

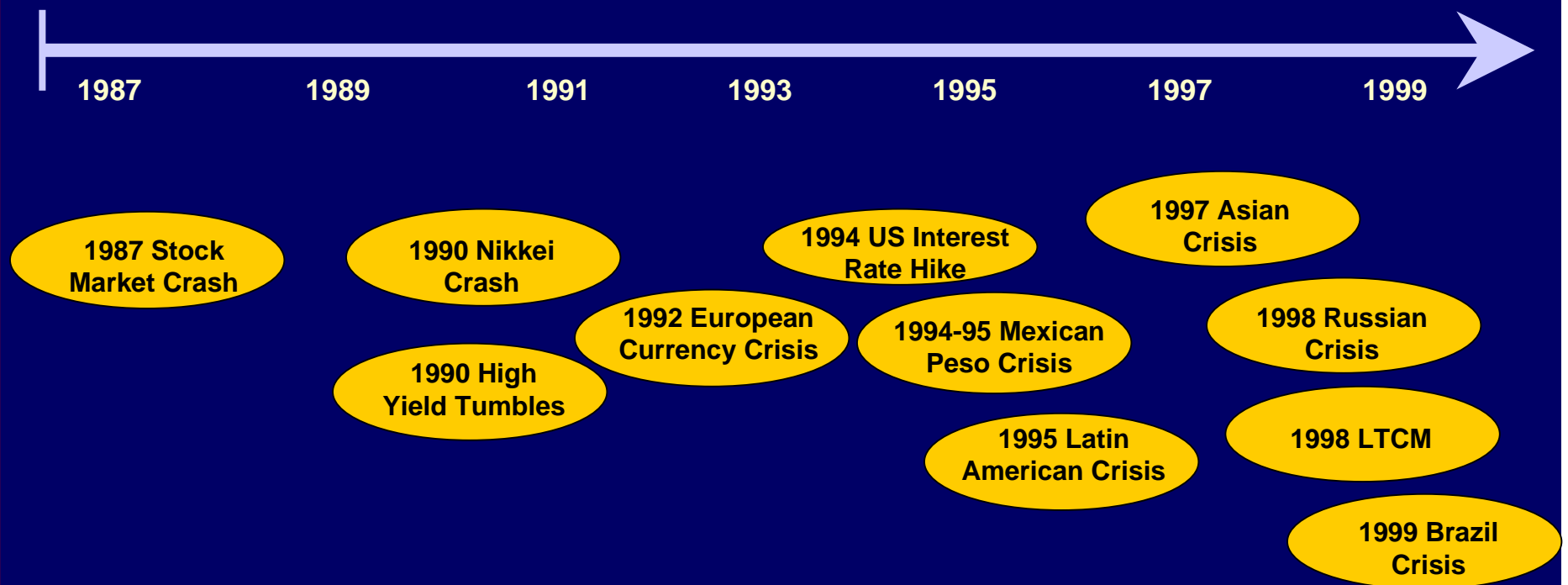
Stress Testing for Market Shocks

Capital Market Risk Advisors



Extreme Market Moves Continue to Occur... Yet Many Are Still Unprepared

“Unexpected” Financial Shocks



Market Shocks

While most institutions address potential credit exposure at a two or three standard deviation move, markets regularly move more than two or three standard deviations

