ps343: Lecture Notes on

Capitalism, Not Globalism:
Capital Mobility,
Central Bank Independence, and
the Political Control of the Economy

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I. Approach (from Acknowledgments):

A. Falsificationism

*Science is important not because it leads to the correct answer, but because it provides us with the best chance of discarding wrong answers.*

B. Utility of Comparing

*The discipline of political science seems to be divided between scholars with an intuition that events are the unique product of circumstances that will never be replicated, and those who view the social world as inherently systematic and therefore amenable to comparison and generalization. [Both incorrect in this stark form; if forced choose, Clark places self in latter camp.]*

C. Modeling Political Economy

1. Start by positing/establishing goals for actors;
2. Assume reasoned decision-making;
3. Work backward from there to likely actions given those goals, (perceptions of) possible actions, and relations actions to goals.

D. \( \Rightarrow \) Context-dependent Political (Elect & Part) Cycles
II. Introduction (Ch. 1)

A. (Recent) Policymaker Behavior in Democracy:

1. As “lefts” became democratic competitors, behavior dictated by that electoral comp. for seats & governmental comp. for control

   a) Przeworski (1985): “As soon as they decided to compete for votes, [in late 19th C], socialist parties sought to gain the electoral support of people other than workers…As socialists become parties like other parties, workers turn into voters like other voters.”

   b) [One could offer parallel statement for aristocratic parties.]

2. Recent “Left” Govts acting like “Ctr-Rts”:

   a) Tony Blair (5/2/97 – 6/27/07):

      (1) His “Christian Socialism” & the Party’s “New Labour”

      (2) On May 6, transferred day-to-day control monetary policy from Whitehall to “Grand Old Lady of Fleet Street” (Bank of England)

   b) Gerhard Schroeder (9/7/98 – 11/22/05):

      (1) 6 Months later replaced leftist Finance Minister

      (2) Soon began series of reforms (retrenchments) welfare state & labor & employ. reg’s

3. Each replaced very long-stand right govts (16yrs Kohl; 19 Thatcher+), only to act as likely to hardwire policy outcomes similar to conserv. prefs.
B. Such Action by Lefts ⇒ Evidence of Convergence?

1. Clark’s Account:

   a) Popular press (& some academics): growing convergence around *market-friendly* policies b/c *globalization*: esp. rapid, strong integration int’l financial markets

   b) Empirical studies: mixed at best; not strong signs macro-policy convergence…

   c) …but this odd b/c, as becomes easier, quicker, & cheaper move financial assets to most-favorable environs, economic costs deviating from most-favored practices (e.g., lowest cap tax) rises ⇒ growing constraint domestic autonomy.


   a) Standard Argument:

      (1)Summary:

      a) Trade & Cap-Mob sharpen capital’s threat v. domestic gov’ts to flee “*excessive & inefficient*” taxation & public policies,

      b) Forcing welfare/tax-state retrenchment, and…

      c) …tax-burden shifts more-mobile cap (esp. financial) to less-mobile lab (esp. skilled-manual)
(2) (Slight) Elaboration:

(a) ↑inter-jurisdictional competition undermines tax-policy autonomy individ. tax authorities (e.g., US states), inducing tax-rate convergence, esp. taxes levied on more-mobile assets.

(b) Such inter-jurisdictional competition intensifies as cap increasingly liquid & mobile across borders ⇒ virtually unmitigated race to some (ill-defined: below) bottom (e.g., Zodrow & Mieszkowski ‘86, Wilson ‘86, Wildasin ‘89; Oates ‘01, Wilson ‘99 review).

(c) Striking post-70s ↑int’l CapMob & steady postwar ↑trade forcing welfare/tax-state retrench & shift tax burden from rel. mobile (cap, esp. financial) to rel. immob (labor, esp. less-flex-spec)

b) Several (at least 8) Counters:

(1) Empirically challenged:

(a) Find support: Hines ‘99, Rodrik ‘97, Dehejia & Genschel ‘99, Genschel ‘01…

(b) Find no support: Quinn‘97, Swank’98,’02, Swank&Steinmo‘02, Garrett&Mitchell’01…

(2) General Gist of Most Counters: Maneuvering Room b/c

(a) Other national differences (e.g., commercial, regulatory, & other policy; lab-mrkt instits; availability intermed-supply; final-mrkt proximity; etc.: Hines ‘99) also affect invest-locate.

(b) Plus, other factors than capital mobility affect governments’ tax policies.

(3) Garrett: Certain Left-Lab combo’s efficient, so not fled.

I.e., certain combos left govt w/ soc-welf, ALMP, coord-barg, & related as or more effic. than neolib minimalism & cons. govt; so cap not flee such combos.

(4) Boix: Left-PubInv & Right-Min Intervention econ’ly close & suff’ly pol. effective

Pub human- & physical-cap investment=alternative to neolib minimalism that sufficiently efficient macroeco’ly to attract/retain capital & politically to support left electorally.
(5) VoC: Institutions & Public Policies ⇒ comparative advantage ⇒ divergence (not convergence)

(a) Hall&Soskice ‘01: complex national networks of PE inst’s confer comparative advant’s

(b) Mosher&Franzese ‘02: VoC ⇒

(i) Fixed-cap mob. & trade integ. spurs specialization (of PubPol & PE-inst’l struct. also);

(ii) Only liquid-cap mobility spurs int’l tax-competition, & it has other implications than commonly thought ⇒ Strategic Interdep. & Race to a “Bottom” that is not necessarily ≥0.

(6) Swank: Domestic political & institutional constraints

Institutional structure of the polity & of welfare system itself shape domestic policy-responses to integration. Argument not fundamentally challenge exclusive or superior macroecon efficiency of neoliberal minimalism; Rather, stresses primacy domestic political conditions in determine nature & mag of welf/tax-policy reactions to int’l econ integ.

(7) Hays: Domestic political-economic structure (in partic.: cap-lab endowment & majority/consensus democracy) condition response to increased capital mobility.

(8) Basinger & Hallerberg (and Franzese & Hays):

(a) Strategic Interdependence: insofar as any these (3, 5, 6, 7 esp.) constrain 1 state, they ease capital-competition for others.

(b) Extent & effect of capital-tax competition depends on what competitors doing.

(9) Rodrik & others: also could expect ↑ globalization to ↑ demand public protection from vicissitudes global economy; so demand ↑ while ability to supply ↓

(a) [Will see 7 & 9 up close in Hays’ book @ end semester.]
Aside: Comparative Advantage and International Trade

I. Simple (Ricardian) Comparative Advantage:

A. Standard Baseline 2x2x1 Model:
   1. 2 countries (A & B)
   2. 2 goods (X & Y)
   3. 1 factor of production (Labor, L)

B. Ctry A absolute advantage over B in production X if can produce X more efficiently (w/ less L).
   1. Production function: equation that maps input, L, into output, X or Y.
   2. Examples: \( X = a_X L \) and \( X = b_X L \)
   3. A has absolute advantage in production of X, if \( a_{LX} > b_{LX} \)
   4. Gains from Absolute Advantage in Trade: If \( a_{LX} > b_{LX} \) & \( a_{LY} < b_{LY} \), i.e., if A has absolute advantage in X and B has absolute advantage in Y, then rather intuitive that each would benefit from specializing in production of good it produces more efficiently and trading for the other.

C. A comparative advantage in production X, relative to B, if A’s opportunity cost of producing X in terms of good Y is less than B’s, or in terms of production functions, if \( (a_{LX} / a_{LY}) > (b_{LX} / b_{LY}) \).
   1. Each ctry specializes in & exports its comp.adv., not it’s abs.adv.’s &, doing so, both ctrys better off, regardless of abs.adv.
   2. B/c comparative advantage is relative, every ctry has comp.adv. in something: here, A comp.adv. in X ⇔ B comp.adv. in Y
D. **Production Possibility Frontiers (PPF’s):** maximum X ctry can produce for each level of Y produced & v.v. I.e., the limits of output capacity given tech (coefficients) and resources (L).

1. Production functions & L=L_x+L_y \Rightarrow X = a_{Lx} L_A - (a_{Lx} / a_{Ly})Y \text{ and } X = b_{Lx} L_B - (b_{Lx} / b_{Ly})Y

2. Graphically (dark lines are PPF’s):

3. Country A has *comparative advantage* in X ⇒ steeper PPF than B.

4. A specializes in X, trades X for Y, (at p somewhere b/w 2 autarky p (i.e., b/w $a_{Lx} / a_{Ly}$ & $b_{Lx} / b_{Ly}$, i.e., b/w the slopes of the 2 PPFs).

5. Dotted line: A’s *consumption possibility frontier* with trade, now seen higher than have consume & produce same

7. PPF_G & PPF_U are hypothetical PPFs for Germany & US under their respective pol-econ institutions.
8. A_G and A_U are their respective productions & consumptions under autarky.
9. T_PG & T_PU are their productions under trade; T(CG) & T(CU) are their consumptions. Trade allows these differ.
10. IC’s are (aggregate) consumers’ indifference curves. Subscripts a and t refer to under autarky and under free-trade.
11. The p lines are relative prices: Ga, Ua, W subscripts indicating German or US autarkic, & World trade.
3. **Clark’s Counter:** Never was any *macro* partisan diverge to converge.

a) No evidence rising partisan converge *macro-policy* b/c partisan convergence = “hallmark of [macro] economic policymaking in democratic capitalist societies & consequently, predated the recent rise in capital mobility” (p. 2).

b) “domestic political consequences of *globalization*—partisan convergence, constraints…to anticipate the response of *footloose* capital…are not the recent effects of changes in the international economy.

c) Instead, …enduring features of the process of economic policy choice in polities dominated by private investment and electoral politics” (p. 2).

d) N.b., *Privilieged Position of Capital + Downsian Electoral Competition* ⇒ partisan convergence on the preferred policies of capital. [Elaboration to follow.]

