The case for central bank independence, and some doubts. James Forder

Arguments on the inadequacy of democratic decision taking

- the political business cycle (e.g. Nordhaus (1975))
    - be very very careful about the evidence
        - USA 1972. UK 1987(?) UK 1997(?) and …?
- a general sense that elected people inflating too much
    - Be very very careful about the evidence
- a general cynicism about democratic processes, but if general, why is it applied so specifically to central banking?

In all cases, what are you assuming about the behaviour of voters?

The cases for rules over discretion

Traditional forms

- variations on the anti-democracy theme, usually advocating constant money growth
- a magic ingredient view
    - money growth
    - nominal income
    - exchange rate
    - (price level)
    - inflation rate
- the hubristic policymaker view
    - most importantly in Friedman (1968)
        - what Friedman did and did not say
            - what he did say: see Friedman
            - one thing he didn't consider Forder (2014) ch 4.1

Rational expectations forms

- what are 'rational expectations'?
    - 'everyone knows the true model (including risks)'
        - randomness of error is a consequence (don't let the econometricians divert your thinking)
    - is it a sensible assumption?
        - imposition of consistency on long run outcomes
        - showing limitations of other specific models
            - interesting, but potential for a bully
        - view of actual market operation (a) financial markets (b) labour markets
    - further uses and developments: (a) Lucas critique (b) credibility models
- the 'Lucas critique' from Lucas (1976)
    - … *of econometric policy evaluation*
    - private sector responses depend on understanding of policy
    - econometrics based on historical data does not evaluate regime shifts
    - potentially very wide application, not only anti-interventionist
        - 1950s arguments on demand stability and investment
    - in practice, usually an argument for rules
    - in weaker form applied to other aspects of reaction to policy shift

    - IMV this is a very important argument in understanding (a) Lucas (b) the possibilities of macroeconometrics (c) the theoretical literature on central banking (d) life the universe and everything.
- arguments arising from the issue of time inconsistency and credibility

<u>Time inconsistency and credibility</u>
- beware the many uses of the expression 'time inconsistent'. Here, it means what it means here. (see below)
- the terminology is ugly confusing and unfortunate. Never mind.

Time inconsistency (from Kydland and Prescott (1977). A hard to understand paper).
- the setting of the problem, circa 1977
    - Inflation bias of the managed economy
        - The 'creeping inflation' and 'dilemma' debate
            - Equilibrium bargaining amongst competing unions
            - Demand-shift inflation (eg Tobin (1972))
            - Policy mistake
            - Policy over-ambition (Friedman 1968)
            - Self-serving policymakers (PBC etc)
        - The point is that continuous or near-continuous inflation was a post-1945 phenomenon
        - The 'expectations augmented Phillips curve'
            - Expectations: rational, other ('adaptive'), institutional adaptation, etc
- Kydland and Prescott result: in a world with a short-run Philips curve, rational expectations, (and other assumptions) a public-spirited policymaker, optimal control generates an inflation bias.
    - The reason: RE equilibrium occurs only at positive inflation
    - See 'Kydland and Prescott diagram'
            - If wage setters expect zero inflation, positive inflation is optimal
    - The clumsy contrast of 'optimal' and 'time consistent'
    - A clever argument for its assumption of *public spirited* policymaking
- The solution, they said, was a *rule*
- Some problems
    - Rational expectations in the labour market
        - a piece of heresy, (perhaps because of the Phillips curve myth): wage bargainers don't have RE!
        - the sense of 'expectations' is crucial
    - The existence of the short run Phillips curve (Forder 2014 for one kind of doubt)
    - The move order
- An assessment
    - A response to an intellectual issue of its time
    - Not, therefore, the *truth*
    - In the monetary policy context, perhaps even a dud.

Developments of the time consistency idea

The 'Rogoff banker': Rogoff (1985)

- The idea
    - Think of different individuals having difference inflation-unemployment preferences
    - Think of the slope of the indifference curves in the KP diagram
    - More pointy indifference curves indicate greater relative weight on price stability
    - 'Appointing an inflation-averse central bankers reduces the inflation bias'
- This too is a clever
    - It describes a principal agent situation where the difference in preference is useful to the principal
    - It captures an intuition about central bankers
    - In strict theory, it suggests an optimization of stabilization and time consistency
- It is often interpreted with little understanding
    - It does not 'solve the time consistency problem'
    - It makes no case for 'strengthening independence'
    - It does not strictly make any case for independence
        - The principal can appoint an appropriate agent… or elect one
    - It does not point towards rules, but to discretion
- The Walsh (1995) variant is billed as optimizing, but involves a very strange assumption about banker-choice

