The Political Business Cycle
(Revised Version)

Does the Macro-economy affect election outcomes?

        If it does, then we would expect politicians to try and influence it.

Empirical Data

        A variety of tests on the U.S.

        Key variables

                Real Income

                Inflation

                Unemployment

The so called "Misery Index"

        $P_r = f(3U + i)$

Where: P_r is the probability of re-election

        U is the unemployment rate

        i is the inflation rate

Kramer – the U.S. house from 1896 to 1964

        Found a significant statistical relationship between reelection chances, and both inflation and (real) income growth

        Since then, various other studies have been conducted. While the coefficients change somewhat, and are not always significant, in general they confirm Kramer's finding.

        Especially given the standards that prevail in macro-economic statistics

Stigler – questioned the logic (and empirics) of the above

        Which politicians do voters hold responsible?

        Logically, house members may be held responsible for "pork", not the economy as a whole

        The U.S. empirics here are mixed: but in general, the correlation between the economy as a whole and reelection chances seems strongest (and clearest) for presidents, then senators, then house members – not all studies find these results for the house and senate…

        Likewise, data from outside the U.S. finds that the re-elections chances of politicians in coalition govts are less strongly (if at all) linked to macro variables.

A model of the Political Business Cycle

The Modern Understanding of the Phillip's curve (for more info on the Philips curve, see Mankiw chapter 35)

        The Phillips Curve (1958, 1960) shows the relationship between inflation and Unemployment

        When inflation rises, unemployment declines

Pre-1960 empirical data *strongly* supports this view.

Widely believed by the early 1960s (We are all Keynesians now)

This fed into the belief that macro-economics was "solved", the rest was just empirics. Using computers, we could now calculate economic variables, and then fine-tune them.

In the late 1960s, this belief was challenged (Friedman and Phelps) by classical and monetary economists who believed that nominal variables don't have real effects, and later by Lucas (1972, 1976), who pointed out that any past empirical relationships existed only in the presence of past policy positions; if you change the policies from those of the past, it is naïve to assume that the relationships will remain the same.

Economists are very fuzzy on what actually causes the philip's curve, micro-models generally posit that individuals are "fooled" into engaging in more economic activity (raising Y and lowering U) because they are confused by price signals – they think they are earning more than they really are, because they have been "fooled" by inflation…..
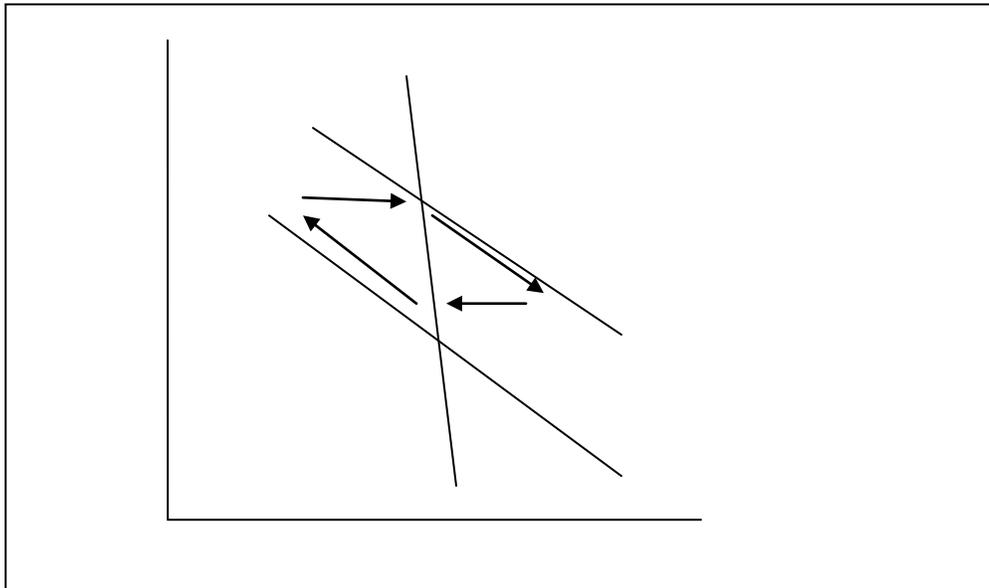
The long-run and short run Philips curve…..

Assumes the long run curve is "steeper – or vertical" than the short run curve…

Thus, a time-inconsistency problem, when Money rises

Unemployment falls today, tomorrow it (and inflation) rises

But the election is today…..

