel III, the management and monitoring of the liquidity position, the budget management and the interest rate risk management of the bank, as well as, the implementation of the CVA and IRC, the management and monitoring of the Counterparty Risk of the Derivatives Portfolios and the Credit Risk Management related to the consumption portfolios and commercial loans of the bank. Abraham is also in charge of representing the institution in the Credit Risk Committee of the Mexican Bank Association.

Previously, he was in charge of the Market and Liquidity Risk management in JP Morgan Mexico; and led the risk area of the Central Counterparty of the Mexican Derivatives Exchange for the Mexican Securities Exchange Group.

He is author and co-author of articles related to various relevant topics in the empirical finance field, including: "Generación de escenarios extremos basados en teoría de valores extremos y cópulas", and more recently he co-author with Jaime Díaz Tinoco: "Teoría de valores extremos y la determinación de márgenes iniciales en una Cámara de Compensación de contratos derivados". He has given classes and workshops regarding Risk Management, Financial Econometrics, Futures, Forwards and Options, Market Risk, Credit Risk, as well as Modern Portfolio Theory and the Capital Asset Pricing Model in the Universidad Anáhuac, the ITESM Ciudad de México, Science Faculty of the National Autonomous University of Mexico UNAM and the Universidad Panamericana.

Main Topics:

- 1. Practical case studies on Credit Risk Parameters
- 1.1. Probability of Default
- 1.2. Severity of the Loss
- 1.3. Exposure at Default
- 2. Practical case studies on Portfolio Credit Risks
- 2.1. Expected Loss
- 2.2. Unexpected Loss
- 2.3. Capital and Reserves
- 3. Practical case studies on Liquidity Risk
- 3.1. Liquidity Coverage Ratio (LCR)
- 3.2. Net Stable Funding (NSF)
- 3.3. Loan to Deposits Ratio (LDR)
- 4. Practical case studies on Counterparty Risk and Market Risk
- 4.1. Unilateral Credit Value Adjustment (CVA)
- 4.2. Bilateral Credit Value Adjustment (CVA)
- 4.3. Incremental Risk Charge (IRC)
- 4.4. Stress VaR (SVaR)
- 5. Practical case studies on Other Relevant Topics
- 5.1. Leverage Ratio (LR)
- 5.2. Capital Indices

DODD FRANK - EMIR: THE CHALLENGES OF SWAP DEALERS, CENTRAL COUNTERPARTIES, EXECUTION FACILITIES, TRADE REPOSITORIES AND END USERS TRADING SWAPS INTERNATIONALLY **PART I**

RONALD H. FILLER / New York Law School

Ron Filler is a Professor of Law and the Director of the Center for Financial Services Law at Firm Law". Ron received a Masters of Law Degree in Taxation from Georgetown University services law. He is the Program Director of the award-winning LLM in Financial Services Law and a B.A. Degree from the University of Illinois in 1970. Graduate Program at NYLS which now offers more than 40 courses involving all aspects of the global financial services industry. He is also a Public Director of the National Futures Association and of NYSE Liffe US, a futures exchange affiliated with NYSE Euronext. He is a 1. The basic structure and material differences between Emir and Dodd Frank Senior Consultant with the international law firm of Allen & Overy.

Prior to joining New York Law School, he was a Managing Director at Lehman Brothers Inc., where he specializes in various aspects of the global futures industry, including legal, compliance, administrative, clearing and operations issues. He has been a member of the Board of Directors of the NFA, the FIA, an exchange and a clearing house. At Lehman, he was also a member of several futures exchanges, including the CBOT, the CME and NYMEX. He has held numerous industry positions, including being a Past President of the FIA Law and Compliance Division, and has spoken at over 100 industry seminars and programs on a variety of issues facing the global futures markets. He was the Founder and Director of the Commodities Law Institute and an Adjunct Professor of Law for over 20 years at Chicago Kent College of Law, Brooklyn Law School, New York Law School and the University of Illinois, where he taught courses on "Futures and Derivatives Law", "Securities Law" and "Brokerage

New York Law School where he teaches several courses relating to derivatives and financial Law Center in 1976, a J.D. Degree from George Washington University Law School in 1973

Main Topics:

