

Some Reflections on Financial Stability

by C.A.E. Goodhart
Financial Markets Group
London School of Economics

There is a contrast between the successful progress of macro-monetary policy over the last 15 years and the continued uncertainties over the management of financial stability.

Macro-Monetary-Policy

One Instrument aimed at One Target

Short-term interest rate Price Stability/Inflation Target

Via: Operationally independent Central Banks basing interest rate changes on forecasts of economic developments.

Common ground of Academics and C.B. practitioners
(Svensson, Woodford) (Bernanke, Issing, King)

Successful outcomes

Chart 1

RPIX Inflation

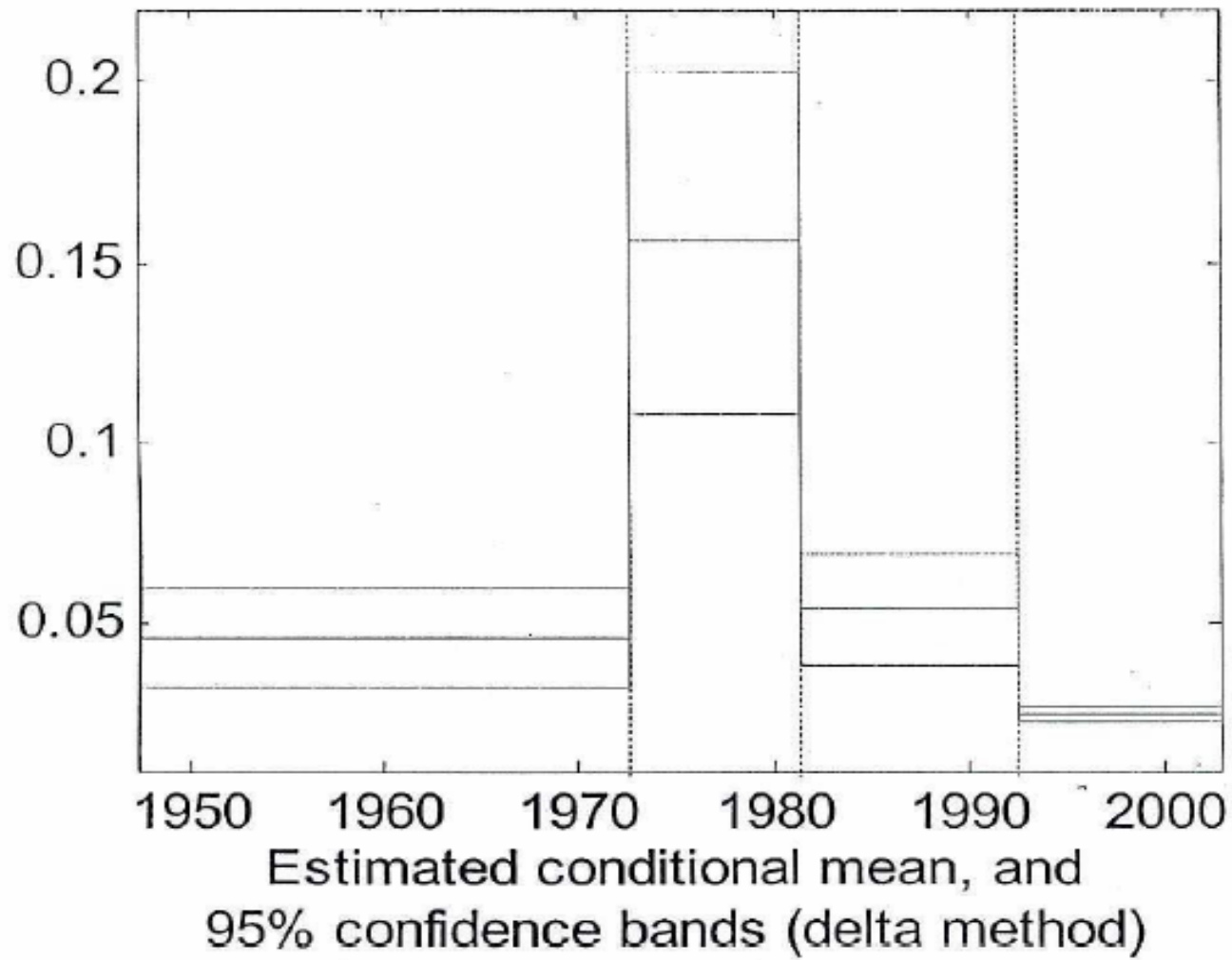
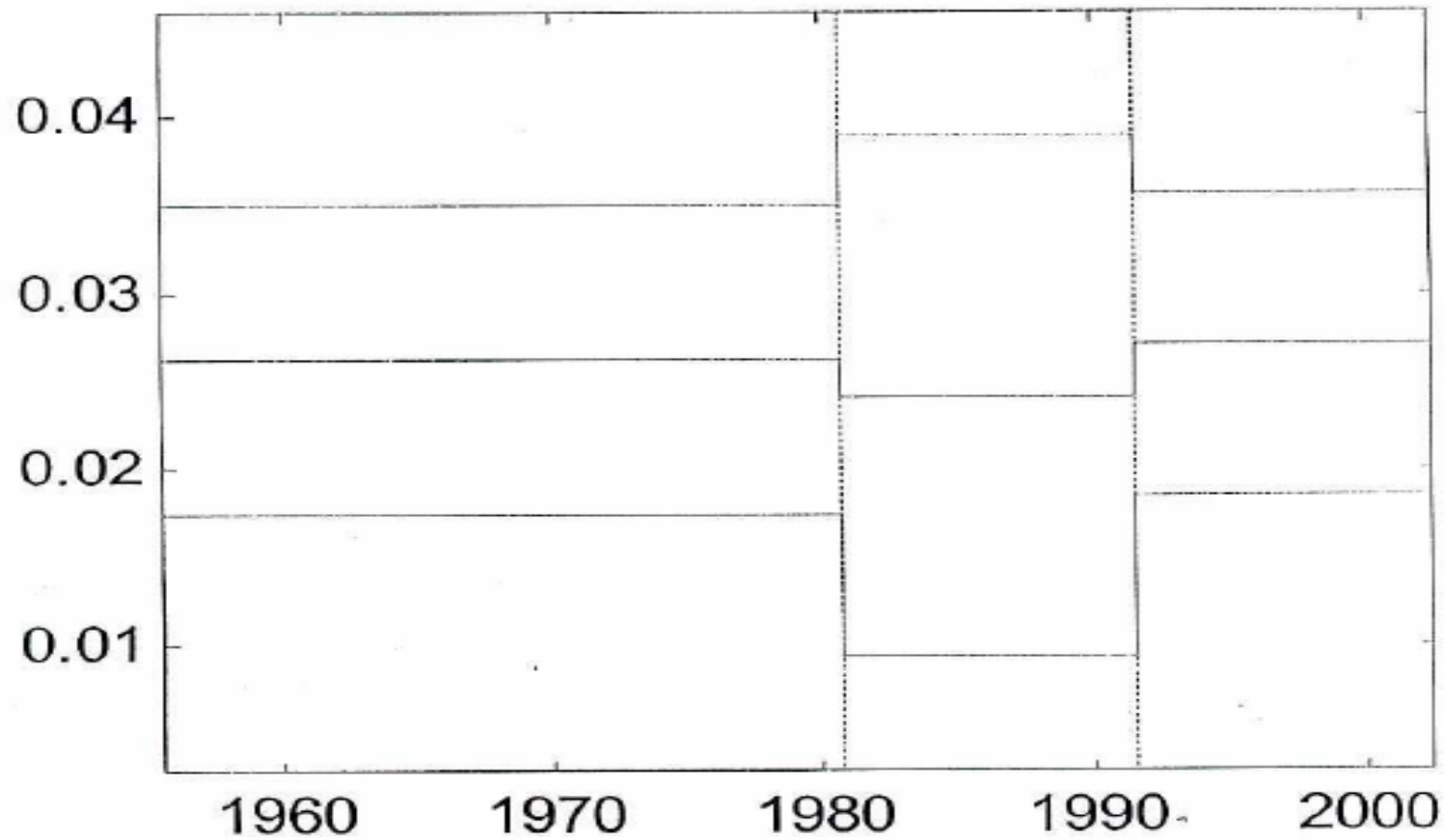


Chart 2

Real GDP Growth



Estimated conditional mean, and
95% confidence bands (delta method)

Financial Stability

Cannot be readily measured, modelled or forecast.

No straightforward ex ante instrument, mostly ex post, reactive; liquidity provision (ex ante set by macro-monetary concerns) and crisis management.

Such mechanisms as can be adopted, such as Capital Adequacy Requirements, need to be set internationally because of ease of disintermediation in a global financial system. Can national discretion (e.g. Pillar 2 of Basel II) be used?

