



Introduction to Credit Portfolio Management

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**International Association of
Credit Portfolio Managers**

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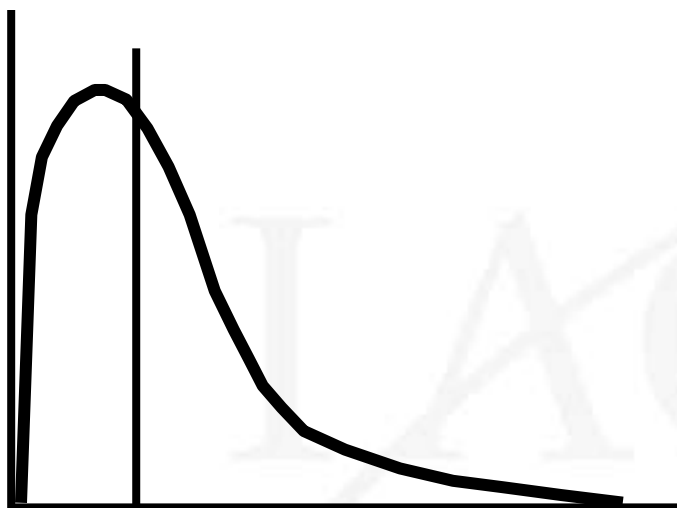
Why Active Credit Portfolio Management?

A Brief Introduction

CPM Held Up During the Crisis

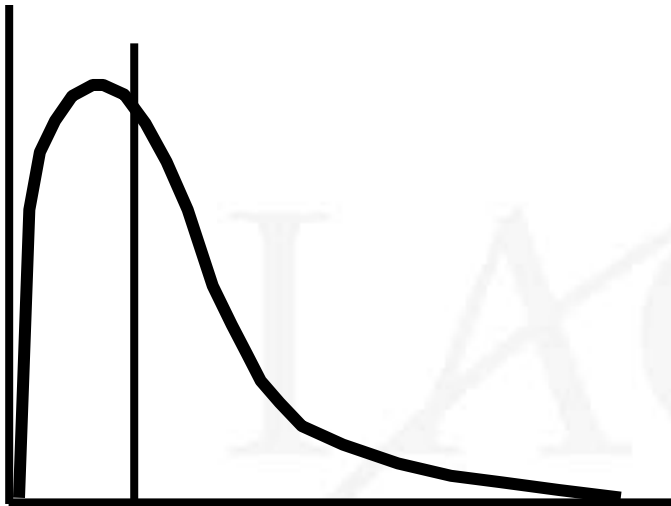
- “We’ve kept the bank open for business”
- “We are back on the map, with more ability to affect good decision making than we have had in years”
- “Hedge strategies have proven to work well”
- “We were able to convince senior management to stay out of the problem asset classes”

Credit Traits: Asymmetric Outcomes



- A “loser’s game”
- Primary focus: Managing the downside
- A small number of bad outcomes can put you on the downside

Credit Traits: Correlations and “Fat Tails”



- Bad years happen more often than we suppose “they should”
- Fat tails + long credit cycles
 - = The “illusion of uniqueness”
 - “The credit crunch”
 - “The accounting fiasco”
 - “The commercial real estate debacle”
 - “The third world debt crisis”

Credit Combines Two Distinct Activities

“Origination”

- Specialization
- Expertise
- Relationships
- Volume

“Portfolio”

- Diversification across industries
- Diversification across geographies
- Limited concentrations

A Summary

- Asymmetric outcomes
- Fat tails and correlations – rare (tail) events are more common than we intuit
- Two business activities – “origination” and “portfolio”

The remedy: Active credit portfolio management and diversification

To Implement CPM, We Need Control Levers

Front end controls

- Policy, limits
- Transaction origination and vetting
 - Deal/credit committee input
 - Pricing tools (RAROC, etc.)
- Syndications (not always in CPM organization)
- Transfer price for credit

Back end “Tools”