The credibility problem: Barro and Gordon (1983)

- a rule is not believable if it is ex post optimal to break it
    - there is an absence of commitment in the KP 'solution'
    - combined with a daft 'trigger strategy' argument they considered 'reputation'
    - you will perhaps notice I have not said this was a clever idea.
- this is a very highly cited argument.
- low policymaker discount rate reduces inflation bias
- the assessment of it sorts the game theorists from the economists
    - policymaking is made powerfully game theoretic
        - contrast KP, or Rogoff
    - but the 'trigger strategy' is a hopeless piece of political economy
        - it guides no intuition, provides no insight into the problem at hand (or any other, after Milgrom and Roberts (1982))
- central bank independence went unmentioned and finding a connection is not easy

Learning about policy preferences: Backus and Driffill (1985)

- 'types' of policymaker ('wet' and 'hard-nosed'), public knowledge of probabilities, imperfect policy control, updating of estimates of probabilities, and hence of estimates of policymaker preferences
    - *everyone* benefits from its being believed the policymaker will fight inflation (the PC is 'lower' in the KP diagram)
    - either type may fight inflation early in term of office

- a much more intuitive sense of 'reputation' (this one comes from Kreps and Wilson (1982))
    - by assumption, it takes a long time to build and can be lost in a moment
    - it arises from observed actions
- some interesting consequences
    - the problem faces *new* policymakers
    - when a wet with hard-nosed reputation retires, inflation benefits everyone
    - for a non-retiring policymaker, 'reputation' is an *asset*
        - so the preservation of reputation is a policymaker goal, and at election time.
        - there is no support for central bank independence of the personal kind

<u>Some problems in relation to central bank independence</u>

- the theory does not support independence
    - KP correctly describe 'the policymaker' as facing the problem
    - So do Barro and Gordon, actually
    - The Rogoff banker is electable
    - BD's analysis argues for re-electing a government with a hard-nosed reputation
        - *Directly contrary* to the intuition of the PBC
            - Naturally, since the private sector's understanding is different in the two cases
- are institutional fixes available or necessary?
    - The Barro Gordon move is always available. (McCallum (1995))
        - The ideal time to break the rule is anytime it works
        - So when is the ideal time to revoke independence?
            - a *reputational* response does not give rise to an institutional fix
        - And the ideal time to change the constitution is when …
    - Does the private sector perceive a policymaker incentive to lie?
        - Note the *enhanced* rational expectations at work
    - Does the policymaker *have* an incentive to lie?
        - Check the election results (US: Carter, younger Bush on taxes; UK: Conservative defeat in 1974, failing to control inflation and deregulate, Labour defeat in 1979, failing to control the unions. Conservative victories in 1983 and 1992 in recession, defeat in 1997 after devaluation).
        - You don't have to be an RE freak to think that voters learn.
    - The government over-ride of a central bank Lohmann (1992)
        - the government *does* have an over-ride power
        - if the central bank avoids being over-ridden, policy outcome is a tightrope walk. Institutional fixes are very hard
- And reputation fixes may be said to argue for elections

Much of the story of the lectures is here:

Easy version: Forder, J. (2001). "The theory of credibility and the reputation bias of policy." Review of Political Economy **13** (1): 5-25 http://tinyurl.com/JF01ROPE

Interesting version: Forder, J. (1998). "Central bank independence - conceptual clarifications and interim assessment." Oxford Economic Papers **50** (3): 307-334 http://www.jstor.org/stable/3488575

Cited works

Backus, D. and J. Driffill (1985). "Inflation and reputation." American Economic Review **75** (3): 530-538 http://www.jstor.org/stable/1814819

Barro, R. J. and D. B. Gordon (1983). "Rules, discretion and reputation in a model of monetary policy." Journal of Monetary Economics **12**: 101-121 http://tinyurl.com/BGJME83

Forder, J. (2014). Macroeconomics and the Phillips curve myth. Oxford, OUP. Bal: 0765 e 077/02; SSL:HD5710.2.FOR 2014; Oxford Scholarship Online. http://tinyurl.com/ForderMPCM

Friedman, M. (1968). "The role of monetary policy." American Economic Review **LVIII** (1): 1-17 http://www.jstor.org/stable/1831652