No consensus either among, or between, academics and practitioners on role of, or in some cases even need for, official regulation in general, or CARs and Basel II in particular.

What does exist are models and measurements for individual bank risk.

Value at Risk and Credit-metrics
VaR KMV

Basel II aims to bring regulatory capital more into line with economic capital that sophisticated banks adopt for their own purposes.

But even on these terms, Basel II has several problems.

- (1) Portfolio theory and diversification
Basel II better than Basel I, but still insufficient.

(2) Differing Purposes amongst Bankers and Regulators

VaR inappropriate for regulators.

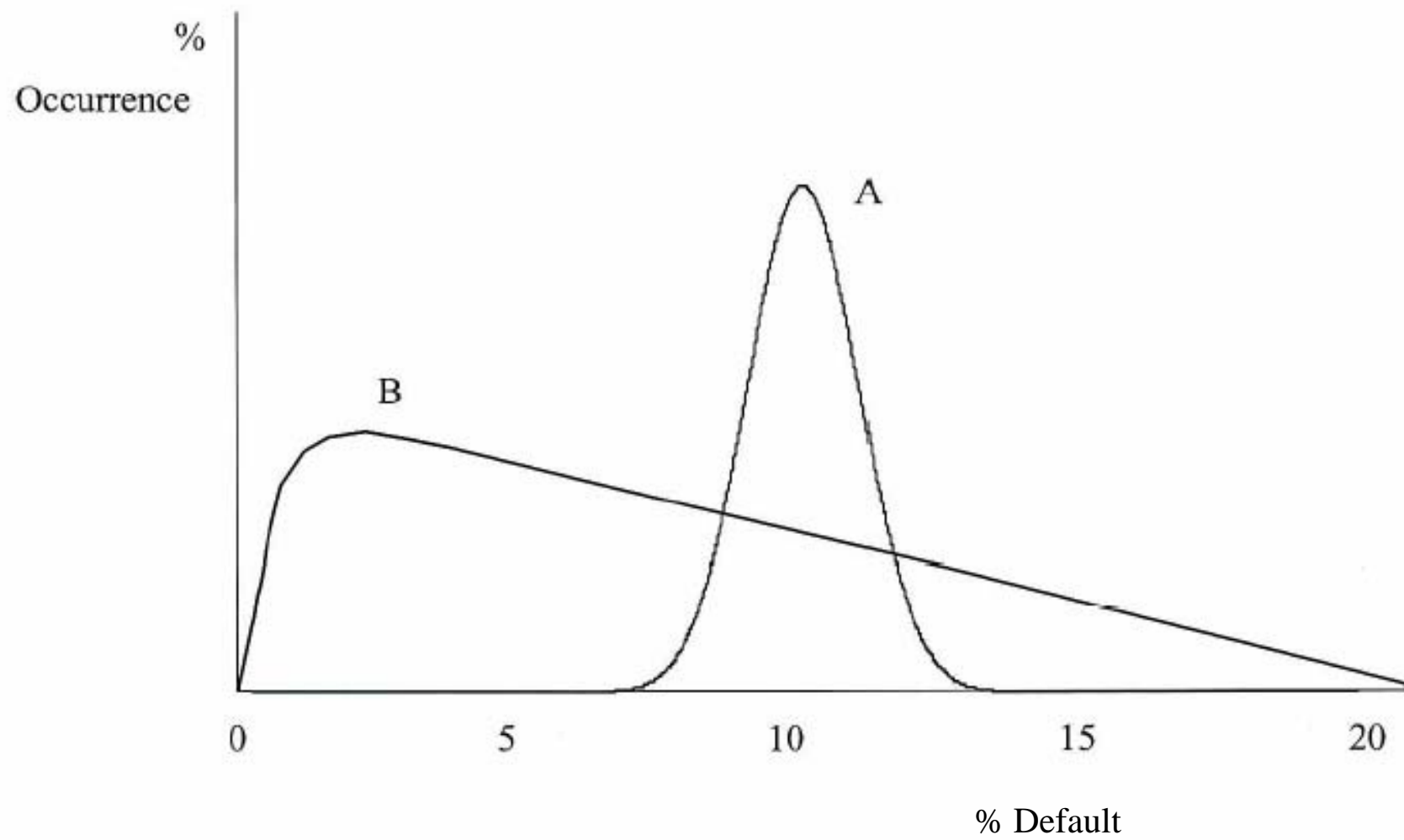
Main externality is contagion, correlation in bank assets; but why worry about operational risk?