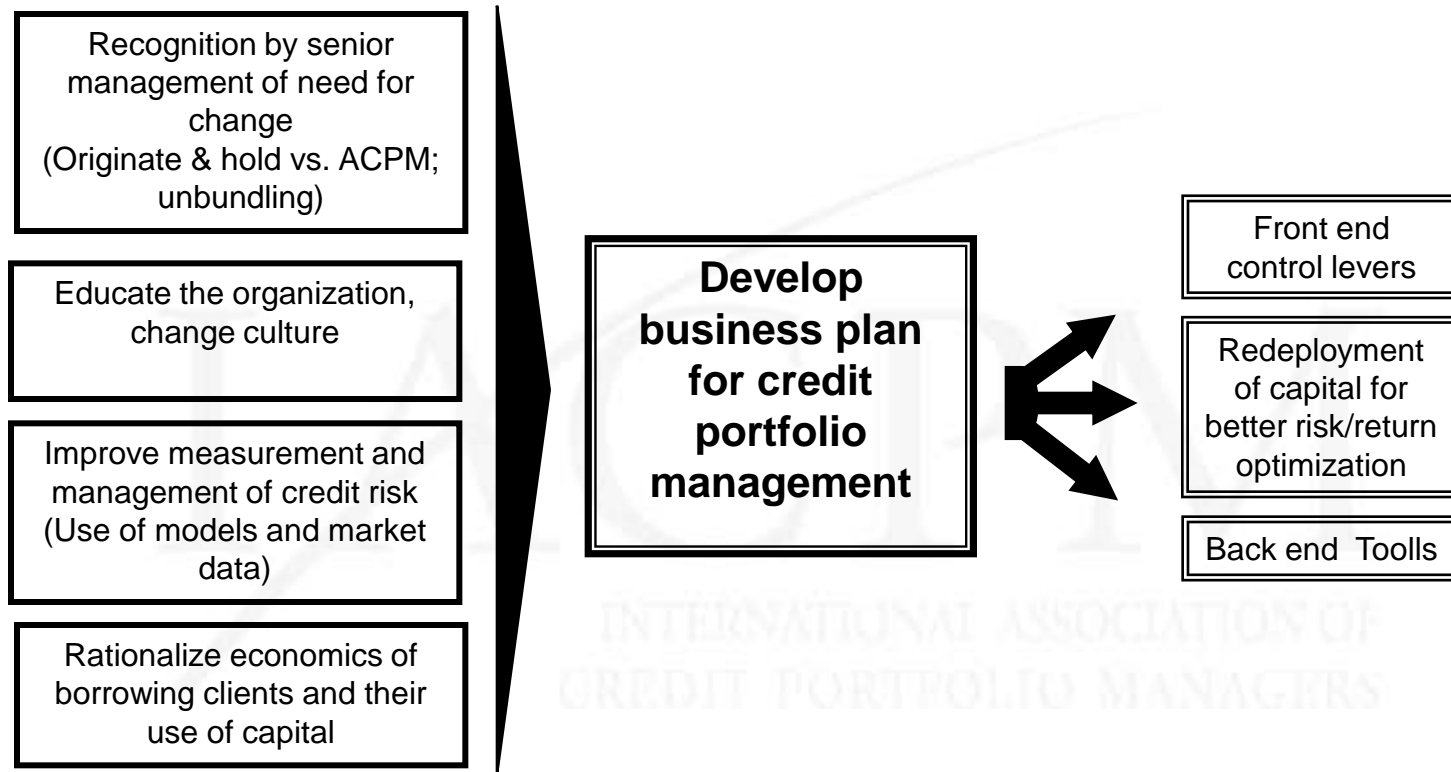
- Loan sales
- Hedging (single name & “macro”)
- Securitizations
- “Long book” to diversify

Supporting Functions

Not always in CPM Organization

- CPM research
- Reporting/Data Analysis
 - Quant Modeling/Analytics
- Problem Loan Mgt.
 - Liquidity Mgt.

Getting Started With CPM



Every bank constructs its own CPM model!!

