Table 3.1
Comparing the Basel Committee proposal with RiskMetrics

Issue	Basel Committee proposal	RiskMetrics
Mapping: how positions are described in summary form	• Fixed Income: at least 6 time buckets, differentiate government yield curves and spread curves.	• Fixed Income: data for 7–10 buckets of government yield curves in 16 markets, 4 buckets money market rates in 27 markets, 4–6 buckets in swap rates in 18 markets.
	• Equities: country indices, individual stocks on basis of beta equivalent.	• Equities: country indices in 27 markets, individual stocks on beta (correction for non-systematic risk).
	• Commodities: to be included, not specified how.	• Commodities: 80 volatility series in 11 commodities (spot and term).
Volatility: how statistics of future price movement are estimated	• Volatility expressed in standard deviation of normal distribution proxy for daily historical observations year or more back. Equal weights or alternative weighting scheme provided effective observation period is at least one year.	• Volatility expressed in standard deviation of normal distribution proxy for exponentially weighted daily historical observations with decay factors of .94 (for trading, 74 day cutoff 1%) and .97 (for investing, 151 day cutoff at 1%).
		• Special Regulatory Data Set, incorporating Basel Committee 1-year moving average assumption.
	• Estimate updated at least quarterly.	• Estimates updated daily.
Adversity: size of adverse move in terms of normal distribution	• Minimum adverse move expected to happen with probability of 1% (2.32 standard deviations) over 10 business days. Permission to use daily statistics scaled up with square root of 10 (3.1). Equivalent to 7.3 daily standard deviations.	• For trading: minimum adverse move expected to happen with probability of 5% (1.65 standard deviation) over 1 business day.
		• For investment: minimum adverse move expected to happen with probability of 5% (1.65 standard deviation) over 25 business days.
Options: treatment of time value and non-linearity	• Risk estimate must consider effect of non-linear price movement (gamma-effect).	• Non-linear price movement can be estimated analytically (delta-gamma) or under simulation approach. Simulation scenarios to be generated from estimated volatilities and correlations.
	• Risk estimate must include effect of changes in implied volatilities (vega-effect).	• Estimates of volatilities of implied volatilities currently not provided, thus limited coverage of options risk.
Correlation: how risks are aggregated	• Portfolio effect can be considered within asset classes (Fixed Income, Equity, Commodity, FX). Use of correlations across asset classes subject to regulatory approval.	• Full portfolio effect considered across all possible parameter combinations.
	• Correlations estimated with equally weighted daily data for more than one year.	• Correlations estimated using exponentially weighted daily historical observations with decay factors of 0.94 (for trading, 74 day cutoff 1%) and 0.97 (for investing, 151 day cutoff at 1%).
Residuals: treatment of instrument specific risks	• Instrument specific risks not covered by standard maps should be estimated.	• Does not deal with specific risks not covered in standard maps.
	• Capital requirements at least equal to 50% of charge calculated under standard methodology.	