4. Clark will explore these converge args in broader context:

a) Nordhaus-Tufte *Electoralist* v. Hibbs-Alesina *Partisan* [macro]Cycles

b) Recognizing *Context Dependence* esp. dependence of cycles on *Capital Mobility ( & Exchange-Rate Regime) & Central Bank Independence*
C. **ASIDE: Downsian Electoral Competition: Partisan Converge & Diverge**

1. Black’s Median-Voter Theorem (MVT) & Hotelling-Downs’ Partisan Convergence [ELABORATED AT BLACKBOARD]

   a) MVT:

   (1) 1-dimensional competition,
   (2) binary vote-choice,
   (3) sincere simple-proximity voting,
   (4) “single-peaked” preferences
   (5) \( \Rightarrow \) Median-Voter *Rules*

   b) Hotelling-Downs: MVT \( \Rightarrow \) strong convergence from electoral competition

   c) Slight Elaboration:

   (1) One Dimension:

   (a) Black (58) Median Voter Theorem (MVT): If voters single-peaked pref’s defined on single dim (e.g., left-right), then median-voter’s ideal point is only pt majority-preferred to all others

   (b) Hotelling(28)-Downs(57) Party Competition Centripetal Tendency: Applied to 2-prty

   elects, MVT \( \Rightarrow \) strong incentives converge toward MV
(2) Multiple Dimension Extensions:

(a) McKelvey’s & Schofield’s “Chaos Theorems”:
   (i) w/ >1D, if choices not structured in restrictive ways: virtually certain that policy proposals will cycle around policy space, w/ no proposal majority-defeating all others
   (ii) \[ \Rightarrow \text{either perpetual flux or arbitrary (Arrow’s Impossibility Theorem).} \]

(b) Strongly suggests inst’l restrictions on proposal- & decision-making process essential to non-arbitrary democratic decision-making:
   (i) Kadane (1972) showed that if eqbm exists in unstructured multi-D space (may not), then must be multi-dimension median, a.k.a. Dimension-by-Dimension Median (DDM).
   (ii) Shepsle’s Structurally Induced Equilibrium [elaborate…]

2. Theoretically, partisan divergence can emerge as equilibria of several reasonable representations of electoral competition:

a) Already mentioned **multiple dimensions**; no clear prediction arises there.

b) **Electoral uncertainty** (esp. re: median-voter’s ‘location’) / abstention / Extra-Electoral Influences (Lobby or Interest Grp):
   (1) Uncertainty: allows policy-interested parties to drift from expected medians at finite (rather than infinite) expected-vote cost, yielding divergence
      (a) Issue is uncertainty about effective ‘location’ median voter’s ideal point.
      (b) Could be uncertain who is median, where is median’s pref, or median re: where parties.
   (2) More polarization as uncertainty ↑ (Wittman 77,83; Calvert 85; Roemer 92).
(3) Abstention: several models; alienation is one, e.g., that produces divergence.

(4) Extra-Electoral Influences:

(a) if resources other than votes can sway elect, by buying, informing, or persuading votes
(b) & if these come not from median (which logical), this can also produce divergence.

Credibility: Divergence can also arise if pre-electoral promises must be credible, i.e., post-electoral optimal for winners to implement.

(1) w/ 2 parties, no entry, & 1-stage games (e.g., no reelects allowed) winners no incentive to implement median preferences if their own preferences differ, so voters only believe victors will enact victors’ own preferences ⇒ full divergence.

(2) In repeated elections, parties can build reputations ⇒ some ability promise something other than party’s ideal point (as known by vote) ⇒ some (not full) converge.

(3) ⇒ Any degree of divergence is sustainable.

d) Entry/Multiple Parties:

(1) Free entry ⇒ no equilibria; entry free, so any number of parties enter anywhere

(2) Suggests systems w/ low-cost entry [?] could sustain mult prtys w/ any degree diverge.

(3) w/ some entry-cost, multiple citizen-candidate equilibria (Besley-Coate 97):

(a) One, that only the median enters, ⇒ Hotelling-Downs-Black, but

(b) Others ⇒ 2 candidates equidistant from median enter, w/ the degree of divergence sustainable widening as entry costs grow.

(4) Even w/ just 2 parties, potential of entry ⇒ entry-deterrence reason to diverge.
3. Degree of Divergence, therefore, is an empirical matter
   a) Tufte, Hibbs, Alesina, Me, & Huge Theoretical & Empirical Lit: (1) Clear, Obvious, Manifest, & Important Partisan Differences in (2) Preferences, Policies, & Outcomes, w/ degree of (1) generally ↓ in (2), i.e., as go pref’s → pol’s → out’s.
   b) Clark: Not so much, esp. in macroeconomic policy & outcomes.

D. Explore Implications CBI & CapMob Domestic [macro] Policy:

1. Starting Points:
   a) Need appropriate pol-econ model: contested. Electoralist or Partisan?
   b) Use ways CBI & CapMob (+exchange-rate regime) interact to shape policy control/efficacy to evaluate alternative electoralist & partisan [macro] models

2. Alternative Models:
   a) Partisan [Macro] Model = Hibbsian Model = “political parties w/ diff ideology orientations enact systematically diff pols & produce sys’ly diff macroec outs”.
   b) Electoralist [Macro] Model (≈Downsian) = Nordhaus Model (≈Tufte): “electoral constraints force [all] politicians… to behave in much same way… pols & outs to please med voter (Downs); … adds… assumpts about way voters form expectations… yields predictions that tie… [policy]… to electoral calendar… [for]… growth & employ in period leading to elections, even if such… leads to future inflation (Nordhaus)”.
3. **Partisan & Electoralist [Macro] Models’ Shared Assumption**: pol-mkrs control policies that can affect/control inflation, employment, output (macroec).

4. **CBI & CapMob challenge, or @ least modify, that Central Claim/Assumpt** ⇒
   - **a)** Theory: nuanced propositions when, where, & what sort of macro cycles.
   - **b)** (Clark’s) Empirical Findings:
     1. Little evidence of partisan macro policy or outcome cycles under any conditions.
     2. Electoral macro cycles not ubiquitous either, but growth & UE (& deficit & M*) cycles when CBI & CapMob conditions leave policymaker some control over these.
     3. International Capital Mobility & *Globalization*:
        - *(a)* Little macro partisan convergence from *globalization* b/c little divergence to begin.
        - *(b)* Altered circumstances under which macroeconomic electioneering occurs.
        - *(c)* Altered what macroeconomic policies used for this electioneering.
   - **c)** Normative Considerations:
     1. CapMob & CBI generally discourage (macro) electioneering, so universally and unambiguously good? Well…
     2. Also induced rightward shift in mean policy & outcomes;
     3. If dem institutions working, then policy use desired, so not clear good to debar it.
     4. **[tradeoff]:** rightward mean-shift & foregone democratically responsive policymaking against less cynical (electoral or partisan) manipulation.
E. Pictures of the Alternative Theories of ‘Convergence’

Standard "Globalization => Convergence" Story:
Left desires activism/involvement, increasingly
constrained by mobile capital threat to flee funding
such activities (i.e., taxes).

(Top line is left party/constituency preference; bottom is right party/constit.
Middle line is median-voter’s pref. **Bold** is policy under that partisan govt.)
Strong "Privileged Position of Capital" Story:
Capital always in strong bargaining position b/c
govt needs growth => needs investment, but
capital can wait => Left & Right always had to do
what capital wanted.
**Downsian Convergence Story:** Electoral competition (b/w 2 parties, on 1 dimension, w/ no uncertainty & full credibility) => convergence on median-voter's preferred policy. Median-voter's preferred policy may drift toward that of capital as capital becomes more mobile, but both parties will track median all along.
F. *Workhorse Macro Political-Economic Models*: Adaptive & Rational Expectations; Electoralist & Partisan Motivations; Endogenous Elections; Context-Conditional Models [Table 1]

1. Adaptive-Expectations Electoral Cycles [Tufte]
   a) *Pol-mkrs*: care only about reelect; control pols that affect macro to aid reelect.
   c) *Predictions*: real macro elect cycles (good pre-, poor post-); less precise re: infl.
   d) *Theory & Evidence*: Challenged.

2. Rational-Expectations Electoral Cycles [Rogoff, Sibert]
   a) *Econ*: Electoral manip not surprise [⇒, in new-K/-class, 0 real macro effect];
   b) *Voters* not [naively] retrospectively ignore future effects of current policies;
   c) [also, since pro- not retro-spective, not reward past but for expected future]
   d) *Predicts*: lesser real effects; [smaller, less regular macro elect cycles].
   e) Stronger *evidence* policy than outcome cycles [tons reasons for this].
3. Adaptive-Expectations Partisan Cycles [Hibbs]
   a) *Pol-mkrs*: partisan-differentiated weights on nominal vs. real economy;
   b) *Voters*: [naively] recognize these partisan diff’s & their relevance to themselves;
   c) *Predictions*: real & nominal macro partisan cycles.
   d) *Theory & Evidence*: Challenged.

4. Rational-Expectations Partisan Cycles [Alesina]
   a) As above, except that only unpredicted policy-change affects real economy;
   b) *The Electoral Surprise* [EXPLAIN] ⇒
   c) *permanent* partisan inflation [& policy] diff’s, *temporary* partisan real-econ diffs.

5. Endogenous Election-Timing & Political Surfing
   a) *Adaptive*: straightforward political surfing [or w/ complications];
   b) *Rational*: more difficult to surf to beneficial effect b/c voters can infer signal
      that incumbent expects worse (or at least less-good) is to come
   c) Some evidence of simple surfing (in India, Japan, maybe UK);
   d) Clark, like most, will essentially ignore endogenous election-timing [which is
      to assume either no surfing or exogenous surfing or, if endog., *orthogonal* surfing].
6. Context-Conditional Electoral [& Partisan] Cycles:
   a) Relative Inattention in all 1-4 (& 5) to Institutional [& other] Contexts
   b) Helps explain previous empirical weakness;
   c) Attention will uncover further, interesting & important political economy.
   d) Here: relax assumpt constant policy control & efficacy, specifically consider
two (prior) institutional commitments that moderate control &/or efficacy:
      (1) CBI: may be others than elected officials in the monetary-policy driver seat [i.e., Two
            Hands on the Wheel: see also Franzese AJPS ‘99]
      (2) Capital Mobility (& Exchange-Rate Regime): steering column may be locked [i.e.,
            Multiple Hands on the Wheel: see also Franzese PA ‘03].
TABLE 1. Alternative Models of the Domestic Political Economy

<table>
<thead>
<tr>
<th></th>
<th>Traditional Electoralist Model(^a)</th>
<th>Rational Electoralist Model(^b)</th>
<th>Partisan Model and Rational Variant(^c)</th>
<th>Context-Dependent Partisan Model</th>
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<tbody>
<tr>
<td><strong>Assumptions</strong></td>
<td></td>
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<tr>
<td><strong>Structure of macroeconomy</strong></td>
<td>Output and employment are driven by changes in inflation</td>
<td>Output and employment are driven by changes in unanticipated inflation</td>
<td>Output and employment are driven by changes in unanticipated inflation</td>
<td>Output and employment are driven by changes in inflation</td>
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<tr>
<td><strong>Inflation controlled by</strong></td>
<td>Elected politicians</td>
<td>Elected politicians</td>
<td>Elected politicians</td>
<td>Elected politicians only under certain institutional arrangements</td>
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<tr>
<td><strong>Politicians are</strong></td>
<td>Electoralist</td>
<td>Electoralist</td>
<td>Partisan: Left-wing incumbents attribute higher cost to unemployment relative to inflation than right-wing parties</td>
<td>Partisan</td>
</tr>
<tr>
<td><strong>Voters are</strong></td>
<td>Homogenous, retrospective, and “pocketbook”</td>
<td>Homogenous, forward-looking, and “pocketbook”</td>
<td>Heterogenous, forward-looking, and “pocketbook”</td>
<td>Heterogenous, retrospective, and “pocketbook”</td>
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<tr>
<td><strong>Implications</strong></td>
<td>Increase in growth and employment prior to elections. Increase in inflation either before or after elections</td>
<td>Monetary and fiscal variables may exhibit short-lived and irregular cycles, but growth and unemployment are all but unrelated to elections</td>
<td>Output growth and inflation should be permanently (temporarily, for rational variant) higher and unemployment lower under left governments, unless (a) central bank is highly independent; or (b) country pursues a fixed exchange rate amid highly mobile capital</td>
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\(^a\)For example, see Nordhaus 1975.
\(^b\)For example, see Rogoff and Sibert 1988; and Persson and Tabellini 1990.
\(^c\)For example, see Hibbs 1977; Alesina 1987; and Alesina and Rosenthal 1995.
III. **Structural Context of Macroeconomic Policy Choice (Ch. 2)**

A. Basic Argument/Consideration:


2. Policymakers not actually full control & efficacy, partly b/c world not deterministic, but also limited info & strategic interaction w/ other actors.