(3) Need for a buffer. Sanctions?

(4) Expected and Unexpected Loss

Need to integrate interest margins and capital requirements.

Diagram 1



Are Risk-related CARs (e.g. Basel II) the right way forward?

Surely obvious that a bank with a portfolio of risky loans needs more capital than one holding government TBs.

But

- (1) Impossible to measure relative riskiness correctly. Innovations, distortions and gaming.
- (2) Complexity
- (3) Pervasive and Prescriptive. Herd behaviour.
- (4) Procyclicality
Exacerbated by IASB and move to fair value?

Table A: CARs for the USA

PERIOD	Standardised	IRB F	ICRM
1982	9.597967	8.591044	8.070189
1983	8.933900	7.185306	6.802057
1984	8.933900	7.624870	7.032411
1985	9.133900	8.024912	7.262765
1986	9.463390	9.989917	8.736384
1987	9.463930	9.824500	8.545390
1988	9.463930	8.659141	6.990717
1989	9.563390	10.804149	6.488127
1990	9.563390	11.677029	7.601025
1991	9.986339	11.434979	7.541649
1992	9.687739	8.064210	6.470195
1993	9.287739	6.468979	4.665018
1994	8.901877	5.395182	3.783256
1995	8.507394	5.561594	4.087216
1996	8.246774	5.646111	4.316443
1997	8.294313	5.940010	4.837646
1998	8.312774	6.508256	5.831926
1999	8.403155	7.810893	6.704727
2000	8.410316	8.126805	7.163834
2001	8.531238	8.245881	7.242604
2002	8.312375	8.180511	6.779526
2003	8.107739	6.603000	6.258685
Average	8.959430	8.016694	6.509627
Variance	0.339964	3.392352	1.945790

