

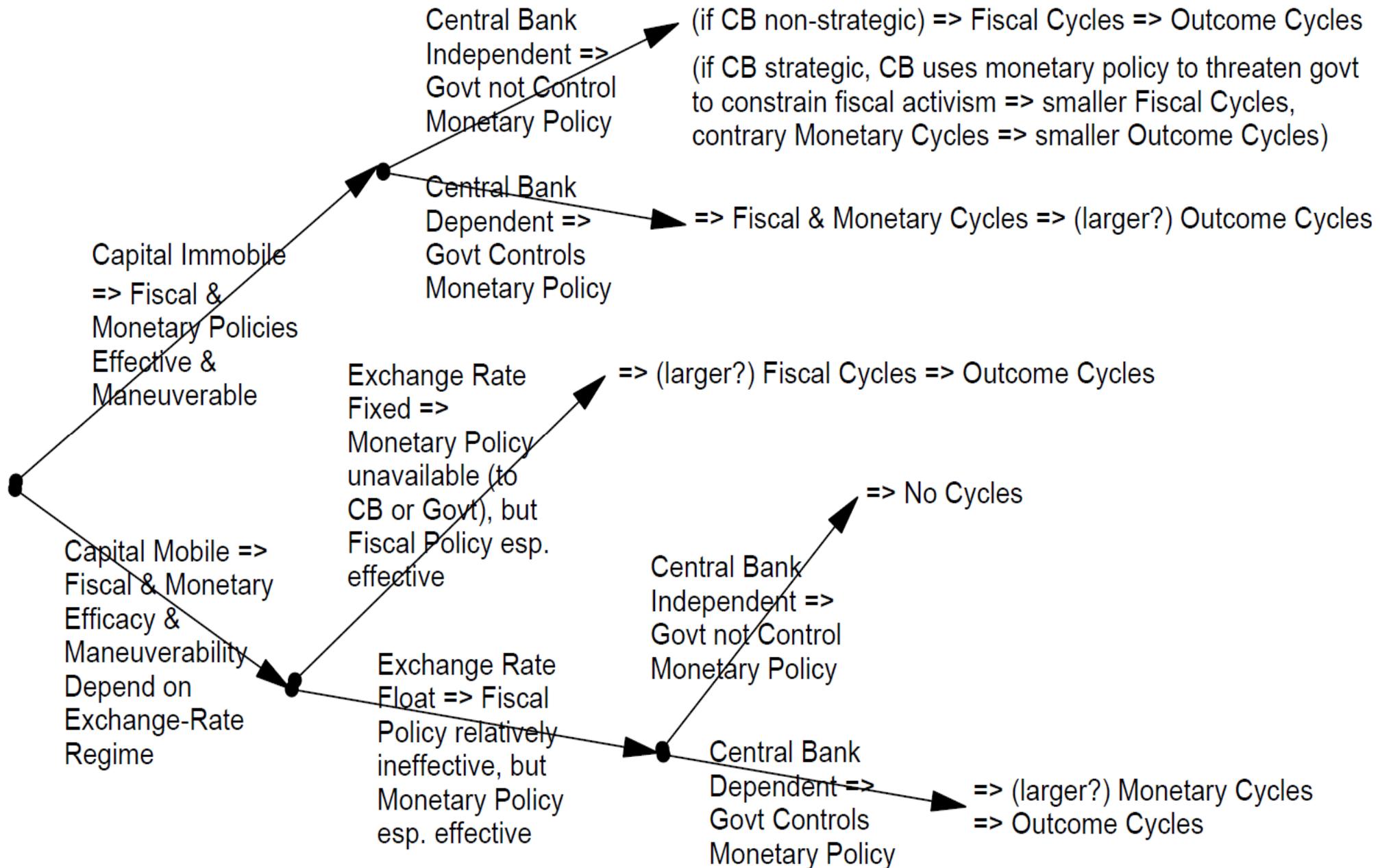
ps389/cics301: Lecture Notes on

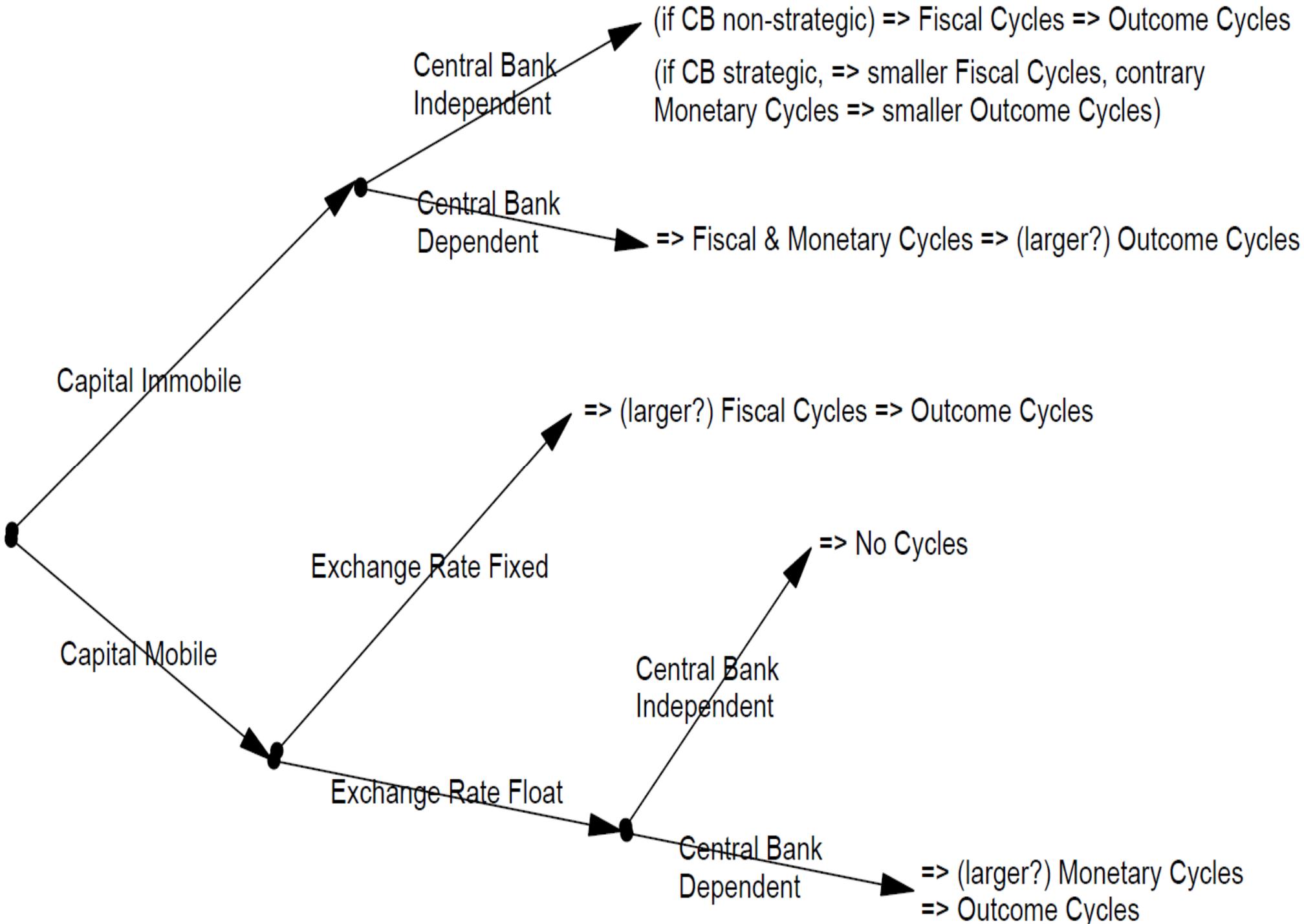
Capitalism, Not Globalism:
Capital Mobility,
Central Bank Independence, and
the Political Control of the Economy

William Roberts Clark

Part c: Context-Conditional Political Cycles in
the Open (Globalized) Economy:
Empirical Analyses

I. Diagrams summarizing Clark's **Central-Bank-Independence, Capital-Mobility, & Exchange-Rate-Regime Conditional Electoral and Partisan Cycles Theory** (1st w/ steps elaborated; 2nd just the upshots):





A. Determinants Domestic Policy Autonomy: **DEF's & MEAS's**

1. **Capital Mobility:**

a) *What:* System or Country Characteristic? Legal or Behavioral?

(1) *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.

(2) Will use Capital Controls: explicit legal barriers cross-border flows [possible issues: seems directly discretionary policy; seems respond more than cause mobility; still...]