3. Consider 2 Such Limiting Factors in Particular: *CBI & Int’l CapMob*, with effect *CapMob* on autonomy/efficacy depending on *Exchange Regime*

4. Consider 1st simple *decision-theoretic* then *strategic game-theoretic* model:
B. Decision-Theoretic Model:

1. CBI & Control:

a) If/as CBI ↑, likely friction b/w incumbent’s incentives & policy ↑
b) Plausible that ↑ CBI ⇒ ↓ partisan & electoral cycles
c) Figures 1 & 2 illustrate:

d) If CBI=1, then \( m=m^*_b \); otherwise [as is always the case], CBI ∈ (0..1)

\[
(1) \Rightarrow m = \text{some compromise } m^*_b \text{ and } m^*
\]

\[
(2) \Rightarrow \downarrow (m^*_l | \text{CBI} - m^*_r | \text{CBI}) \text{ and } \downarrow (m^*_e | \text{CBI} - m^*_{~e} | \text{CBI})
\]
e) Refer also to Franzese AJPS ‘99 for broader implications of this proposition…
2. Aside: Elaboration of PE Theory CBI

a) PolSci & Econ gen’ly agree CBI ↓ infl; both also similarly def CBI as degree of autonomy of (conservative) CB from political authority in making monetary pol.

   (1) From PolSci view:
   (a) CB=bureaucratic institution, populated by financial experts generally hawkish on inflation, whether socialized to that view or coming from a population w/ those interests.
   (b) Govt instead, & especially in democracy, more responsive to various societal pressures that may emerge for inflation.
   (c) Only most conservative Govts as anti-inflationary as CB, so delegation of monetary-policy authority to CB, i.e., CBI, ↓ inflation.

   (2) From the (neoclassical) economist’s view:
   (a) Monetary policy involves a time-inconsistency problem ⇒ inflationary bias if policy controlled by a discretionary, i.e., responsive, authority.
   (b) Credible delegation of monetary authority to an independent & conservative (i.e., a non-responsive) CB offers commitment device to evade time-incons. & so infl. bias ⇒ CBI ↓ infl

b) Aside: Elaboration of neoclassical model monetary policy by rule vs. discretion:

   (1) Start with a “rational expectations” model of a perfect-competition economy:
   (a) Equation (1), the economy: $Y = Y_n + \alpha(\pi - \pi^e)$.

      (i) I.e., output ($Y$) generally equal to natural output ($Y_n$), but short-run prices may be sticky so, if monetary authority created INF>expected INF (i.e., if $\pi - \pi^e > 0$), then $Y$ temporarily exceeds natural rate. I.e. short-run (or expectations-augmented) Phillips curve (with slope $\alpha$).
(2) Now suppose the policymaker has value function given by:

(a) Equation (2), policymaker’s objective: 

\[ V = -\frac{1}{2}A(Y - Y_T)^2 - \frac{1}{2}\pi^2 \]

(i) I.e., policymaker does not like deviations of output from some (presumably high) target rate \( Y_T \), & also dislikes inflation (deviations from target, set to 0 for simplicity).

(3) So, policymakers w/ preferences described by (2) facing economy described by (1) & controlling INF rate directly (a simplification), will act as if solving following maximization:

(a) \[ \text{Max}_\pi -\frac{1}{2}A(Y_n + \alpha(\pi - \pi^e) - Y_T)^2 - \frac{1}{2}\pi^2 \]

where, notice, (1) has been substituted into (2)

(b) \[ \Rightarrow -A \alpha (Y_n + \alpha(\pi - \pi^e) - Y_T) - \pi = 0 \]

...maximize by taking derivative of expression to be maximized w/ respect to control variable (\( \pi \)) & setting result equal to zero...

(c) \[ \Rightarrow \pi = -A\alpha^2\pi - A\alpha (Y_n - \alpha\pi^e - Y_T) \]

...rearranging...

(d) \[ \Rightarrow \pi(1 + A\alpha^2) = -A\alpha (Y_n - \alpha\pi^e - Y_T) \]

...rearranging again...

(e) \[ \Rightarrow \pi(1 + A\alpha^2) = A\alpha^2\pi^e - A\alpha (Y_n - Y_T) \]

...and again...

(4) So, policymakers w/ preferences (2), facing economy (1), choose INF given by (3e),

(a) but here’s the rational expectations part: Price setters know policymakers behave this way, so their \( \pi^e \) expectations also given by (3e). I.e, in eqbm, something Abe-Lincoln-like: “you can’t fool all the people all the time”. On average, \( \pi^e \) will equal \( \pi \). So, rewriting (3) with \( \pi^e=\pi \) gives you:

\[ \text{c) Rational-Expectations Equilibrium: } \pi = A\alpha(Y_n - Y_T) \]

and, substituting \( \pi^e=\pi \) back into economy, (1), we also get that in eqbm: \( Y = Y_n + \alpha(\pi - \pi^e) = Y_n \). I.e., monetary policy has no real effects in eqbm. (Note: if so, then to avoid real costs of monetary contraction: simply announce contraction soon enough & be believed so \( \pi^e=\pi \) reflected in wage & price contracts will include expected contraction...]

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d) CB Autonomy from political authority in monetary policy-making, matter of°
  (1) Never complete b/c CB authority invariably derives from legal statute, i.e., law, or constitutional provision.
  (2) Either subject to change by political authorities if CB policies ever sufficiently distasteful to them to justify expending political capital necessary to change CB status.
  (3) Furthermore, CB authorities’ appointed & perhaps replaced by govt…

e) Nor can Govt costlessly ensure CB conducts policy precisely as current will:
  (1) CB expertise &/or an information advantage over govt in monetary policy,
  (2) Plus, time & other resources for govt even to monitor CB, much less conduct monetary policy itself.

f) CBI must, therefore, measure how far CB could stray from current govt’s will before govt would bear political-economic costs to alter CB law or seize mon pol itself. Therefore, mon pol (& so infl) always partly CB & partly govt control ⇒
  (1) Actual monetary policy (inflation) = wtd average what would be if conservative CB credibly, fully, & autonomously controlled monetary policy & what would be if instead curr govt made mon pol w/o any CB influence, w/° CBI measuring wt on former:

\[
m = CBI \times m_b^* \left( X_b \right) + \left(1 - CBI\right) \times m_g^* \left( X_g \right)
\]

(2) ⇒ anti-infl effect of CBI not constant; it varies depending on political-economic environment in which CB operates. (Also implies all converses: [show derivatives].)
(3) E.g., anti-inf effect CBI greater when left govt than when right & v.v., less the more open the econ & v.v., vary depending other labor- & goods-market institutions & v.v., etc.
3. International Capital Mobility & Exchange-Rate Regimes:

a) CB affects control, not efficacy [actually, can affect both, but ignore that]; CapMob can affect efficacy (depending on exchange regime).

b) Mundell-Fleming (Open-Economy Macroeconomics):

   (a) ↑m⇒↓i⇒(↑I, but also) depreciation, which must fight by ↓m so ↑i back (⇒↓I); alternative quick explanation: if Fix E.R. & CapMob, then must use m to fix i at rate nec. maintain peg.
   (b) ↑def⇒↑AD&↑i⇒appreciation, which must fight by ↓m to ↓i (i.e., fiscal expansion forces reinforcing monetary move also, so doubly effective)

(2) CapMob & Flexible E.R. ⇒ fiscal [relatively] ineffective; mon hypereffective.
   (a) ↑m⇒↓i⇒↑I, & also depreciation, which allowed/accommodated so ⇒↑(X-M) also.
   (b) ↑def⇒↑AD, but also ↑i ⇒ appreciation, which ⇒↓(X-M) (i.e., two sources of “crowding out”, crowding investment because ↑i & ↓(X-M) b/c apprec., so fiscal [relatively] ineffective).

c) Aside: Elaboration of Mundell-Fleming Framework

IV. Open-Economy Macroeconomics (IS-LM-BoP Model)

A. Simultaneous eqbm in money (liquidity) mrkt (LM), goods (investment & saving) mrkt (IS), and balance of payments (BoP); i.e., eqbm is/are interest rates (i) & national income (Q) that clear money & goods markets (IS & LM), & that balance external accounts (BoP).
B. The LM (liquidity mrkt) Curve (eqbm in money market)

1. For any given money supply ($M^s$), some interest rate, $i$, needed for folks to demand exactly that quantity of money given their income, $Q$.

2. Slopes upward: if more income, $Q$, demand more goods & services, $\Rightarrow$ want more money, but for a given $M^s$, that additional demand for money $\Rightarrow$ price of money ($i$) must rise:

3. From point A in figure, $\uparrow Q \Rightarrow \uparrow$ demand money, stock money fixed, so $i$ rises, to pt B, say. From B, $\downarrow Q \Rightarrow \downarrow$ demand money, stock fixed, so $i$ falls, to pt A, say.