- 2. Jurisdictions have addressed international transactions
- 3. Principal areas and expectations:
- 3.1. Registration
- 3.2. Reporting
- 3.3. Clearing and execution requirements
- 3.4. Practical considerations:
 - a. Sales Practices
 - b. Risk Controls
 - c. Conflicts
 - d. Market Integrity
 - e. Operations



GAR Y DEWAAI / President Gary DeWaal and Associates LLC

Gary DeWaal is currently President of Gary DeWaal and Associates LLC, a NY-based consulting During June 2010, Gary was selected as one of the top five general counsels in the world (in a firm specializing in advice regarding financial services regulatory matters. Previously, Gary competition among 3,000 general counsels) by the International Law Office in association with served as a Senior Managing Director and Group General Counsel of Newedge, as well the Association of Corporate Counsel. Gary is frequently quoted in the media for his thoughts as a member of its global Executive Committee, where he oversaw the Group's worldwide Legal, Compliance and Financial Crimes Prevention (including AML) departments. Newedge was created on January 2, 2008 from the merger of the Fimat and Calyon Financial Groups. (Newedge refers to Newedge Group and all its branches and worldwide subsidiaries. Newedge Group is jointly owned by Société Générale and Credit Agricole Corporate Investment Bank). Gary joined Fimat in March 1995 from Brody White & Company where he had served, at various times, as President, General Counsel, Head of Operations and Head of Internal Audit since 1986. Previously Gary worked for the U.S. Commodity Futures Trading Commission's Division of Enforcement in NYC, and Mudge Rose Guthrie & Alexander, a Wall Street corporate law firm whose principal partner was once Richard Nixon.

Gary graduated in 1980 with JD and MBA degrees from the SUNY Buffalo and in 1976 from the State University of New York at Stony Brook where he received a BA degree in English and Economics; was elected to Phi Beta Kappa and Omicron Delta Epsilon (international economics honors society); and co-received awards as the University's top overall graduating senior and junior.

on the international financial services industry and has published numerous articles on futures and securities industry issues. He regularly lectures or appears as a speaker at futures and securities industry conferences or in training sessions for international regulators.

Main Topics:

- 1. How will Dodd Frank impact Mexican financial institutions doing business with US persons?
- 2. How has the mandatory clearing requirements impacted the OTC derivatives markets?
- 3. What new customer protections are still needed?
- 4. How should high frequency traders be regulated, if at all?
- 5. Have the swap execution facilities been effective in providing transparency?
- 6. What regulations should the Mexican regulators now consider regarding the financial markets and their products?



PART III

ELIZABETH RITTER / Chief of Staff and Senior Counsel at Commodity Futures Trading Commission (CFTC)

Elizabeth has practiced law in Washington D.C. since 1989. She has an undergraduate Elizabeth is an adjunct professor of law at Georgetown University Law School, specializing in degree from Penn State and received her law degree from the George Washington University. regulation of derivatives and complex derivative transactions, and has also taught at George Elizabeth has received appointment as legal counsel to six Presidential appointees in the Washington University National Law Center, American University College of Law, and Catholic last four administrations. She specializes in the area of financial market regulation, and has University Law School. She has written and spoken extensively in the areas of derivatives and served as the Commodity Futures Trading Commission's Office of General Counsel as Deputy securities regulation. General Counsel for Legislative and Intergovernmental Affairs. She has also served as Senior Counsel to the Senate Agriculture Committee, working on financial market regulatory reform legislation.

GIPS® GLOBAL INVESTMENT PERFORMANCE **STANDARDS**

ERICK MORALES / KPMG

Erick is a bilingual (English-Spanish) resource which came to KPMG early on 2011, bringing in Other training he has received recently, include: more than twelve years of experience, where he held different positions in the broker-dealer & asset management operations at an important financial group in Mexico. He is knowledgeable of the regulation for stocks, bonds and derivatives brokerage business, as well as retail funds activities.

He is proficient in the design of internal controls in front office processes and risk management. He has been involved in multiple middle – back office projects, to comply with local regulatory requirements.

During the last year, he did participate in providing information on performance metrics and products assistance to a local institutional and private banking client with assets under management of around 160 million USD, as well as managing a database with volume of 3,000 clients. He is knowledgeable of KYC / AML process and regulation, as well as with the US IRS' FATCA initiative.