Chart A: CARs for the USA

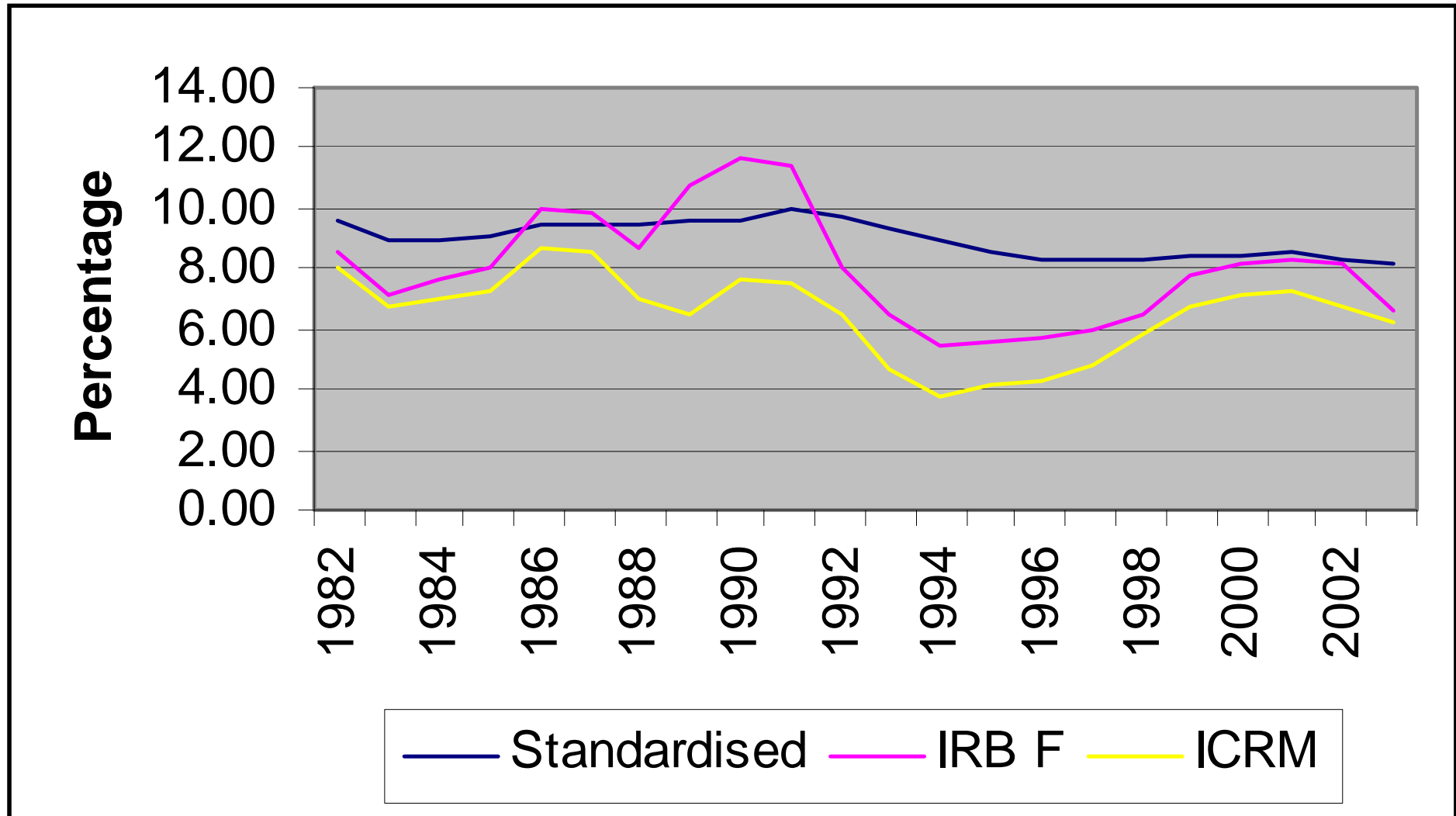


Table B: CARs for Norway

PERIOD	Standardised	IRB F	ICRM
1989	9.991635	8.311481	7.580115
1990	10.265155	9.275921	8.127573
1991	10.465155	9.781705	8.675031
1992	10.367155	9.929912	9.034373
1993	10.265155	9.523779	9.186305
1994	10.940239	13.235447	9.821542
1995	11.320031	14.066170	11.082487
1996	10.669155	12.141937	9.722593
1997	10.265155	8.857323	7.317353
1998	10.265155	9.001267	7.422621
1999	10.265155	9.218641	7.527889
2000	10.265430	9.486551	7.930505
2001	10.360916	9.648655	8.333122
2002	10.461360	9.764866	8.343509
Average	10.440489	10.160261	8.578930
Variance	0.113401	2.941614	1.190491