4. MONETARY POLICY: $\uparrow M^s \Rightarrow \downarrow i$ @ any given $Q$, $\uparrow Q$ for any given $i$ to keep LM balance; the reverse for $\downarrow M^s$, so expand/contract monetary policy $\equiv$ outward/inward shift of LM curve.
C. Balance-of-Payments (BoP) Curve (eqbm in external accts)

1. **Balance-of-Payments (BoP):** Current Account (Trade Balance: \(X - M\)) + Capital Account (Net Outflow: Cap Outfl. – Cap Inflow) = 0. I.e., \(X+M+\text{NetCapFlow}=0\). [another accounting identity]

2. Thus, trade surplus matched by capital outflow (revenue from surplus is equal to investment abroad); trade deficit matched by capital inflow (excess consumption funded by investment inflow).

3. For any \(i\), some \(Q\) balances Trade (export & import demand: \(M=f(Q)\), \(X\) not) & Capital Accounts (desired invest out-/in-flow) & v.v.

4. Slope? If \(\uparrow Q\), imports rise, exports not \(\Rightarrow\) trade deficit \(\Rightarrow\) need cap inflow, only get if higher \(i\); and v.v. for \(\downarrow Q\) \(\Rightarrow\) surplus needs outflow, get by \(\downarrow i\).

5. Importantly, **BoP line flatter (elastic, i.e., interest sensitive) the more mobile is cap.** Cap flows greater in response to \(i \uparrow \downarrow\), the more mobile capital. Perfect cap mob \(\Rightarrow\) horizontal.
D. IS (investment-savings) Curve (equilibrium in goods markets)

1. National Income $\equiv$ National Expenditures: $Y=Q=C+I+(G-T)+(X-M)$

2. IS-curve slopes downward: For given $C$, $(G-T)$, & $(X-M)$, any $\downarrow i \Rightarrow \uparrow I \Rightarrow \uparrow Q$.

3. FISCAL POLICY: $\uparrow (G-T) \Rightarrow \uparrow Q$ at any given $i$; i.e., outward shift of IS curve.
E. Gen Eqbm in IS-LM-BoP Model: All 3 Curves Intersect
F. Using the IS-LM-BoP Model for Policy Analysis

1. Capital Mobile:

   a) *Monetary Policy under a Fixed Exchange-Rate Regime with highly Mobile Capital*

   (1) \( \uparrow M^s \Rightarrow \) LM shifts out, but this \( \Rightarrow \) \( \downarrow i \) along IS curve, but this \( \Rightarrow \) capital outflow \( \Rightarrow \) depreciation, which violates Fixity. \( \downarrow M^s \Rightarrow \) …[same chain, opposite direction]… \( \Rightarrow \) appreciation, which violates Fixity.

   (2) \( \Rightarrow \) *Monetary Policy forsaken (wholly unavailable) under Cap Mob & Exchange Rate Peg*
b) Fiscal Policy under a Fixed Exchange-Rate Regime

(1) $\uparrow(G-T) \Rightarrow IS$ shifts out, but this $\Rightarrow \uparrow i$ along LM curve, but this $\Rightarrow$ capital inflow $\Rightarrow$ appreciation, which violates Fixity, so monetary policy must accommodate, i.e., $M^s$ must expand to $\downarrow i$ back, which amplifies stimulus.

(2) $\downarrow(G-T) \Rightarrow \ldots$ [same chain, opp. dir.] $\ldots \Rightarrow M^s$ must shrink to $\uparrow i$ back, amplifies stimulus...

(3) UPSHOT: *Fiscal Policy doubly effective under Cap Mob & Peg* (because it forces monetary policy to come along with it in order to maintain peg).
c) Monetary Policy under a Floating Exchange-Rate Regime

(1) $M^s \uparrow \Rightarrow LM$ shifts out, but this $\Rightarrow i \downarrow$ along IS curve, but this $\Rightarrow$ capital outflow $\Rightarrow$ depreciation, which allowed under float, so $(X-M) \uparrow \Rightarrow IS$ shifts out further.

(2) $M^s \downarrow \Rightarrow \ldots[\text{opposite}]\ldots \Rightarrow$ appreciation, which... $(X-M) \downarrow \Rightarrow IS$ shifts in further.

(3) **UPSHOT:** *Monetary Policy doubly effective under Cap Mob & Float Exchange-Rate.*
d) Fiscal Policy under a Floating Exchange-Rate Regime

(1) \( \uparrow (G-T) \Rightarrow \text{IS shifts out} \Rightarrow \uparrow i \text{ along LM curve} \Rightarrow \text{cap inflow} \Rightarrow \text{appreciation, which} \Rightarrow \downarrow (X-M), \text{which} \Rightarrow \text{some shift back of IS, might be more or less or same as original shift...} \)

(2) **UPSHOT:** Fiscal Policy relatively ineffective if Cap Mob & Float

2. Capital Immobile: Model reduces to IS-LM (without BoP) ⇒
   a) Can Peg or Float w/o forsaking monetary autonomy or amplifying monetary efficacy.
   b) Can Peg or Float w/o amplifying or dampening fiscal efficacy.
II. Purchasing-Power Parity & Interest Parity

C. Alternative way to see how Cap Mob may constrain monetary autonomy

D. PPP: \( P = EP^* \) or, in logs (\( \ln \)), \( p = e + p^* \)

1. Given free trade, price of basket in one currency must equal price of same basket in another currency multiplied by the exchange rate.

2. Logic of no-arbitrage: could make \( \infty \) $ if this not true & trade is free (& costless).

3. Empirical: holds very well on avg over long periods (at least, up to a constant); not very well in short run.

E. IP: \( i = i^* + E(\hat{e}) \) (\( \hat{e} = \% \) change e.r. & \( E(\cdot) \) is “expected”)

1. Logic similar, relies on no-arbitrage condition in diff mrkts (money mrkts) though

2. If not, all investors would want the better-return currency only, so \( \hat{e} \), i.e., expected depreciation must equalize the returns.

3. Empirical: holds very well up to extremely short-run, although one might note that prediction is VERY flexible given difficulty estimating second term on the right…

4. So: any diff in nominal int-rates (mon policy) will be met fully by nom. exchange-rate depreciation (flexible e.r.) or real exch.-rate deprec. (fixed e.r.). If cap perfectly mobile, these capital flows infinite, which perfectly unsustainable, so perfect mobility means mon. authorities tiny country must match domestic to foreign policy
5. Clark’s CBI & CabMob+E.R.R. Predictions [Franzese’s elaboration]:

a) *Upshots from IS-LM-BoP, plus CBI:*

(1) If Cap Immob, then both Mon & Fisc available & effective

(2) If Cap Mob & E.R. Flex, monetary doubly effective but fiscal relative ineffective

(3) If Cap Mob & E.R. Fix, monetary unavailable but fiscal doubly effective

(4) If CB Independent, monetary policy unavailable (to domestic political actors).

b) *Political-economic implications for policymakers:*

(1) If CapImmob OR E.R. Flex, pol-mkrs can use mon pol for electoralist or partisan purposes ⇒ macro cycles by monetary mechanism; these monetary-driven cycles would be dampened by CapMob & Fix E.R.

(2) If CapImmob OR E.R. Fix, pol-mkrs can use fisc pol for electoralist or partisan purposes ⇒ macro cycles by fiscal mechanism; these fiscal-driven cycles dampened by CapMob & Flex E.R.

(3) However, furthermore: If CBI, macro cycles by mon mech constrain/damp’d; fiscal-driven cycles still possible, although CB might work against.

(4) ⇒ Cycles achievable under any combo except CBI+CapMob+Flex, but one would expect CBI & CapMob perhaps to dampen cycles, esp. for pol-mkrs facing some competing strategic actors under these conditions.
C. Game-Theoretic (Strategic) Model:

1. *Basic Structure:* Govt Controls Fisc Pol; CB Controls Mon Pol, but (conservative) CBPrefs Differ from Govt’s Only If [insofar as] Indep.

2. *Model:*

   a) *Goals of Policymakers:* \( L_i = (v - y_i^*)^2 + \alpha_i (\pi - \pi_i^*)^2 \)  

      (1) Real Target: \( y_g^* = k_g y^n \): for electoralist model: \( k > 1 \) if election year; for partisan model: \( k > 1 \) if left govt; \( k = 1 \) if non-elect, right, or if \( CBI = 1 \).

      (2) Simplify: \( \alpha_i = \pi_i^* = 0 \Rightarrow \) policymakers differ in real target only

   b) *Economy:* \( y = y^n + \mu (\pi - \pi^*) + \phi g \)

      (1) Expectations-augmented Phillips Curve + simple Keynesian fiscal efficacy; *n.b.*, all else equal fiscal-policy preferred to monetary (*b/c g* not in Loss function, \( L \), but \( \pi \) is).

      (2) \( \text{CapImmob} \Rightarrow 0 < \phi, \mu < 1 \);

      (3) \( \text{CapMob, Fix} \Rightarrow \phi = 1, \mu = 0 \);

      (4) \( \text{CapMob, Flex} \Rightarrow \phi = 0, \mu = 1 \).

   c) *Order of Play:*

      (1) All learn game structure (E or ~E; R or L; \( CBI \) or ~\( CBI \), all parameters of model); *n.b.*, actually no role for \( \pi \) here; game as modeled entirely b/w CB & govt, no citizens.

      (2) Govt chooses \( g \); then bank chooses \( \pi \). Note:

          (a) Actually, bank chooses \( \pi \) given expects \( g \) from govt optimize \( \Rightarrow \) some \( \pi(g) \); symmetrically, govt chooses \( g \) knowing this is how bank will act.

          (b) [game somewhat odd for \( CBI = 0 \) case; because then govt would optimize over \( g \) & \( \pi \)]
3. **Implications**: As before but CB not only not act *electorally* or *partisan-ly* but leans monetarily against govt if indep & retains mon. auton.

4. **Predictions**:

   a) If CapImmob, fiscal manipulation regardless of E.R. or CBI, but CBI likely *dampens*. [note: fiscal policy Pareto-preferred *ceteris paribus* in this model.]

   b) If CapMob, fiscal manipulation under *Fixed E.R* but not under *Flex E.R.*, regardless of CBI. [note: fiscal 100% ineffectual under *Flex* in this model.]

   c) If CapImmob, monetary manipulation in contractionary direction [more generally, monetary counters fiscal policy] if CBI.

   d) If CapMob, monetary manipulation in expansion dir only if ~CBI & Flex E.R.

5. **Main Difference from Non-strategic (Decision-Theoretic) Model**: CapMob, Fix, & CBI ⇒ fiscal effective & CB constrained from countering ⇒ fiscal cycles, if anything, greater outcome cycles w/ CapMob than w/o .