At KPMG Mexico, he has been involved in Financial Services local compliance engagements related to México's Central Bank 31 requirements needed to intermediate derivates as well as Comprehensive Risk Management regulatory compliance as set by CNBV, the local Banking & Securities regulator.

Professional and Industry Experience

He has ample experience on different asset classes, including fixed income, equities, Fx., ETF's (iShares) and financial derivates for local and U.S. Markets.

Erick has been also assisting asset management institutions in portfolio management systems, performance, risk control processes and GIPS compliance for financial institutions, along with FATCA-related assistance.

- US FATCA (Foreign Account Tax Compliance Act) Academy
- · Harvard Management Mentor, Mexico, 2011

Main Topics:

- Fundamentals of Compliance
- 2. GIPS® Composites
- 4. Compliant Presentations
- 5. Advertising Guidelines
- 6. Supplemental Information
- 7. Error Correction

IFRS 9 - FINANCIAL SECURITIES (INTERNATIONAL FINANCIAL REPORTING STANDARD) **PART I**

ÁS OLEA / KPMG

Nicolás Olea Zazueta es Socio de Financial Risk Management, dentro de la práctica de Risk Main Topics: Advisory Services en la oficina de KPMG en la Cd. De México. Contador Público Titulado y Master en Ciencias, con especialidad en Sistemas de Información, ambos por el Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM-Campus Monterrey).

Nicolás se incorporó a KPMG en Septiembre de 1999. Durante la década de los 80's, Nicolás trabajó en un proyecto conjunto ITESM-CEMEX ,destinado a diseñar una familia de modelos de simulación financiera computarizados, en apoyo a la Planeación Corporativa de CEMEX, posteriormente se desempeñó en el Banco Español de Crédito (BANESTO) en funciones relacionadas al financiamiento basado en activos (factoring & leasing), adicionalmente durante los últimos trece años se ha venido desempeñado tanto en la industria de corretaje de Acciones, Bonos y Derivados listados, en los Estados Unidos (REFCO-Chicago) y en México (Bolsa Mexicana de Valores y en el MexDer, el Mercado Mexicano de Derivados), así mismo, dentro de KPMG a cargo de múltiples revisiones de Riesgos en el Sector Financiero Mexicano (Bancos, Casas de Bolsa, Aseguradoras, Afores), y en particular, en materia de Instrumentos Financieros primarios y derivados.

Su especialidad reside en aspectos relacionados a la Contabilización y Auditoría de Instrumentos Financieros Primarios y Derivados. Funge como líder de producto KPMG para Latinoamérica en cuanto a normatividad en materia de contabilización de instrumentos financieros y derivados con fines de cobertura bajo los estándares contables IAS-39 y SFAS 133/138. Fungió como Presidente del Comité de Auditoría de MexDer y miembro del Comité Técnico de Asigna, la Cámara de Compensación de MexDer. Liderea el Grupo de Instrumentos Financieros en la Comisión de Principios de Contabilidad, dentro de la Comisión de Principios de Contabilidad del Instituto Mexicano de Contadores Públicos y es miembro del Comité de Instrumentos Financieros del Consejo de Investigación de Normas de Información Financiera (CINIF). Asimismo, es miembro del Comité de Información Financiera del IMEF y participa en el Comité Editorial de la Revista de Contaduría Pública del IMCP. Desde hace tres años viene colaborando con FIDES (Federación Interamericana de Empresas de Seguros) en la difusión por distintos países de Latinoamérica, de IFRS en materia de Instrumentos Financieros (IAS-32/39 & IFRS-7). Sectores de Especialidad: Financiero (Bancos, Casas de Bolsa, Aseguradoras, Fondos de Pensiones, Sociedades de Inversión), Agro-negocios (Commodities) y Energía.