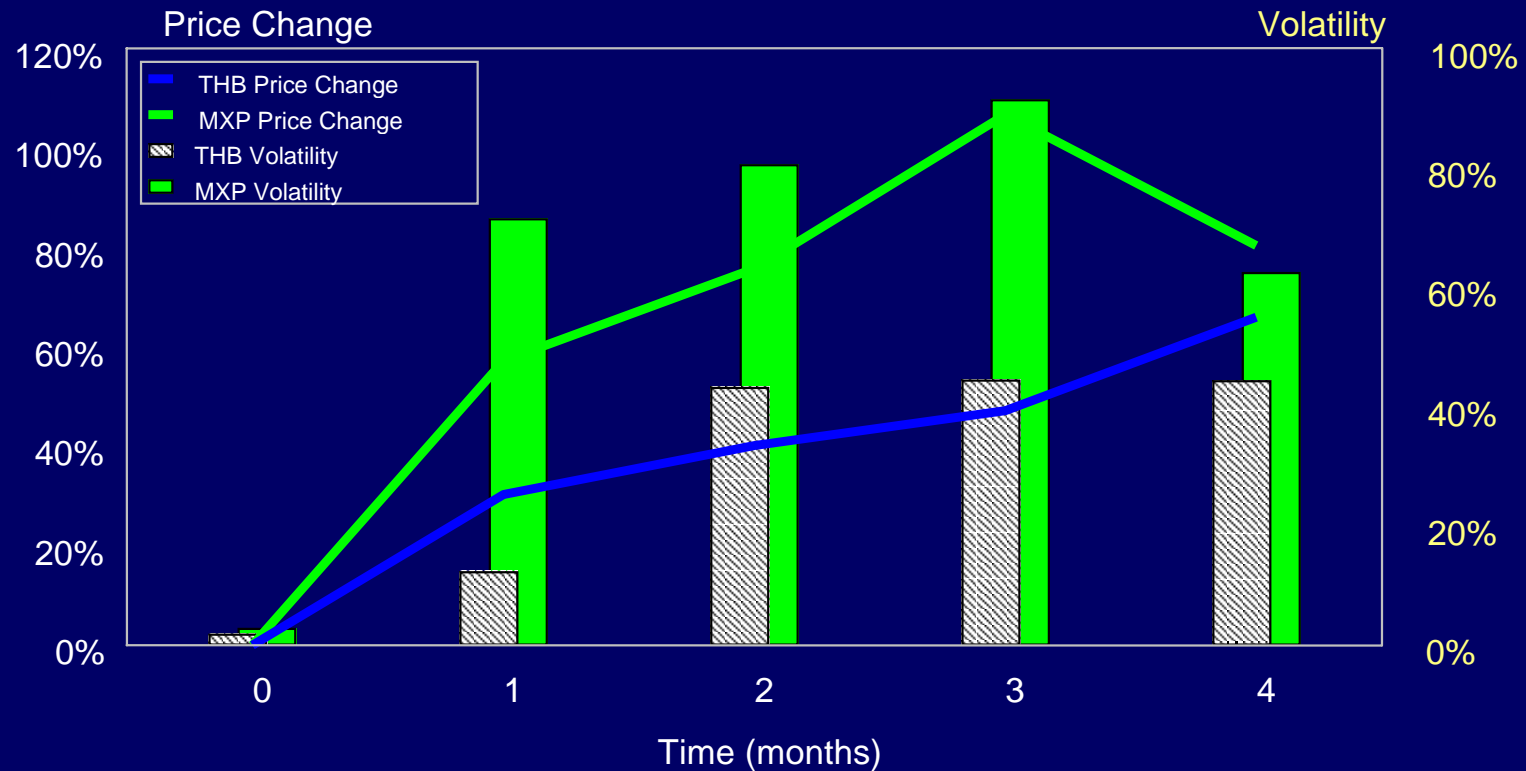
Market	Largest 1 Day Move	Date	Pre-Event STD Deviation	Number of Pre-Event SD	2 STD Dev Move	3 STD Dev Move	20 STD Dev Move
Mexican Peso	20.4%	12/22/94	2.5%	8.1	5.0%	7.6%	50.4%
Thai Baht	19.5%	7/2/97	17.6%	1.1	35.2%	52.7%	351.5%
Russian Ruble	41.2%	8/27/98	1.6%	25.8	3.2%	4.8%	32.0%
Brazilian Real	9.0%	1/13/99	.1%	9.9	1.8%	2.7%	18.2%

Categories of Stress Tests

Portfolio Mix & Markets	Model Assumption	Product Complexity	Credit / Liquidity	Sea Change
<ul style="list-style-type: none"> Term structure and yield curve levels and shapes Term structure and relationship of volatility Price shifts in equities, sectors, indices Currency, commodities price shifts Spreads and basis relationships 	<ul style="list-style-type: none"> Yield curves building assumptions Pricing models VAR and Capital Models Asset/Liability model 	<ul style="list-style-type: none"> Products with uncertain cash flows Structured products & complex derivatives Emerging markets and difficult to handle risks 	<ul style="list-style-type: none"> Concentrations Linkages Credit components of securities Volatility of credit spreads Default assumptions 	<ul style="list-style-type: none"> EMU Y2K Changing competitive structure