6. [TABLE 3: *n.b.*, absolute (none, all) statements mostly due to dichotomized conditions & extreme resolution of assignment problem (all fiscal policy); viewed as relative statements should hold though.]
TABLE 3. The Expected Effect of an Increase in Left Governance or the Onset of an Election under Various Conditions

<table>
<thead>
<tr>
<th></th>
<th>No Central Bank Independence</th>
<th>Central Bank Independence</th>
</tr>
</thead>
<tbody>
<tr>
<td>No capital mobility</td>
<td>\textit{Fiscal policy}: expansion \n\textit{Monetary policy}: indeterminate \n\textit{National income}: expansion</td>
<td>\textit{Fiscal policy}: (smaller) expansion \n\textit{Monetary policy}: contraction \n\textit{National income}: (smaller) expansion</td>
</tr>
<tr>
<td>Capital mobility and fixed exchange rates</td>
<td>\textit{Fiscal policy}: (larger) expansion \n\textit{Monetary policy}: none \n\textit{National income}: expansion</td>
<td>\textit{Fiscal policy}: (larger) expansion \n\textit{Monetary policy}: none \n\textit{National income}: expansion</td>
</tr>
<tr>
<td>Capital mobility and flexible exchange rates</td>
<td>\textit{Fiscal policy}: none \n\textit{Monetary policy}: expansion \n\textit{National income}: (smaller) expansion</td>
<td>\textit{Fiscal policy}: none \n\textit{Monetary policy}: none \n\textit{National income}: none</td>
</tr>
</tbody>
</table>

7.\textbf{NOTE:} \textit{CBI, CapMob, E.R.} all viewed as exogenous.

8.\textbf{Policymaking Highly Context-Dependent}; misleading at best to explore [theoretically or] empirically w/o consider context
D. Diagrams summarizing Clark’s Central-Bank-Independence, Capital-Mobility, & Exchange-Rate-Regime Conditional Electoral and Partisan Cycles Theory (1\textsuperscript{st} w/ steps elab’d; 2\textsuperscript{nd} just upshots):

- Central Bank Independent $\Rightarrow$ Govt not Control Monetary Policy
  - (if CB non-strategic) $\Rightarrow$ Fiscal Cycles $\Rightarrow$ Outcome Cycles
  - (if CB strategic, CB uses monetary policy to threaten govt to constrain fiscal activism $\Rightarrow$ smaller Fiscal Cycles, contrary Monetary Cycles $\Rightarrow$ smaller Outcome Cycles)

- Central Bank Dependent $\Rightarrow$ Govt Controls Monetary Policy
  - $\Rightarrow$ Fiscal & Monetary Cycles $\Rightarrow$ (larger?) Outcome Cycles

- Capital Immobile $\Rightarrow$ Fiscal & Monetary Policies Effective & Maneuverable
  - Exchange Rate Fixed $\Rightarrow$ Monetary Policy unavailable (to CB or Govt), but Fiscal Policy esp. effective
    - $\Rightarrow$ (larger?) Fiscal Cycles $\Rightarrow$ Outcome Cycles

- Capital Mobile $\Rightarrow$ Fiscal & Monetary Efficacy & Maneuverability Depend on Exchange-Rate Regime
  - Exchange Rate Float $\Rightarrow$ Fiscal Policy relatively ineffective, but Monetary Policy esp. effective
    - Central Bank Independent $\Rightarrow$ Govt not Control Monetary Policy
      - $\Rightarrow$ No Cycles
    - Central Bank Dependent $\Rightarrow$ Govt Controls Monetary Policy
      - $\Rightarrow$ (larger?) Monetary Cycles $\Rightarrow$ Outcome Cycles
Central Bank Independent

- If CB non-strategic, => Fiscal Cycles => Outcome Cycles
- If CB strategic, => smaller Fiscal Cycles, contrary Monetary Cycles => smaller Outcome Cycles

Central Bank Dependent

- => Fiscal & Monetary Cycles => (larger?) Outcome Cycles

Capital Immobile

- => (larger?) Fiscal Cycles => Outcome Cycles

Exchange Rate Fixed

Capital Mobile

- Central Bank Independent

- => Exchange Rate Float

Central Bank Dependent

- => No Cycles

- => (larger?) Monetary Cycles => Outcome Cycles

=> Outcome Cycles
E. Determinants Domestic Policy Autonomy: DEF’s & MEAS’s

1. Capital Mobility:

a) What:

(1) System or Country Characteristic? Legal or Behavioral?

(2) Sources:

(a) [Science & Tech] Information/communication (& other) technological advances;
(b) [Econ] Financial-instrument/market advances (e.g., Eurodollar, futures, etc.);
(c) [Pub Pol] Removal capital controls;
(d) [All of above] Increased trade.

(3) Only Capital Controls seems directly (discretionary) policy & seemed to respond more than cause mobility ⇒ use this as more exogenous, behavioral, system characteristic

b) When: b/w ‘60s–‘80s; ‘70s transition period; by ‘78 seems prominent; key bellweather=1972 $-gold-window closure & Bretton Woods collapse.

c) Measures:

(1) Correlation of Domestic Savings & Investment. [WHY?] [PROBS: S&I both pro-cyclical, so corr. anyway; large-ctry S&I affect world; path may seem oddly volatile]

(2) Counts of Capital Controls

d) Data: FIGURE 4.
2. Exchange-Rate Regimes:

a) What & When & Where:

(1) WWII-’71 = Bretton Woods: all [most] to $ [to IMF SDR’s≈$] which tied to gold.

(2) Heterogeneous since: simple pegs; crawling pegs; unilateral baskets; group baskets; managed float; flexible; etc. Great mix; considerable variation across & some w/in ctrys.

(3) Snake—Tunnel—ERM/EMS—EMU—Euro; a few other patterns.
b) *Measure*: n.b., assumes official policy $\Rightarrow$ effective policy

c) *Data*: TABLE 4.

<table>
<thead>
<tr>
<th></th>
<th>Snake</th>
<th>EMS</th>
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<td>—</td>
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</tr>
<tr>
<td>Austria</td>
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</tr>
<tr>
<td>Canada</td>
<td>—</td>
<td>—</td>
<td>—</td>
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<tr>
<td>Denmark</td>
<td>1973–78</td>
<td>1979–89</td>
<td>—</td>
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<tr>
<td>Finland</td>
<td>—</td>
<td>—</td>
<td>1977–89</td>
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<tr>
<td>France</td>
<td>Intermittent</td>
<td>1979–89</td>
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<td>Ireland</td>
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<td>—</td>
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<tr>
<td>West Germany</td>
<td>1973–78</td>
<td>1979–89</td>
<td>—</td>
</tr>
</tbody>
</table>

3. Central Bank Independence: [DEF]

a) What:
   (1) Legal (de jure) or Behavioral (de facto) [in developing, only latter seems matter].
   (2) Legal CBI:
      (a) Appointment, dismissal, tenure-length of CB decision-makers;
      (b) Procedures of dispute resolution;
      (c) Objectives of policy as defined in bank law;
      (d) Whether bank may or must buy govt bonds & under what terms;

b) Where & When: until recently (ECB/Euro project & convent wisdom), very rarely changed; almost constitutional feature

c) Measures: 5 common indices (n.b., a different 5 available)

d) Data: TABLE 5.
<table>
<thead>
<tr>
<th></th>
<th>$AS^a$</th>
<th>$BP^b$</th>
<th>$GMT^c$</th>
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<td>7.6</td>
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</table>

*Note: All indexes are constructed so that higher numbers indicate greater central bank independence.*

*Index created by Alesina and Summers (1993) by rescaling and combining the Bade and Parkin (BP) and Grilli, Masciandaro, and Tabellini (GMT) indexes.*

*Index proposed by Bade and Parkin (1982) and extended by Alesina (1988b).*

*Sum of economic and political indexes provided by Grilli, Masciandaro, and Tabellini (1991).*


*Indicates an above-median score for a country that is below the median on at least one other index.*
V. Partisanship and Fiscal & Monetary Policy (Ch. 3)

A. “There’s not a dime’s worth of difference between the Republicans and the Democrats” (G. Wallace, ’68 Indep Cand)
   1. Remember Blair & Schroeder; but was that new?
   2. Mitterand’s U-turn in early ‘80s; opening bell or was that not new?
   3. Wilson’s (’64-70; ’74-76) austerity program in Sterling crisis? Need…
   4. **Systematic analysis**: whether & when Left distinctly more interventionist
      a) Sev’l previous studies: ↑ integ not clearly erode partisan diff’s, maybe even ↑.
      b) Clark’s reanalysis: suggests little difference to begin, & integration not Δ this;
      c) & also indirect support for electoralist model over partisan model, perhaps.

B. Hibbsian Partisan Model & Prior Evidence

   1. Fiscal & Monetary Policy Differences: Expected Left tendencies…
      a) Tax Capital & More-Progressive Tax System;
      b) Pro- Social-Welfare & Redistribution;
      c) More Counter-cyclical & Expansionary Fiscal Policy;
      d) Greater taxes, larger govt overall; less debt- & inflation-averse.
2. Partisan v. Downsian Perspectives:
   a) *Partisan*: either intrinsic pol pref’s or survival depends on diff constituencies
   b) *Downsian*: must appeal median, regardless of partisan preferences:
   c) *Alesina & Rosenthal*: D=choose policies to win; P=try win to choose policies
   d) *Clark*: pithy, but D&P need not differ whether part goals diff, but rather whether electoral competition induces policy-actions converge

   a) Tax Size (Revenue share of GDP):
      (1) Generally supportive cross-sectional or long-run partisan differences (Cameron ‘78; Hibbs ‘77; Wildavsky ‘74; Huber, Ragin, & Stephens ‘93; Hicks & Swank ‘01)
      (2) TSCS analyses more mixed—support or ambiguous—but stat problems or challenges
      (3) *Clark*: Cross-sect or LR part diff’s not the issue here; Question is whether left-right change in govt, controlling for median, ⇒ policy Δ
      (4) ⇒ examine effect w/in-ctry partisan Δ better test, esp. if control median.
      (5) [ELAB: not much challenge view when/where voters want R/L, elect R/L, & then get R/L, but Q is whether govt control by R/L causes pol Δ]
   b) Tax Composition:
      (1) *Capital Tax*: No, evidence actually contrary: L less; R more
      (2) *Income Tax* (& not Consumption): generally supportive to mixed/ambiguous
c) Spending:

(1) Castles (‘82): L=↑Gov Cons, PubEd, PubHealth; R=↓total spend, welfare, social transfers & subsidies, PubEd, PubHealth;
(2) Gen’ly Supportive Cross-Sections/LR evidence since; TSCS mixed & often flawed
(3) Some evidence that C-Dems different Secular Conserv, w/ C-Dems less anti-welfare.
(4) Some evidence, beginning ‘80s, L more aggressive T-cut
   (a) “Nixon to China”; Downsian “position jumping”; [or just more to cut where been L gov]
(5) Iversen ‘97: not size spend, but R spend via direct transfers, L by G-Cons [why?]