- 1. Clasificación y medición
- 1.1. Porqué la necesidad de sustituir IAS39
- 1.2. El concepto de Modelo de Negocio y las nuevas categorías de Instrumentos Financieros no derivados
- 1.3. Comparando IAS 39 v.s. IFRS 9
- 1.4. ¿Hay diferencias v.s. US GAAP y Criterios CNBV?
- 1.5. Ejemplos
- 1.6. Revelaciones
- 2. Contabilidad de coberturas (hedge accounting, aprobado por el iasb en nov 19, 2013
- 2.1. IAS-39 se preserva en buena medida, pero aun así hay cambios importantes aprobados por el IASB
- 2.2. Establecer el nexo entre el Modelo de Gestión de Riesgos y las Estrategias/Cotablización de Cobertura,
- 2.3. Disectando por componentes de Riesgos: Implicaciones importantes para Hedging de Commodities
- 2.4. Coberturas montadas sobre otra relación de cobertura
- 2.5. Desaparece el rango de eficacia del 0.8-1.25
- 2.6. Posibilidad de "rebalanceo" de la relación de cobertura
- Imposibilidad de des-designar de manera discresional una relación de cobertura
- 2.8. Aspectos de revelación introducidos.
- 3. Costo amortizado y deterioro de cartera
- 3.1. Antecedentes
- 3.2. Definiciones en el tratamiento de la cartera y cuentas por cobrar bajo el concepto de IAS39
 - a. Concepto de Pérdida incurrida
 - b. Clasificación de crédito individualmente significativo y cartera colectiva
 - c. Definición de deterioro
- 3.3. Determinación del costo amortizado de la cartera
- 3.4. Estimación de la Pérdida Incurrida para la cartera individualmente significativa y paramétrica
- 3.5. Pérdida incurrida vs Pérdida Esperada, los retos y el camino a seguir
- 3.6. El nuevo enfoque de estimación de deterioro (impairment) de cartera bajo IFRS 9
- 3.7. Principales diferencias para la determinación del deterioro entre USGAAP e IFRS
- Situación actual y siguientes pasos
- 3.9. Conclusiones



PART II

ANTONIO VILLAREAL / KPMG México

Antonio Villareal es Socio del área de Risk Consulting dentro de la Práctica de Asesoría en KPMG México. Cuenta con más de 15 años de experiencia en el ámbito de la Administración de Riesgos.

Se ha desempeñado como Director de Riesgos en diversas instituciones financieras. Su especialidad radica en el desarrollo y validación de modelos de riesgo de mercado, crédito y liquidez así como su implementación en la infraestructura tecnológica y gobierno corporativo de las instituciones.



REGULATORY AND STRUCTURE MARKET TRENDS IN THE GLOBAL MARKETS...



Chair

WHAT'S NEXT?

Ronald H. Filler New York Law School



John Hull University Toronto



Gary De Waal
Gary DeWaal and
Associates LLC



Vassilis Vergotis
Eurex



Sandy Frucher Vice Chairman NASDAQ OMX



Elizabeth Ritter
Chief of Staff and Senior
Counsel to Commodity
Futures and Trading
Comission (CFTC)

PANEL

Panel 19^{TH} june (Day 2) 8:30 PM – 10:00 PM

RISK MANAGEMENT MEASURES AND CONTROLS IN THE FINANCIAL INSTITUTIONS...

COULD BARINGS HAPPEN AGAIN?



Chair

Luis Seco Sigma Analysis & Management Ltd



Paul Wilmott



Jonh Hull
Toronto University



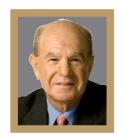
Marco Avellaneda NYU



Emanuel Derman
Columbia UniversityFormer Goldman
Sachs



Nick Leeson Former Trader Barings Bank



Edward I. Altman NYU

PAYMENT METHODS

1. BANK TRANSFER IN US DOLLARS BANK: BBVA Bancomer, S.A. ACCOUNT NUMBER: 012180001649665629 USD

SWIFT: BCMRMXMM

BRANCH NUMBER: 0956 Sector Financiero, Bancos y Casas de Bolsa,

México, D.F.

BENEFICIARY: RiskMathics Financial Innovation, S.C.

2. CREDIT CARD: VISA, MASTERCARD or AMERICAN EXPRESS

IMPORTANT NOTICE: There will be no reimbursements.

