QUANTITATIVE GOALS FOR MONETARY POLICY — BY FATAS/MIHOV/ROSE

PANEL RESULT, 1960-2000, 42 COUNTRIES, ANNUAL:

DELIVERY + SETTING OF TARGETS REDUCES INFLA

THIS ROBUST RESULT INTERPRETED AS:

TRANSPARENCY MATTERS

(BUT NOT FOR OUTPUT VOLATILITY)

IMPRESSIVE RESULT BUT IS THIS CORRECT INTERPRETATION?

PROBLEM WELL-KNOWN OF [IDENTIFICATION / SELECTION BIAS]

WHEREBY SOME OTHER FACTOR (UNOBSERVED) IS DRIVING BOTH TARGETING AND INFLATION REDUCTION. CAN ONLY BE RESOLVED BY MODEL/IDENTIFYING RESTRICTIONS.

STYLISED PROBLEM HERE

(1) $\pi_t = \alpha x_t + \epsilon_t$

(2) $x_t = \gamma \epsilon_t + \eta_t$

x_t = TARGETS

ϵ_t = MONETARY ETC ACTIONS

∴ ALSO

(3) $\pi_t = \alpha\gamma\epsilon_t + \epsilon_t + \alpha\eta_t = (1+\alpha\gamma)\epsilon_t + \alpha\eta_t$

LINEAR COMBINATION OF (1) & (3)

$$\pi_t = \lambda\pi_t + (1-\lambda)\pi_t = \alpha\lambda x_t + \underbrace{[(1+\alpha\gamma)(1-\lambda)+\lambda]\epsilon_t + (1-\lambda)\alpha\eta_t}_{\text{ERROR}}$$

(A) WE DON'T KNOW λ : ANY λ COULD BE OPERATING — LACK OF IDENTIFICATION

(B) SELECTION (SIMULTANEOUS) BIAS AS ϵ_t CORRELATED WITH x_t

[NB. REVERSE CAUSATION $\pi_t \to x_t$ UNLIKELY]

WHAT DO MODELS SAY?

= DISINFLATION DIFFERENT FROM SETTLED LOW-INFLATION SITUATIONS

= UNDER <u>DISINFLATION</u>

TARGET WITHOUT CREDIBLE PROGRAMME[1] OF DELIVERY USELESS

HITTING TARGETS IN (NARROW / COSMETIC)[2] SENSE POINTLESS, MISSING TARGETS MEANINGFULLY MAY BE EFFECTIVE[3]

PART OF CREDIBLE PROGRAMME IS FISCAL STRINGENCY[5]

[1] UK 1976/9 (INCOMES POLICY) [2] M3 'CORSET' UK 76/9

[3] UK 1979/81 OVERSHOOTING OF £M3 ACCOMPANIED BY SHARP M SQUEEZE

[4] US VOLCKER NON-BORROWED RESERVES TARGETG OF M

[5] ARGENTINA'S 1990s CURRENCY BOARD

VITAL IS POLITICAL SUSTAINABILITY[6]

[6] GERMAN THATCHER IN EUROPE LINK MARK EU TO DM

= WHEN INFLATION HAS BEEN BROKEN

TARGETING REGIME INFLUENTIAL ON OPERATION OF MONETARY RULE

↓ AFFECTS VOLATILITY/PERSISTENCE OF INFLATION[1] ↓ VOLATILITY OF OUTPUT[2]

[1] UK, NZ, US 1990s [2] UK, NZ, US FROM 1992

BUT NOTICE EXPLICIT TARGETING NO (UK, NZ) BETTER THAN IMPLICIT TARGETING (US)

= ROLE OF EXPLICIT TARGETS & OTHER TRANSPARENCY DEVICES (MINUTES/HEARINGS..) IS TO REINFORCE ACTUAL POLICY REGIME BY FOCUSING PUBLIC OPINION ETC. (RIKSBANK, BANK OF ENGLAND) – LEARNING EFFECT?

POSSIBLE MODELS:

(A) DISINFLATION: TARGETING (BY COMMUNICATING BETTER) SPEEDS UP LEARNING ⇒ SO REDUCES OUTPUT COSTS OF π-REDUCTION, ALSO SHORTENS LAG BETWEEN POLICY (M, F) AND π, BUT DOES NOT CHANGE LONG-RUN EFFECT OF POLICY ON π

(B) LOW INFLATION: DIFFERENT 'TARGETING' ≠ DIFFERENT MONETARY RULE/REGIME ⇒ NO EFFECT ON MEANS EFFECT ON VARIANCES (OF π, y) ⇒ PERSISTENCE OF π.

APPLICATION TO THIS STUDY =

~~ TARGETS HAVE MUCH SMALLER EFFECT IN DISINFLATION : PROXYING (CORRELATED WITH) UNOBSERVED POLITICAL COMMITMENT + PROGRAMME. MAY VIA CREDIBILITY REDUCE OUTPUT COST OF DISINFLATION

~~ TYPE OF TARGETING REGIME IMPORTANT FOR $Var\bar{\pi}$, $\rho_{\bar{\pi}}$, $Var y$. IF OPTIMAL, CAN LOWER ALL 3 + BRING IN VAR FRONTIER

POSSIBLE WAYS FORWARD =

SPLIT SAMPLE INTO (A) (DISINFLATION / INFLATION > 5%)

AND (B) LOW INFLATION

INVESTIGATE VAR ISSUES ONLY ON (B)

$Var\bar{\pi} = -\phi Var y + \psi(\text{REGIME})$

ON (A) INVESTIGATE WHETHER (RECESSIONARY COST / DISINFLATION) REDUCED BY TARGETS

ANYTHING ELSE?

TO GET INSIGHT INTO ROLE OF REGIME CHANGE BOOTSTRAP MODEL UNDER EACH REGIME; CHECK WHETHER MEANS/VARIANCES OF π, y VARY SIGNIFICANTLY ACROSS REGIMES

(COULD GENERALISE TO MULTI-COUNTRY PANEL BOOTSTRAP)

E.G. RESULTS FOR UK INFLATION PERSISTENCE

PARAMETER OF SUCH AN EXERCISE

	ESTIMATED*	LOWER-UPPER 95%§	
BRETTON WOODS* (→71)	0.25	-0.01	0.49
INCOMES POLICY (70s)†	0.73	0.70	0.96
MONEY TARGETING† (EARLY 80s)	0.52	0.04	0.59
SHADOW/ACTUAL ERM† (86-92)	0.63	0.83	0.99
INFLATION-TARGETING† (93-2002)	-0.15	-0.56	-0.20

SOURCE: MINFORD WEBPAGE

× MINI-MODEL + LIVERPOOL MODEL * AR(1) PARAMETER § BOOTSTRAP