d) Overall Fiscal Stance: i.e., Deficits & Debt:

(2) Boix: L⇒↑D only in ‘73–‘82 period [Why? Clark: CapMob & flex ⇒↓fiscal effect, so need more; [problem w/ other parts arg.; other explanations?] [see also Franzese ‘02]
(3) If control fiscal institutions (Clark & Hallerberg; Hahm et al.; Halerberg & von Hagena), hard to find any simple relation partisanship & deficits/debt.
(4)[Cusack ‘99,‘01: L/R not ↑/↓ debt, but L/R ↑/↓ activist, i.e., ↑/↓ Keynesian counter-cyclical (meaning respond more/less to macroecon conditions)]
4. [Franzese’s Summary of previous results:

a) Tax: fairly supportive overall T; ½ pro-, ½ anti- re: tax mix.

b) Spend: mostly supportive both size & mix of spend, esp. mix, but some evidence L may be effective cutter in some circumstances.

c) Def & Debt: very mixed, little support of anything simple re: L/R ⇒ D&D]

5. Social-Democratic/Corporatist Model:

a) Left & Labor often closely tied & some versions partisan arguments emphasize their combination &/or interaction explicitly in shaping policies &/or outcomes

(1) E.g., Lab power via strike threat/activity; Left pub pol includes soc wage; LftLab ⇒ high Social-Wage/low Strike equilibrium;

(2) E.g., Lange & Garret ‘85 ff (et al.): [DEF; EXPL:] Encompassing, Coordinated, Tri-Partite Bargaining interacts w/govt partisanship ⇒ macro policy & efficiency:

(a) Coord Barg ⇒ Lab restraint, if credible reason believe some of benefit directed back to Lab; Left Govt provides such credible commitment: Lft+Lab ⇒↑MacroPolActive & ↑Efficiency

(b) Highly Decentralized Bargain ⇒ Lab restraint if expect non-expansionary policy: Right + weak Lab ⇒↓MacroPolActive & ↑Efficiency

(c) Left government + Decentralized labor ⇒ lack of restraint ⇒↑MacroPolActive, but ↓Efficiency

(d) Right government + Centralized labor ⇒ lack of restraint ⇒↓MacroPolActive, and ↓Efficiency

b) Evidence:

(1) That Union density or coordination [distinguish] ⇒↑SocWelfare, etc.: gen’ly good

(2) That Left + Labor ⇒ fiscal or monetary as argued: more mixed at best.
6. Open-Economy Considerations:

a) *Embedded Liberalism*: ↑ Trade exposure ⇒ ↑ risk in small, concentrated economies ⇒ ↑ (a pro-trade) Left & Labor & associated policies & outcomes

b) n.b., high Cap controls/CapImmob; as ↑*CapMob*, convergence arg’s have 2 big negative implications for this *Postwar Settlement (Class Compromise)* on *KWS*:
   1. ↑ competition for capital ⇒ Welfare State now less affordable
   2. ↑ competition for capital ⇒ Keynesian activism now less effective

c) Evidence:
   1. Rodrik‘97; Cusack‘97; Hallerberg&Basinger‘98: not much evidence convergence;
   2. H&S (‘98,’01) some evidence *CapMob & FinLib* undermine Left-Labor eqbm
   3. Garrett: as *CapMob* ↑, gen’ly more beneficial LftLab effect.
   4. *Clark*: Reconsider Cusack quickly, then Garrett thoroughly.

1. Estimate Model Like:  
   \[ G = \gamma_0 + \gamma_1 P + \gamma_2 (P - V) + \epsilon \]
   
   a) \( P \): measure of the left-to-right position of the current government
   
   b) \( V \): some measure left-to-right position voters (vote-wtd avg of parties prev elect)
   
   c) Interpretation:
      
      (1) \( \gamma_1 \): response of policy to govt partisanship (preferred policy), controlling for how far govt’s preference is from electorates’ preferences
      
      (2) \( \gamma_2 \): response of policy to distance govt’s partisan prefs from voters’ prefs
         
         (a) \( \gamma_1 < 0 \) \( \Rightarrow \) right parties prefer smaller G than left parties do
         
         (b) \( \gamma_2 > 0 \) (assuming \( \gamma_1 < 0 \) \( \Rightarrow \) both parties moderate toward voter prefs
         
         (c) if \( \gamma_2 = -\gamma_1 \), then parties fully moderate to voters’ position
      
      (3) Easier Interpretation:
         
         (a) \( dG/dP = \gamma_1 + \gamma_2 = \) effect rtwrd gov\( \Delta \), controlling for, holding constant, net of voters’ location
         
         (b) \( dG/dV = -\gamma_2 = \) effect rtwrd voter \( \Delta \), controlling for, holding constant, net of govt location

2. Findings [Table 6]:
   
   a) \( dG/dP \approx 0 \): seems little effect govt partisanship, once net voter position [in fact, most estimates slightly \( > 0 \) | probably insignificant, but can’t tell; might suggest some small Nixon-to-China effect: right must moderate (slightly) more than left to maintain its credibility w/ voters]
b) \( dG/dV < 0 \): policy responds intuitively to left-right preferences voters

c) \( \gamma < 0 \): parties pref’s clearly diverge, just not much effect net of voters’ position

d) Summary: seems primarily that Voter Preferences \( \Rightarrow \) Govt Partisanship \( \Rightarrow \) Partisan Policies; not much L/R gov’t effect controlling for voters’ location.

e) [n.b.: Voter pref measure entirely based on party location; smoother measure than P of that location, but lagged 1 yr; not clear how strongly should lean this distinction; likely hi corr’d]
D. Reconsider Garrett (‘98): Partisan Politics in the Global Economy

1. G’s Arg:
   a) Left+Lab ⇒ pro- growth, employment, & redistribution [& less anti-inflation], by public-spending, deficit, tax, monetary, & redistributive policy.
   b) Globalization ⇒ ↑ cap competition ⇒ ↑ cost intervention; OR it ⇒ ↑ economic dislocation ⇒ ↑ demand intervention; OR both ⇒ empirical Q which dominant

2. G’s Model & Measures:  
   [important implications of \( a_i + a_t \)]

   a) \[ \text{POL}_t = a_i + a_t + \text{CONTROLS}_t + r \text{POL}_{t-1} + b_1 \text{LLP}_t + b_2 \text{Trade}_t + b_3 \text{CapMob}_t + b_4 \text{LLP}_t \times \text{Trade}_t + b_5 \text{LLP}_t \times \text{CapMob}_t + e_t \]
   b) \[ \frac{d\text{POL}}{d\text{LLP}} = b_1 + b_4 \text{Trade} + b_5 \text{CapMob} \]

   c) Measures:

      (1) LLP: Left Party Cab Share + stdzd lab-market organization encompassingness score
      (2) CapMob: # cross-border cap-mrkt restricts [n.b., 93% smpl ≤2]; \( \text{Trade} = (X+M)/\text{GDP} \) [n.b., almost all smpl ≥30, ≤120].
      (3) POL: 5 spend, 5 tax, 2 overall AD stance (fisc: deficits; mon: int rates)
         a) Spend: Total, Transfers, G-Consumpt, Industry Subs, Cap Spend
         b) Tax: Tot Rev, IncTax Rev, Consumpt Tax, Corp Tax, Employer SS Tax
3. Predictions of [Simple] Partisan Model (Tab 7); Results (Tab 8):

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Predicted Relationship with Left-labor power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total spending</td>
<td>+</td>
</tr>
<tr>
<td>Spending on</td>
<td></td>
</tr>
<tr>
<td>Income transfers</td>
<td>+</td>
</tr>
<tr>
<td>Civilian government consumption</td>
<td>+</td>
</tr>
<tr>
<td>Subsidies to industry</td>
<td>+</td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>+</td>
</tr>
<tr>
<td>Total revenues</td>
<td>+</td>
</tr>
<tr>
<td>Revenues from</td>
<td></td>
</tr>
<tr>
<td>Personal income tax</td>
<td>+</td>
</tr>
<tr>
<td>Consumption taxes</td>
<td>-</td>
</tr>
<tr>
<td>Corporate income taxes</td>
<td>+</td>
</tr>
<tr>
<td>Employer contributions to social security</td>
<td>+</td>
</tr>
<tr>
<td>Macroeconomic policy</td>
<td></td>
</tr>
<tr>
<td>Budget deficits</td>
<td>+</td>
</tr>
<tr>
<td>Interest rates</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total Spending (1)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td></td>
<td>( C_{m} = C_{mg} ) (a)</td>
</tr>
<tr>
<td><strong>Left-labor power (Lip)</strong></td>
<td>0.082 (0.192)</td>
</tr>
<tr>
<td><strong>Trade</strong></td>
<td>-0.043* (0.024)</td>
</tr>
<tr>
<td><strong>Capital mobility (Cm)</strong></td>
<td>-0.885*** (0.298)</td>
</tr>
<tr>
<td><strong>Trade · Lip</strong></td>
<td>0.008** (0.004)</td>
</tr>
<tr>
<td><strong>Cm · Lip</strong></td>
<td>0.228*** (0.058)</td>
</tr>
<tr>
<td><strong>Lagged dependent variable</strong></td>
<td>0.806*** (0.025)</td>
</tr>
<tr>
<td>GDP growth</td>
<td>-0.399*** (0.029)</td>
</tr>
<tr>
<td>Unemployment</td>
<td>0.086* (0.045)</td>
</tr>
<tr>
<td>Old-age population</td>
<td>0.241** (0.106)</td>
</tr>
<tr>
<td>Constant</td>
<td>5.291*** (1.651)</td>
</tr>
</tbody>
</table>

\( F_{DW} \) 0.60 \ 0.60 \ 1.31 \ 1.31 \ 0.65 \ 0.65 \ 0.65 \ 0.65 \ 7.49 \ 7.49

\( \text{Prob.} > F \) 0.661 \ 0.661 \ 0.267 \ 0.267 \ 0.629 \ 0.629 \ 0.629 \ 0.629 \ 0.112 \ 0.112

Observations 350 \ 350 \ 350 \ 350 \ 350 \ 350 \ 350 \ 350 \ 350 \ 350

Number of countries 14 \ 14 \ 14 \ 14 \ 14 \ 14 \ 14 \ 14

Note: Columns 1a–5a use Garrett's coding for the capital-mobility measure; columns 1b–5b use transformed capital-mobility measure.