REQUIREMENTS

- 1. Come from economic Administrative Careers
- 2. Preferably working in Financial Institutions
- 3. Participants should bring a laptop

REGISTRATION

E-Mail: derivatives@riskmathics.com Telephone: (+52 55) 5536 4325 y (+52 55) 5669 4729



WWW.RISKMATHICS.COM

Venue: CAMINO REAL Santa Fe Guillermo González Camarena No. 300 Centro Ciudad Santa fe, México D.F. 01210

COST FULL EVENT (4 DAYS): \$35,000 Mexican Pesos + Tax (16%)

WORKSHOP*		
PRACTITIONERS	COST	LANGUAGE
NAGEMENT		
Nick Leeson	\$7,000 Mexican Pesos + Tax (16%)	Inglés
Gunter Meissner	\$25,000 Mexican Pesos + Tax (16%)	Inglés
John Soldevilla / Gustavo Fuertes	\$23,000 Mexican Pesos + Tax (16%)	Español
Carlos Vallebueno	\$18,000 Mexican Pesos + Tax (16%)	Español
Jon Gregory	\$25,000 Mexican Pesos + Tax (16%)	Inglés
John Hull	\$18,000 Mexican Pesos + Tax (16%)	Inglés
Suresh Sankaran	\$25,000 Mexican Pesos + Tax (16%)	Inglés
Gerardo Zamudio	\$25,000 Mexican Pesos + Tax (16%)	Español
Marcelo G. Cruz / Santiago Carrillo	\$30,000 Mexican Pesos + Tax (16%)	Español/Inglés
Edward Altman	\$20,000 Mexican Pesos + Tax (16%)	Inglés
Rafael García/ José Diego Alarcón/ Jordy Payés/Manuel Aguilera	\$30,000 Mexican Pesos + Tax (16%)	Español
ANTITATIVE FINANCE		
Marco Avellaneda	\$18,000 Pesos más IVA	Español
Marco Avellaneda	\$18,000 Mexican Pesos + Tax (16%)	Español
Oscar Sierra / Rohan Rao / Emanuel Derman	\$30,000 Mexican Pesos + Tax (16%)	Español Inglés
Izzy Nelken	\$25,000 Mexican Pesos + Tax (16%)	Inglés
Marcos López De Prado	\$15,000 Mexican Pesos + Tax (16%)	Inglés
Paul Wilmott	, ,	-
José Alatorre / Emanuel Derman	` '	Español/Inglés
SURY MANAGEMENT		1 0
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·	\$25,000 Movison Doggo + Tay (169/)	Inglés
	\$25,000 IVIEXICALI PESOS + Tax (10%)	irigles
Carlos Orta / Heleodoro Ruiz/ Abraham Izquierdo	\$25,000 Mexican Pesos + Tax (16%)	Español
Gary DeWaal / Ron Filler / Elizabeth L. Ritter	\$25,000 Mexican Pesos + Tax (16%)	Inglés
Erick Morales	\$20,000 Mexican Pesos + Tax (16%)	Español
Nicolás Olea / Antonio Villarreal	\$20,000 Mexican Pesos + Tax (16%)	Español
	Nick Leeson Gunter Meissner John Soldevilla / Gustavo Fuertes Carlos Vallebueno Jon Gregory John Hull Suresh Sankaran Gerardo Zamudio Marcelo G. Cruz / Santiago Carrillo Edward Altman Rafael García/ José Diego Alarcón/ Jordy Payés/Manuel Aguilera ANTITATIVE FINANCE Marco Avellaneda Marco Avellaneda Oscar Sierra / Rohan Rao / Emanuel Derman Izzy Nelken Marcos López De Prado Paul Wilmott José Alatorre / Emanuel Derman SURY MANAGEMENT Luis Seco Marcos López De Prado Suresh Sankaran ULATION Carlos Orta / Heleodoro Ruiz/ Abraham Izquierdo Gary DeWaal / Ron Filler / Elizabeth L. Ritter Erick Morales	NAGEMENT

PATROCINADORES



KPMG (KPMG in Mexico is a member Firm of KPMG International, a global network of independent Firms that can be found in over 155 countries that jointly employ more than 155,000 people across a range of activities. Through our Audit, Tax and Advisory services we offer a dual benefit to our clients: global experience and ample local expertise to help them:

- Increase productivity and optimize costs
- Manage both internal and external risks
- Take full advantage of their technology investments
- Establish a sound financial, fiscal and legal structure for complying with various regulatory provisions
- Boost profitability and reach the highest operating standards

In Mexico, we have offered advice to domestic and multinational clients for over six decades through our 18 offices, strategically located in cities with the highest impact on the country's economy. Our more than 2,800 professionals are equipped to provide high-value services while contributing to our clients' sustained and sustainable growth. Additionally, our firm is supported by foreign professionals through our Global Opportunities program, who are part of specialized engagement teams that advise German, Japanese and Chinese companies as regards compliance with Mexican laws and standards as well as with the corresponding regulations in such countries.