Chart B: CARs for Norway

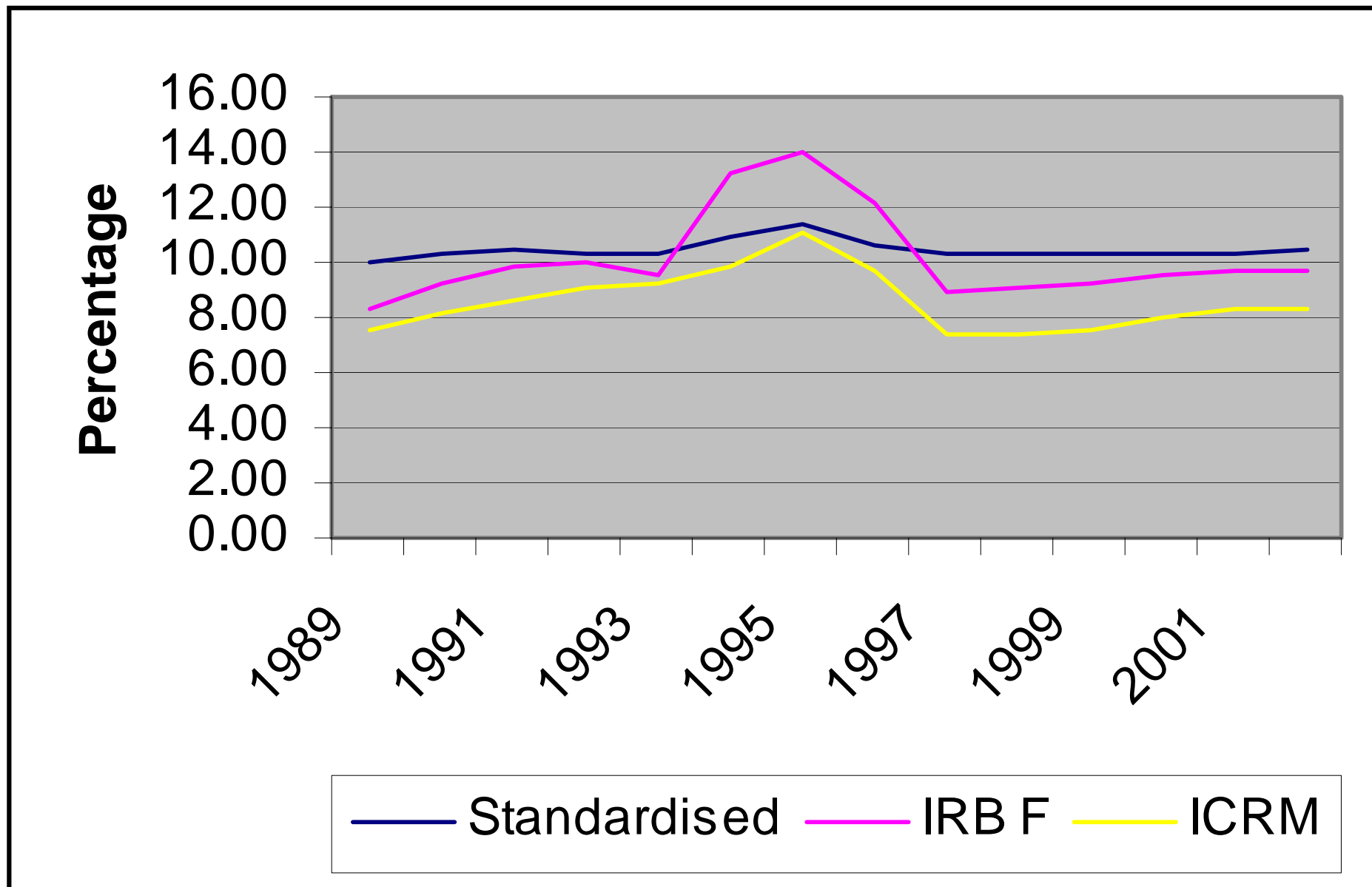


Table C: CARs for Mexico

PERIOD	Standardised	IRB F	ICRM
Mar-95	8.765096	13.864230	10.462123
Jun-95	9.221855	16.650790	12.285877
Sep-95	9.299730	17.103009	12.714591
Dec-95	9.493498	18.151470	12.820000
Mar-96	9.251044	17.067542	12.589874
Jun-96	9.494958	18.448561	13.248221
Sep-96	9.557249	19.415843	14.891864
Dec-96	10.303734	24.230942	17.645355
Mar-97	9.430354	19.088714	15.153354
Jun-97	9.273425	17.500911	13.895955
Sep-97	9.396601	18.254201	14.344051
Dec-97	8.928781	15.194116	14.796451
Mar-98	8.813186	14.397932	13.673818
Jun-98	8.851211	14.428160	12.256023
Sep-98	9.058278	15.545394	11.622476
Dec-98	9.040916	15.456234	11.797630
Mar-99	9.052107	15.519282	12.003802
Jun-99	8.981783	15.296608	12.251375
Sep-99	9.135013	15.979265	12.725803
Dec-99	8.968905	15.345409	12.100842
Average	9.215886	16.846931	13.163974¹⁴
Variance	0.122662	5.644965	2.588205