Panel-corrected standard errors are in parentheses.

The term \( F_{DW} \) is the test statistic for Durbin-Watson's \( m \).

\( ^* p < .10, ^{**} p < .05, ^{***} p < .01 \), one-tailed test for variables involving Lip, two-tailed otherwise.
Fig. 5. The estimated effect of Left-labor power on government spending at various levels of trade and capital-market openness. Darker lines denote increased capital-market liberalization. (*Note: * indicates coefficient is significant at $p < .10$, one-tailed.)

a) Spend:

(1) Esp. recalling that $Trade>30$, this remarkably GOOD for G’s arg.

(2) Least strong Transfers & Capital Spending, but results basically Partisan as expect (mostly signif’ly so as ***) & ↑ in both $CapMob$ & $Trade$ (mostly signif’ly so), as expect.
b) Tax:

(1) Considerably more mixed, less significant, & less good for G’s arg.

(2) Perhaps some partisanship in Total Tax as expected, but differences ↓ in Trade (convergence) while ↑ CapMob as G argues.

(3) Income Tax ↑ in LLP, but significant only in mostly non-sample value-ranges, & convergence in Trade (significant) and CapMob (insignificant) here.

(4) Consumption Tax & Corporate Tax: find opposite naive partisan story, find divergence & convergence respectively, but insignificantly so in both cases

(5) Employer Social-Security contributions mostly partisan as expected but not significant & these converge (significantly).

(6) ⇒ Simple partisan tax-level & tax-instrument stories not well supported except for Total Tax, but some evidence of convergence.
c) Overall AD Policy Stance: Def & IntRates (real 1-yr G-Bonds)

(1) G’s IntRate model problematic: controls inflation (badly endog.), & US IntRate \(\Rightarrow\) spatial dynamics & further endog., CBI (supposed to dampen partisan policies, not just an additive control)

(2) Policy instrument is nominal interest rates; hard to back out of equation.
d) **Conclusions:** pretty good for partisan policy & for Garrett on fiscal policy; perhaps some signs convergence on monetary policy, but convergence responding trade-open, not cap-mob [which odd].
e) CLARK: Reconsider Spend, Tax, & AD Pol, conditional also upon Exchange-rate regime:

(1) Model: \( POL_{it} = a_i + a_t + C_{it} + rPOL_{i,t-1} + b_1LLP_{it} + b_2CapMob_{it} + b_3Flex_{it} + b_4LLP_{it} \times CM_{it} + b_5LLP_{it} \times Flex_{it} + b_6CM_{it} \times Flex_{it} + b_7CM_{it} \times Flex_{it} \times LLP_{it} + e_{it} \)

(2) \( \Rightarrow \frac{dPOL}{dLLP} = b_1 + b_4CM + b_5Flex + b_7CM_{it} \times Flex_{it} \)

E. ELABORATION: All of Clark’s empirical models some version of this:

\[ E(Policy) = \beta_0 + CONTROLS + \beta_1 CapMob + \beta_2 Fix + \beta_3 CBI + \beta_4 EP \]
\[ + \beta_5 CapMob \times EP + \beta_6 Fix \times EP + \beta_7 CBI \times EP \]
\[ + \beta_8 CapMob \times Fix + \beta_9 CapMob \times CBI + \beta_{10} Fix \times CBI \]
\[ + \beta_{11} CapMob \times Fix \times EP + \beta_{12} CapMob \times CBI \times EP + \beta_{13} Fix \times CBI \times EP \]
\[ + \beta_{14} CapMob \times Fix \times CBI + \beta_{15} CapMob \times Fix \times CBI \times EP \]

Where EP is either an electoral indicator or a govt-partisanship indicator, and Policy is a fiscal or a monetary policy.

F. Models: Interpretation

1. In these models, the effects of Partisanship (i.e., size of partisan cycles), or the effects of an Election year (i.e., the size of partisan cycles) are given by the combination of CapMob, Exchange-Regime, and CBI conditions according to:

\[ \frac{\partial E(Policy)}{\partial EP} = + \beta_4 + \beta_5 CapMob + \beta_6 Fix + \beta_7 CBI \]
\[ + \beta_{11} CapMob \times Fix + \beta_{12} CapMob \times CBI + \beta_{13} Fix \times CBI \]
\[ + \beta_{15} CapMob \times Fix \times CBI \]
2. So, for example, monetary cycles (electoral or partisan) are supposed to be impossible under capital mobility and fixed exchange-rates, so we expect the effects of EP to be zero when CapMob and Fix are both 1. CBI is irrelevant under these conditions. That is:

$$\frac{\partial E(\text{MonPol})}{\partial EP} \bigg|_{\text{CapMob}=\text{Fix}=1} = +\beta_4 + \beta_5 + \beta_6 + \beta_{11} + (\beta_7 + \beta_9 + \beta_{13} + \beta_{15}) \ CBI = 0$$

$$\Rightarrow +\beta_4 + \beta_5 + \beta_6 + \beta_{11} = \beta_7 + \beta_9 + \beta_{13} + \beta_{15} = 0$$

3. Another example: monetary cycles (electoral or partisan) are supposed to occur (i.e., be non-zero, namely positive) under capital mobility and flexible exchange-rates, i.e., when CapMob=1 and Fix=0, but only if CBI=0 and not if CBI=1. So:

$$\frac{\partial E(\text{MonPol})}{\partial EP} \bigg|_{\text{CapMob}=1; \text{Fix}=0; \text{CBI}=1} = +\beta_4 + \beta_5 + \beta_7 + \beta_{12} = 0$$

$$\frac{\partial E(\text{MonPol})}{\partial EP} \bigg|_{\text{CapMob}=1; \text{Fix}=0; \text{CBI}=0} = +\beta_4 + \beta_5 > 0$$

$$\Rightarrow +\beta_4 + \beta_5 = -(\beta_7 + \beta_{12})$$

And so on…
a) OK, back to Clark’s Reconsider Spend, Tax, & AD Pol, conditional upon CBI, CapMob, and Exchange-Regime:

(1) Model: \( \text{POL}_{it} = a_i + a_t + C_{it} + rPOL_{i,t-1} + b_1 \text{LLL}_{it} + b_2 \text{CapMob}_{it} + b_3 \text{Flex}_{it} + b_4 \text{LLL}_{it} \times CM_{it} + b_5 \text{LLL}_{it} \times Flex_{it} + b_6 CM_{it} \times Flex_{it} + b_7 CM_{it} \times Flex_{it} \times \text{LLL}_{it} + e_{it} \)

(2) \( \Rightarrow \frac{d\text{POL}}{d\text{LLL}} = b_1 + b_4 \text{CM} + b_5 \text{Flex} + b_7 \text{CM} \times \text{Flex} \)

(3) Simple Convergence Story \( \Rightarrow b_4 \text{ & } b_4 + b_7 \text{ opposite sign as } b_1 \)

(4) Clark/Mundell-Fleming:

(a) fiscal convergence under flex, not fix \( \Rightarrow b_4 + b_7 \text{ opp. sign } b_1, \text{ but not } b_4 \)

(b) [mon convergence under fix, not flex \( \Rightarrow b_4 \text{ opp sign } b_1, \text{ but not } b_4 + b_7 \)]

(c) [n.b., M-F logic may not apply solely to G or to T, but jointly to AD]

(d) [n.b., ignoring CBI complication for now]

(e) [n.b., recall the sample range mostly \( CM \leq 2 \)]

(5) Conclusions [see results 2 slides down]: Largely similar to before...

(a) Cleanest results on Spending side, where looks Garrett-like, little difference by Exchange-Rate Regime, although Individual Subsidies insignificant & Capital Spending odd (& insignificant)

(b) Tax results mixed to counter the naïve partisan story; only TotRev remotely supports simple partisan story & only at high mobility; simple partisan story on CapTax and EmpSS looks increasingly wrong, only last shows any difference by exchange-rate regime.

(c) Budget Deficit & Interest Rate give some support partisan+M-F story
4. Conclusion [Franzese’s]:

a) Points where agree w/Clark:
   
   (1) Evidence of large partisan diff’s macroec policy not overwhelming.
   (2) Simple partisan tax story finds very little support in evidence.
   (3) Simple partisan converge or diverge stories also at best mixed support.
   (4) Fisc. & mon. (AD) policies seem conditional on combo CapMob&E.R.
   (5) Electoral cycle evidence [to come] more cleanly supports Clark/M-F.

b) Points Clark may overstate:
   
   (1) Partisan differences in spending & responses to globalization seem largely as G argued, & largely unconditional on exchange-rate regime.
   (2) Partisan differences Capital/Employ Tax may actually be significantly opposite simple partisan story, Garrett, & Clark—not just a null result: needs explanation.
   (3) Signs of Clark/M-F partisan cycles in Deficits & Interest Rates better than the text credits; but CapMob constrains MonPol even in Flex, just more so w/ Fix.
Fig. 8. The estimated effect of Left-labor power on government spending under various degrees of capital-market openness and alternative exchange rate regimes. Darker lines denote flexible exchange rate. *(Note: * indicates coefficient is significant at \( p < .10 \), one-tailed.)*

Fig. 9. The estimated effect of Left-labor power on government revenues under various degrees of capital-market openness and alternative exchange rate regimes. Darker lines denote flexible exchange rate. *(Note: * indicates coefficient is significant at \( p < .10 \), one-tailed.)*

Fig. 10. The estimated effect of Left-labor power on macroeconomic policy under various degrees of capital-market openness and alternative exchange rate regimes. Darker lines denote flexible exchange rate. *(Note: * indicates coefficient is significant at \( p < .10 \), one-tailed.)*
VI. Elections and Fiscal & Monetary Policy (Ch. 4)

A. Intro/Motivation:

1. If not [so much] partisan, then electoral?

2. Again, prev. lit ambig., can considering CapMob, ER, CBI ⇒ sense?

3. Clark et al.’s previous work:
   a) CBI constrains electoral cycles; CapMob & Fix also constrains
   b) Leaves questions:
      (1) Fiscal policy not necessarily constrained by these conditions;
      (2) CBI constrain monetary cycles when $CapImmob$, or $CapMob&Flex$, but should not be able to do so when $CapMob&Fix$ (beyond effect of that mobility & peg).