Firms Apply CPM to Different Asset Mixes

[illegible]

Source: IACPM 2011 Principles & Practices in CPM Survey

Not involved
Advisory role
Co- responsibility
Full and sole responsibility
Does not apply

[illegible][illegible]

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	IJ	JK	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LL	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	XG	XH	XI	XJ	XK	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XU	XV	XW	XX	XY	XZ	YA	YB	YC	YD	YE	YF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YY	YZ	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZI	ZJ	ZK	ZL	ZM	ZN	ZO	ZP	ZQ	ZR	ZS	ZT	ZU	ZV	ZW	ZX	ZY	ZZ	AA	AB	AC
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IACPM

CPM Mandate Can Vary By Firm

Main Objectives of CPM Unit (multiple responses possible)	%	Rank
Improve portfolio structure, reduce concentrations	77	1
Provide portfolio information	74	2
Help guide origination	70	3
Manage Return on Equity, RAROC or analogous target(s)	60	4
Optimize Risk & Return (either quantitative or qualitative)	58	5
Manage maximum “risk appetite” target	57	6
Manage P&L volatility, absolute P&L and analogous targets	53	7
Manage use of Risk Weighted Assets (RWA)	51	8
Managing Regulatory Change	43	9
Other	21	10

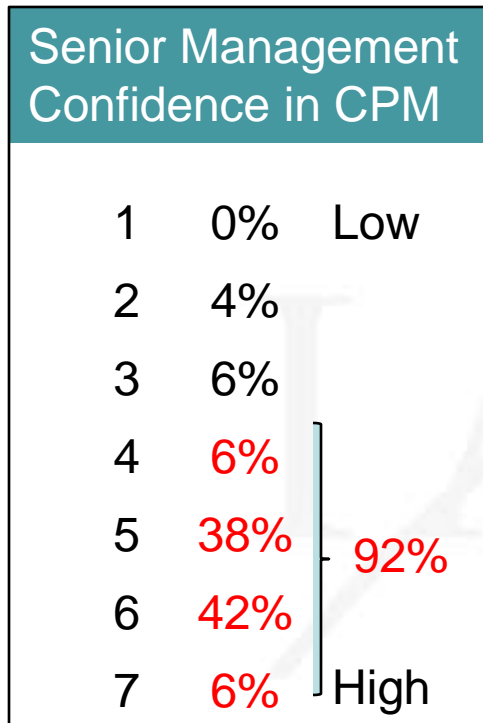
Source: IACPM 2011 Principles & Practices in CPM Survey

Portfolio Managers Use Many Controls & Tools

Relative Importance of CPM Tools (%)	Most Important	Somewhat Important	Rarely Used	Do Not Use
Discipline at origination (e.g., concentration limits)	65	23	4	8
Single Name CDS	35	35	12	19
Loan sales/purchases	15	38	35	12
Transfer pricing	12	25	8	56
Financial guarantees	12	17	44	27
Securitizations	10	25	42	23
Index tranches, baskets, options (usually on CDS index)	6	16	25	50
Credit insurance	0	19	40	40

Source: IACPM 2011 Principles & Practices in CPM Survey

Management Confidence in CPM Remains High



Change in Senior Management Confidence		
	2011	2010
Significant Increase	28%	16%
Somewhat increased	42%	50%
Unchanged	28%	25%
Somewhat decreased	2%	5%
Significantly decreased	0%	2%
Unclear	0%	2%

Source: IACPM 2011 Principles & Practices in CPM Survey

Seminar Agenda

- Introduction: Why Active Credit Portfolio Management? (CPM)
- Models for CPM Organization
- CPM at a Bank Which Emphasizes “the Front End”
- CPM at a Bank Which Makes Heavy Use of “Bank End Tools”
- Panel Discussion: Implementing CPM
- *Lunch*
- Afternoon Introduction
- CPM Measurement and Modeling
- How BoTMU Developed CPM in Japan
- Panel Discussion: Comparing Chinese and International Experience