Kreps, D. M. and R. Wilson (1982). "Reputation and imperfect competition." Journal of Economic Theory **27**: 253-279 https://tinyurl.com/KW82Repute

Kydland, F. and E. Prescott (1977). "Rules rather than discretion: the inconsistency of optimal plans." Journal of Political Economy **85**: 473-491 http://www.jstor.org/stable/1830193

Lohmann, S. (1992). "The optimal degree of commitment: credibility and flexibility." American Economic Review **82** (1): 273-286 http://www.jstor.org/stable/2117615

Lucas, R. E. (1976) Econometric Policy Evaluation: A Critique *in* The Phillips curve and the labor market. Carnegie-Rochester Series on Public Policy volume 1. ed K. Brunner and A. H. Meltzer Amsterdam North Holland 19-46. *repr in* R E Lucas, Studies in Business Cycle Theory, MIT Press, 1985, p104-130. BAL: 0775 f 030; SSL: HB3711.LUC. http://tinyurl.com/LucasCrit

McCallum, B. T. (1995). "Two fallacies concerning central bank independence." American Economic Review **85** (2): 207-211 http://www.jstor.org/stable/2117920

Milgrom, P. and J. Roberts (1982). "Predation, reputation and entry deterrence." Journal of Economic Theory **27**: 280-312 https://tinyurl.com/MR82Pred

Nordhaus, W. D. (1975). "The Political Business Cycle." Review of Economic Studies **42**: 169-190 http://www.jstor.org/stable/2296528

Rogoff, K. (1985). "The optimal degree of commitment to an intermediate monetary target." Quarterly Journal of Economics **100**: 1169-1190 http://www.jstor.org/stable/1885679

Tobin, J. (1972). "Inflation and unemployment." American Economic Review **62** (1): 1-18 http://www.jstor.org/stable/1821468

Walsh, C. E. (1995). "Optimal contracts for central bankers." American Economic Review **85**: 150-167 http://www.jstor.org/stable/2118001

Figure 1. Kydland and Prescott

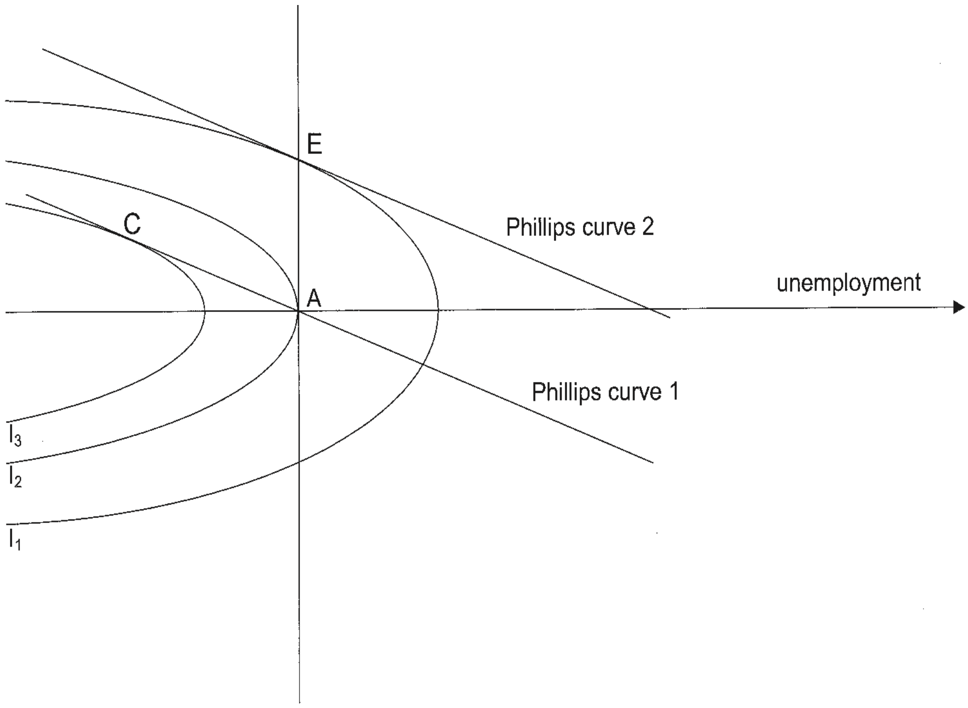

Figure 2. Illustrating the Rogoff banker