4. ⇒ Reconsider w/ this fuller story: [n.b., some Δs from partisan chpt:]
   a) [Database: 1973-89 quarterly for monetary, 1981-92 annually for fiscal]
   b) [CBI not considered in partisan case; considered here.]
   c) [Evaluation only $CapMob$, post-BW, post-OPEC, & largely assume constant]
   d) [Monetary instrument more appropriately $d(M1)$]
   e) [No time-period dummies in monetary-policy models]
   f) [$Partisan$ tests combined Left+Lab; $Electoral$ tests unadulterated Left.]
B. Electoral Policy-Cycle Hypotheses

<table>
<thead>
<tr>
<th>TABLE 14. Electorally Induced Cycles in Macroeconomic Policy Instruments under Various Structural Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Central Bank Independence</td>
</tr>
<tr>
<td>Capital mobility and fixed exchange rates</td>
</tr>
<tr>
<td>Capital mobility and flexible exchange rates</td>
</tr>
</tbody>
</table>

C. Electoral Cycles in Monetary Policy:

1. \textit{Model}: \( m_{it} = b_1 + \sum b_j m_{it-j} + e_{it} + b_1E + b_2CBI + b_3\text{Fix} + b_4E*CBI + b_5E*\text{Fix} + b_6CBI*\text{Fix} + b_7E*CBI*\text{Fix} \)

2. \( \Rightarrow \frac{dm}{dE} = b_1 + b_4CBI + b_5\text{Fix} + b_7CBI*\text{Fix} \) [for dum-var model, \( \Rightarrow \)]

   a) \( \frac{dm}{dE} |_{CBI=\text{Fix}=0} = b_1 \)

   b) \( \frac{dm}{dE} |_{CBI=\text{Fix}=1} = b_1 + b_4 + b_5 + b_7 \)

   c) \( \frac{dm}{dE} |_{CBI=1; \text{Fix}=0} = b_1 + b_4 \)

   d) \( \frac{dm}{dE} |_{CBI=0; \text{Fix}=1} = b_1 + b_5 \)

   e) Only 1st should be distinguishable from 0 [\( \Rightarrow b_4,b_5 \approx -b_1; b_7 \approx b_1 \)]
3. **Results (Table 16):**

a) Gen’ly as expect: CBI & *Fix* each gen’ly constrain, but some possibility *Fix* | CBI actually allows.

b) [n.b., stat’ly insig’ly diff from 0 & =0 very diff. things] Fig11: continuous CBI ⇒ sim., slightly less clean

**TABLE 16. Conditional Effects of Elections on Monetary Policy**

<table>
<thead>
<tr>
<th>Central Bank Independence</th>
<th>Exchange Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flexible</td>
</tr>
<tr>
<td></td>
<td>Calculated from column 1 in table 15</td>
</tr>
<tr>
<td>High</td>
<td>−0.118 (0.429)</td>
</tr>
<tr>
<td>Low</td>
<td>1.071** (0.499)</td>
</tr>
<tr>
<td></td>
<td>Calculated from column 3 in table 15</td>
</tr>
<tr>
<td>High</td>
<td>−0.202 (0.540)</td>
</tr>
<tr>
<td>Low</td>
<td>1.56** (0.725)</td>
</tr>
</tbody>
</table>

*Note: The coefficients are conditional coefficients with conditional standard errors in parentheses. *p < .10, **p < .05, one-tailed test.*
Fig. 11. The estimated effect of an election on the money supply under fixed and flexible exchange rates and various degrees of central bank independence. Darker lines denote fixed exchange rate. (Note: * indicates coefficient is significant at $p < .10$, one-tailed.)
D. Electoral Cycles in Fiscal Policy

1. Model A: $dD = a_1 + b_4 dD_{t-1} + b_5 dU + b_6 d_{t-1} (r-y) + b_7 \text{GovType} + b_1 E + b_2 \text{Flex} + b_3 E^* \text{Flex} + e$

2. Model B:
   $dD = a_1 + b_8 dD_{t-1} + b_9 dU + b_{10} d_{t-1} (r-y) + b_{11} \text{GovType} + b_1 E + b_2 \text{CM} + b_3 \text{Flex} + b_4 E^* \text{CM} + b_5 E^* \text{Flex} + b_6 \text{CM}^* \text{Flex} + b_7 E^* \text{CM}^* \text{Flex} + e$

3. Model A $\Rightarrow d(dD)/dE = b_1 + b_3 \text{Flex}$; hyp: $b_1 > 0, b_3 \approx -b_1$

4. Model B $\Rightarrow d(dD)/dE = b_1 + b_4 \text{CM} + b_5 \text{Flex} + b_7 \text{CM}^* \text{Flex}$; [Hyp: $b_1 > 0, b_7 < 0, b_4 \geq 0, b_5 \approx 0$; Clark not explicitly state]

5. Results (T17,F12): Esp. if use reasonably accurate measure E, quite nicely supportive of Clark/M-F electoral budget cycles.

![Graph of estimated effect of an election on government debt under fixed and flexible exchange rates and various degrees of capital-market openness. Darker line denotes flexible exchange rate. (Note: * indicates coefficient is significant at p < .10, one-tailed.)](image)
<table>
<thead>
<tr>
<th>Coding of Elections</th>
<th>Standard (1)</th>
<th>Franzese (2)</th>
<th>Franzese (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Election</td>
<td>0.49</td>
<td>1.52**</td>
<td>4.239</td>
</tr>
<tr>
<td></td>
<td>(0.60)</td>
<td>(0.75)</td>
<td>(3.341)</td>
</tr>
<tr>
<td>Capital mobility</td>
<td></td>
<td>0.549*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.292)</td>
<td></td>
</tr>
<tr>
<td>Flexible</td>
<td>-0.20</td>
<td>0.14</td>
<td>-0.420</td>
</tr>
<tr>
<td></td>
<td>(0.60)</td>
<td>(0.64)</td>
<td>(3.839)</td>
</tr>
<tr>
<td>Election * Flexible</td>
<td>-0.26</td>
<td>-1.42</td>
<td>-0.742</td>
</tr>
<tr>
<td></td>
<td>(1.18)</td>
<td>(1.25)</td>
<td>(0.855)</td>
</tr>
<tr>
<td>Election * Capital mobility</td>
<td>11.320</td>
<td>(8.681)*</td>
<td></td>
</tr>
<tr>
<td>Capital mobility * Flexible</td>
<td>0.000</td>
<td>(0.972)</td>
<td></td>
</tr>
<tr>
<td>Election * Capital mobility * Flexible</td>
<td>-3.342**</td>
<td>(2.253)</td>
<td></td>
</tr>
<tr>
<td>d Debt_{t-1}</td>
<td>0.47***</td>
<td>0.48***</td>
<td>0.442**</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
<td>(0.10)</td>
<td>(0.109)</td>
</tr>
<tr>
<td>d Unemployment</td>
<td>1.27***</td>
<td>1.27***</td>
<td>1.212**</td>
</tr>
<tr>
<td></td>
<td>(0.22)</td>
<td>(0.22)</td>
<td>(0.216)</td>
</tr>
<tr>
<td>d GDP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d Debt costs</td>
<td></td>
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<td></td>
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<tr>
<td>Government type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>0.67</td>
<td>0.25</td>
<td>1.098</td>
</tr>
<tr>
<td></td>
<td>(0.59)</td>
<td>(0.63)</td>
<td>(1.302)</td>
</tr>
</tbody>
</table>

Conditional coefficients

|                 | Election | Flexible = 0 | 0.49 | 1.52* |
|                 |         |              | (0.60) | (0.75) |
| Election | Flexible = 1 | 0.22 | 0.10 |
|           |           | (0.85) | (0.98) |

F_{DW} 0.57 0.57 0.06
Prob. > F 0.66 0.69 0.99
Observations 206 206 206
Number of countries 19 19 19

Note: The dependent variable is the change in the gross-debt-to-GDP ratio. Following de Haan and Sturm, I do not include country dummy variables, although their inclusion does not affect the qualitative results. Note that the political variables (election, the three variables for the type of government, strong finance ministers, and negotiated targets) are evaluated according to a one-tailed test.
The term F_{DW} is the test statistic for Durbin-Watson's m.
*p < .10, **p < .05, ***p < .01.
E. Implications:

1. European Economic & Monetary Union

   a) Concerns about fiscal excess:

      (1) Fixed E.R. (1 currency now) & CapMob ⇒ fiscal-policy dominant (although ECB in Frankfort may not monetary reinforce fiscal or to same degree as had domestic CB).

      (2) Moral Hazard / Common Pool:

         (a) if govts believe EU bailout, then ↑ incentive to borrow (deficit).

         (b) each individual country only a portion of the solvency of Euro ⇒ common pool ⇒ “over-fishing” that common resource, in this case, borrowing.

   b) EU Moves to Limit these Problems:

      (1) Maastricht Treaty explicitly banned EU bailout member states;

      (2) Stability & Growth Pact procedures monitor & punish excess deficits.

   c) Whether work [enforce so far difficult], clearly not affect Electoral bdgt-cycles: timing of EU censure & action allows plenty room for domestic Electoral cycles.

      (1) Alternatives: negotiated bdgt trgts or delegate to strong finance min (H&vonH).

      (2) Federal systems: signs financial mrkts, via debt-interest premia, can induce states to self-regulate by anti-deficit &/or other tight rules in bdgting legislation (Poterba et al)
2. **Policy-Tool Choice**: Given \(\text{CapMob} [\& \text{CBI}]\), \(E.R.\) choice to opt macro pols

3. **Mon-Insts Choice**: Given \(\text{CapMob} [\& \text{ER}]\), \(\text{CBI}\) choice [should be joint]
   a) If \(\text{Flex}\), \(\uparrow \text{CBI} \Rightarrow \downarrow \) policy efficacy & autonomy [b/c only fiscal left & it ineffect]
   b) If \(\text{Fix}\), \(\uparrow \text{CBI} \Rightarrow \text{no loss autonomy or efficacy} \) [b/c only fiscal effective & mon dedicated to \(\text{Fix}\) either way]
   c) [If \(\text{CBI}\), \(\uparrow \text{Fix} \Rightarrow \text{no loss autonomy} \) [b/c CB had monetary anyway], maybe **gain** efficacy [b/c only fiscal effective & now CB can’t move to counter]
   d) [If \(\text{CBI}\), \(\uparrow \text{Flex} \Rightarrow \text{lose} \) fiscal efficacy, & **no gain** monetary autonomy b/c CB has that either way.]

F. A couple of final thoughts:

1. Why, if fiscal cycles under \(\text{Fix} + \text{CBI} \) (\& \(\text{CapMob}\)), & fiscal policy should be effective find no outcome cycles under these conditions?
   a) Monetary blunt, macro instrument; Fiscal better suited to targeting; so these not macro demand-management cycles, but cycles targeted policy.
   b) [This doesn’t really work w/in the M-F macro logic, though]

2. [Fiscal *is* better target though; n.b., partisan evidence too on fisc.]