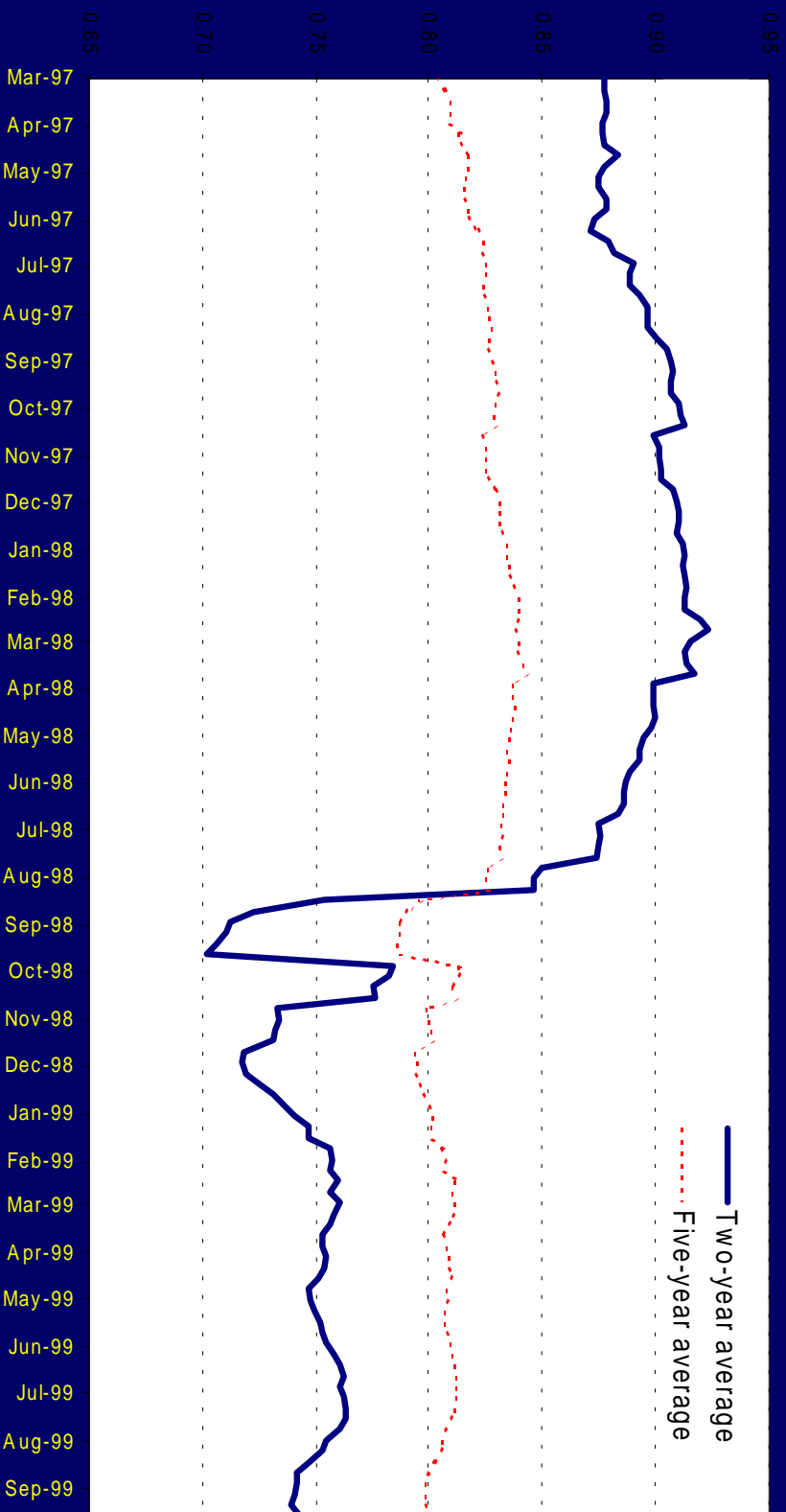
Other Asset Class History IS Valuable

Currency Crisis Comparison: Mexican Peso vs. Thai Baht



Correlation Between Corporate and Treasury Yields

Correlation



Government Bond Yield Spreads