We are aware that we will only attract and retain the best people if they believe we are their best work option. Therefore, KPMG is known worldwide as a great place to work. In particular, KPMG in Mexico has been acknowledged for several consecutive years as a "Super Company – Companies People Want to Work for the Most"

NASDAQ OMX

NASDAQ OMX Inc. is an American multinational financial services corporation that owns and operates the NASDAQ stock market and eight European stock exchanges in the Nordic and Baltic regions and Armenia under the NASDAQ OMX banner. It is headquartered in New York City



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Intelligent information is a unique synthesis of human intelligence, industry expertise and innovative technology that provides decision-makers with the knowledge to act, enabling them to make better decisions faster. We deliver this must-have insight to the financial and risk, legal, tax and accounting, intellectual property and science and media markets, powered by the world's most trusted news organization.



Risk Management & Trading Community (http://riskmathics.info/), is a community created mainly for Traders, Risk Managers, Quants, and regulators linked to the financial sector worldwide.

Here you can contact the most acknowledge practitioners, academics and in general all those involved, like you, in an active way in the domestic and international financial markets. In addition, you can find out all RiskMathics courses and events in which you can participate, which will be exclusive to members of the Risk Management & Trading Community. One benefit to register to Risk Management & Trading Community is that its members can have access to the latest innovations on risk and trading sectors, researches, items of interest, learn cutting-edge topics, relevant financial facts, among lots of other information that can promote the development of financial markets.



Electronic Liquidity Group is the first Home Broker based in Mexico that has a proprietary technology platform to provide direct market access to organized derivatives markets. At this early stage, ELG provides direct access to MexDer, Mexican Derivatives Market via Internet to independent Traders, individual investors and / or institutionals who can operate regardless of their geographical location. ELG provides to Traders and Investors, relevant information on derivatives exchanges than other media and information vendorn, as open outcry and depth positions of all futures and options listed on the market ensuring fast execution and especially with the market lowest fees...Let's Trade



Serfiex, es una empresa de software y consultoría líder en España en soluciones de "financial Risk Management", constituida en 1993. Los clientes de SERFIEX son tesorerías y departamentos de riesgos de bancos y corporaciones, gestoras de fondos, hedge funds, brokers, banca privada, entidades aseguradoras, supervisores e infraestructuras de mercado. SERFIEX tiene delegaciones en Madrid, Barcelona y Miami.

Las áreas de innovación de SERFIEX son: Riskco Student®, el primer software profesional de gestión de riesgos financieros para estudiantes. Riskco Portfolio Web®,.el mejor software de gestión de inversiones on-line. Dynamic optimal Risk® (DoR), una metodología para determinar con precisión cuánto

aumentar o disminuir periódicamente el riesgo de la cartera.



QuantConnect ayuda a los Quants a desarrollar su talento a través de proveerles una poderosa plataforma de simulación financiera, bases de datos gratuitas y capital de inversión. Como patrocinadores del curso, QuantConnect pone a disposición, de los estudiantes una suscripción premium gratuita para todos aquellos que quieran utilizar la plataforma (para obtener el código de 100% de descuento por favor escribir a shai@quantconnect.com). Además, los Quants que hayan desarrollado estrategias exitosas y rentables tendrán la posibilidad de recibir una asignación de capital de inversión por parte de alguno de los fondos asociados a QuantConnect.



QuantRisk QuantRisk Es una empresa mexicana de consultoría establecida desde 2011 en la Ciudad de México. Con una amplia experiencia y reconocimiento en el sector Bursátil, Financiero, de Consultoría, asesoría, académico e investigación.

Ofrece servicios profesionales integrales y asesorías en las áreas económica, financiera, patrimonial, fiscal, de auditoría, contable, administrativa, jurídica, desarrollo suplementario de las capacidades y habilidades de personal, laboral, comercio exterior, a todo tipo de personas físicas o morales, nacionales o extranjeras. Sus expertos son Quants, Traders, Risk Managers, expertos de negocios y economistas de reconocimiento, así como responsables de Trading, Riesgos y Clearing.