A to B) Before the election, we move along our short run Philip's curve, from point A to point B. Inflation rises, but unemployment drops. Since voters care about unemployment more, we win the election.

B to C) Then, after everybody has adjusted to the new higher rate of inflation, we stop "tricking" people, they return to their pre-inflation level of economic activity. We go to point C, where inflation is now higher, but unemployment has returned to the NAIRU level.

C to D) In order to eliminate the inflation, we decrease the money supply, we causes a recession, and unemployment goes up.
D to A) we come out of the recession, back where we started.

The above assumes:
> A long run and a short run Phillips curve
> The government understands this, and can manipulate it….
> Voters do not understand it, they are "myopic"….
>> Voters are thus irrational, (rationally perhaps) and non-adaptive

 The "rational" political business cycle
> Incumbents signal voters by manipulating the economy
>> Voters know what's happening, they respond to (in)competence

Empirics of the PBC model….
> Weak evidence for pre-1960 anywhere….
>> Suggests other factors at play – perhaps spending caused fear of future i?
>> Is it plausible politicians understood the relationship before economists?
> Strong evidence for the 1960s and 1970s
>> Almost certainly the case in 1972…
> Weak evidence since the mid-1980s
>> Note the "conservative central banker" literature, time inconsistency, etc.
>> Even countries with independent central banks, seem to not be immune to political opportunism…

Another model of PBCs – Assume partisan politics (voter loyalty)
> Rather then assume that all voters have the same indifference curve….
>> Assume two sets of voters, white collar and blue collar
>> White collar workers (voters) do not loose their jobs during recessions
>> Blue collar workers (voters) may loose their jobs during recessions
> This implies that there are two sets of voters, who have different indifference curves (interests) regarding unemployment.

> This leads to two political parties, a rightwing (anti-inflation) and a leftwing (anti-unemployment) party.
>> Empirical Evidence (polling)……
>>> Democrats are much more responsive to changes in unemployment
>>> Republicans are more responsive to changes in inflation…
>>> In general, unemployment is more important than inflation

>> This is a well established empirical fact
>>> It is also well established in other countries
>>>> But tolerable levels of inflation vary greatly…..
>>> Americans and Germans do not like inflation
>>> Italians and New Zealanders are quite tolerant of it….

All the above indicates that while tolerance of unemployment and inflation can vary across nations and time, Relative tolerance of if does not change that much between the wealthy and the poor….

See tables from pgs 441 and 442….

The retrospective voter hypothesis
> Voters are rational, but poorly informed (rationally so)
> They are in a principal-agent relationship with politicians

Re-election is a function of E, Evaluation
Incumbent (holding office) politicians maximize E, where E is function of i, U (inflation and unemployment)
(this is a variant of the model on page 443 of the book)

$$P(E) = \sum E(R)(\alpha_R i + \beta_R U) + \sum (L)(\alpha_R i + \beta_R U)$$

Probability of reelection depends on the evaluation of two groups of voters, Right wing votes and Left wing voters. α and β are estimates of the weight voters put on each variable (inflation and unemployment), the base assumption seems to be that voters weigh α as 1/3 the importance of β.

 The evaluation of politicians depends upon the evaluation of both groups – you need your own supporters, but also some of the other group…..

This model has strong predictive powers…...

The rational voter hypothesis
> These models are more difficult to analyze, because in them the Philips curve disappears. You can't trick rational voters, because they are rational….
> But time inconsistency and prediction uncertainty can still generate s can still generate cycles….
> Union wage setting model…. (skip)

Are voters Myopic, Retrospective, or Rational?
> Empirically, retrospective voters seems to receive the most empirical support.

Pg 446-460 skip….

Non Cyclical Behavior:

Is inflation biased upwards?
> If the long run Phillip's curve is vertical, will inflation just continue to rise?
> How does the government pre-commit to low inflation?
>> The different Philip's curves (see mankiw pg. 797)
>> The philip's curve is highly sensitive to expectations.
>> If the government can create expectations of low inflation… the benefits of inflating the economy will be greater – because people don't expect the inflation, you get the benefits (low unemployment).
> The conservative Central Banker, and Central Bank Independence
>> Very strong empirical evidence for this.

Independent central banks lead to low inflation….

Are budget deficits biased upwards?
    One eyed Keynsianism

The strong version of the Lucas Critique…..
    Government intervenes in the macro-economy to end random instability
    Government can't systematically fool people, they are rational…
    So government can only fool them by acting unpredictably
        And that means randomly, any non random policy can be predicted

So to end macro-economic random instability, the government adopts random policies…..