Chart C: CARs for Mexico

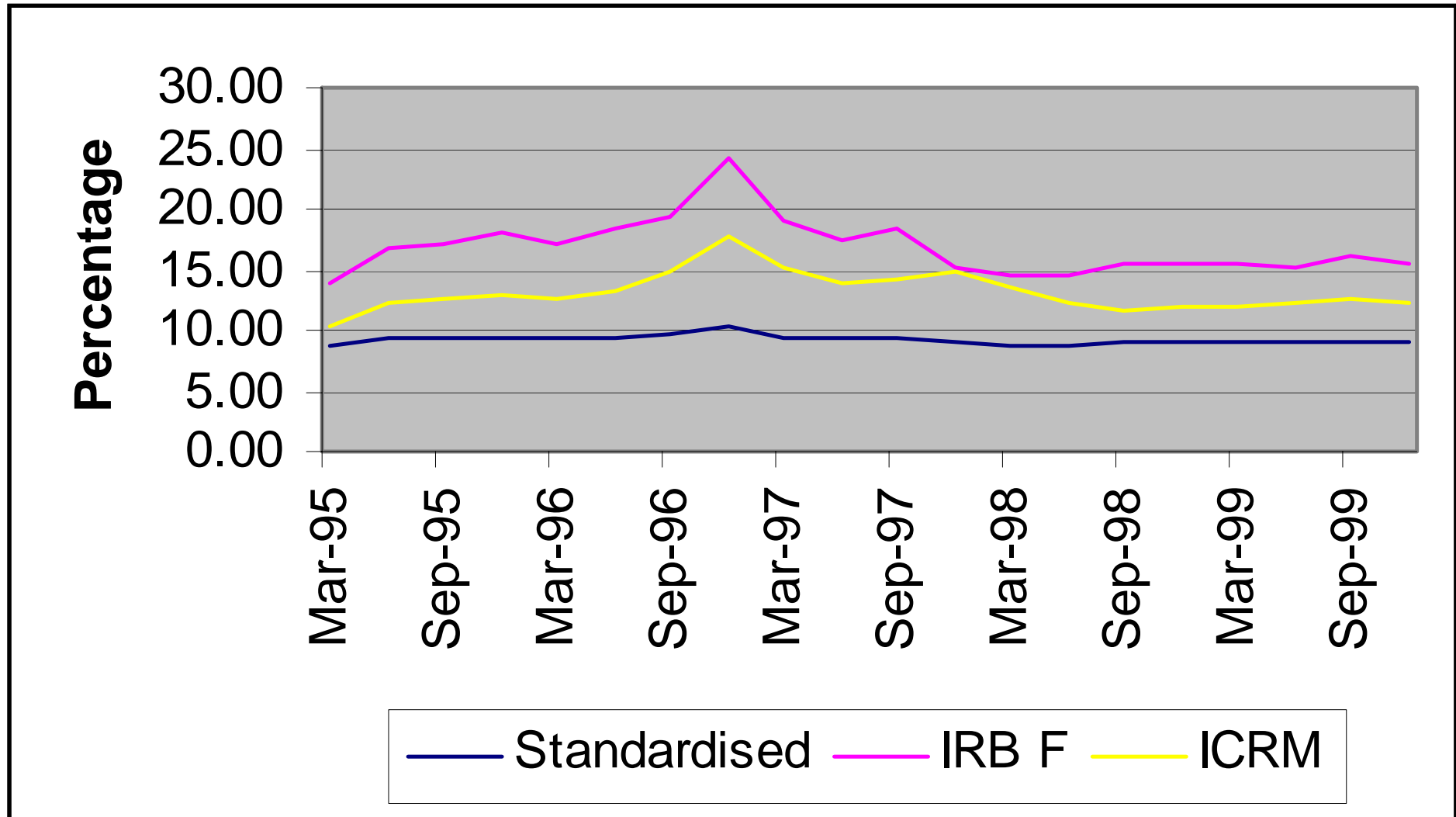


Table D: Maximum % Change in CARs

A. IRB	Upwards				Downwards			
	1 Period	Date	2 Consecutive Periods	Dates	1 Period	Date	2 Consecutive Periods	Dates
USA	0.25	1989	0.33	1989/90	-0.29	1992	-0.49	1992/93
NORWAY	0.39	1994	0.45	1994/95	-0.27	1997	-0.41	1996/97
MEXICO	0.25	Dec 96	0.30	Sep/Dec 96	-0.21	Mar 97	-0.30	Mar/Jun 97

B. ICRM	Upwards				Downwards			
	1 Period	Date	2 Consecutive Periods	Dates	1 Period	Date	2 Consecutive Periods	Dates
USA	0.21	1998	0.33	1998/99	-0.28	1993	-0.47	1993/94
NORWAY	0.13	1995	0.20	1994/95	-0.25	1997	-0.37	1996/98
MEXICO	0.18	Dec-96	0.30	Sep/Dec 96	-0.14	Mar-97	-0.22	Mar/Jun 97

C. Stand	Upwards				Downwards			
	1 Period	Date	2 Consecutive Periods	Dates	1 Period	Date	2 Consecutive Periods	Dates
USA	0.04	Jun-05	0.06	1985/86	-0.07	1983	-0.09	1994/95
NORWAY	0.07	Jun-05	0.10	1994/95	-0.06	1997	-0.10	1996/97
MEXICO	0.08	Dec-96	0.08	Sep/Dec 96	-0.08	Mar-97	-0.10	Mar/Jun 97

There are other approaches:-

(1) FDICIA 1991

Forestall a crisis before it happens. Take over banks before equity capital falls to zero.

(2) A second instrument for financial stability.

A time/state varying CAR. Based on rate of change of key fundamental.

Conclusions