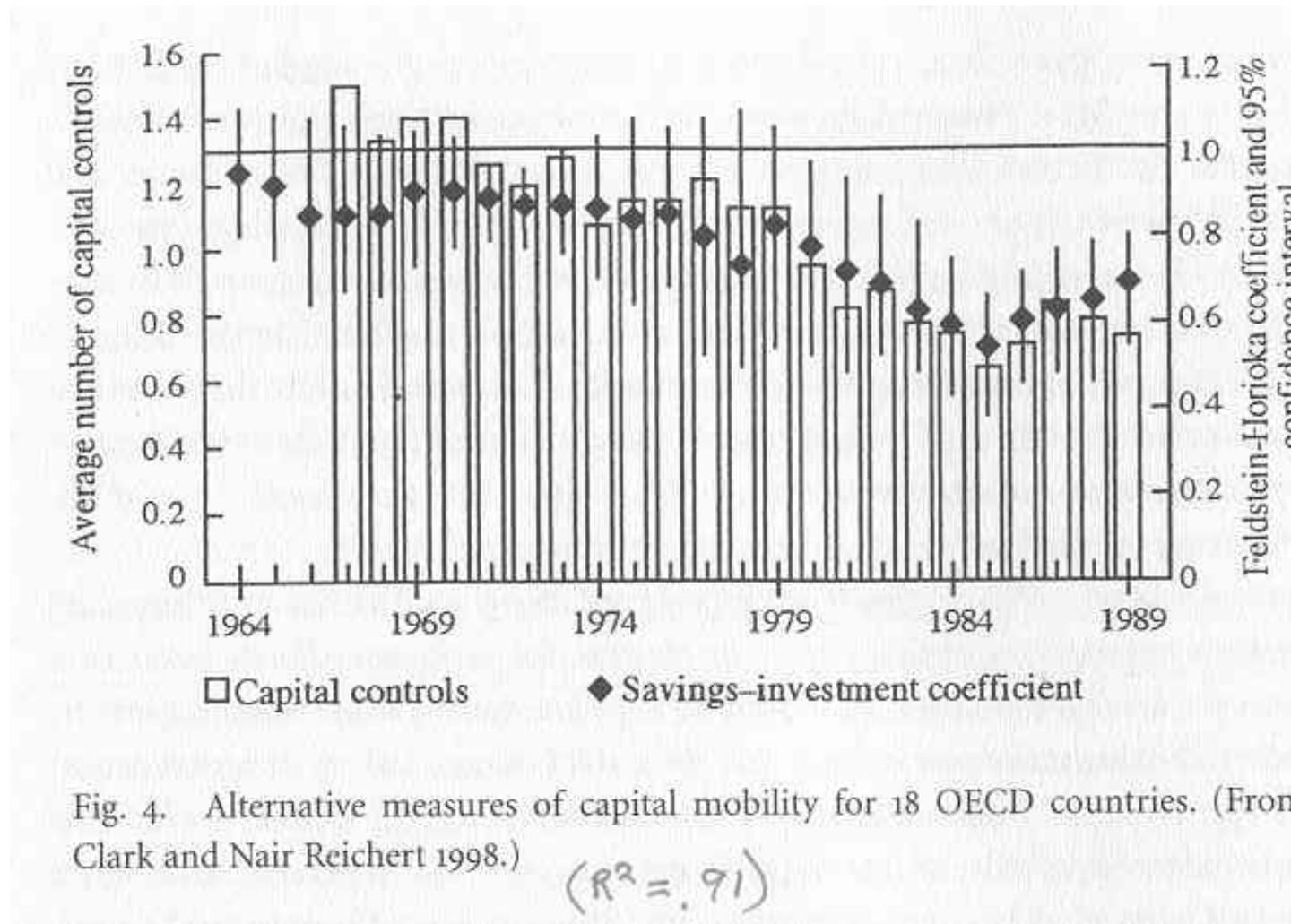
b) *When:* b/w '60s-'80s; '70s transition period; by '78 seems prominent; key bellweather=1972 \$-gold-window closure & Bretton Woods collapse.

- (1) BW system of fixed e.r., to IMF SDR's, which heavily \$, which nominally tied gold.
- (2) Under BW system, ctry's much use of capital controls (which helped maintain some domestic monetary autonomy, despite the peg).
- (3) With BW collapse, ctry's started eliminate these capital controls too.

c) *Measures:*

- (1) Correlation of Domestic Savings & Investment. [WHY?] [*Problems:* S&I both pro-cyclical, so corr. anyway; large-ctry S&I affect world; path may seem oddly volatile]
- (2) Counts of Capital Controls
- (3) [Other options, notably (a) *interest-rate parity* and (b) *value actual cap flows*, also imperfect.
 - (a) For (a), $E(\Delta e)$ part difficult gauge & adds noise; [*covered interest-parity*: diff. get data many ctrys & yrs]
 - (b) For (b), as \uparrow mob, \uparrow response to i disparity, but also \downarrow disparity. \Rightarrow unclear how should relate]

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*: official, stated policy [so assumes official = or \approx effective policy]

c) *Data*: TABLE 4.

TABLE 4. Participation in Fixed Exchange Rate Regimes after 1972 and before 1990

	Snake	EMS	Pegged
Australia	—	—	—
Austria	—	—	1973–89
Belgium	1973–78	1979–89	—
Canada	—	—	—
Denmark	1973–78	1979–89	—
Finland	—	—	1977–89
France	Intermittent	1979–89	—
Great Britain	—	—	—
Greece	—	—	—
Ireland	—	1979–89	1973–78
Italy	—	1979–89	—
Japan	—	—	—
Netherlands	1973–78	1977–89	—
New Zealand	—	—	1973–79
Norway	1973–78	—	1979–89
Spain	—	—	—
Sweden	1973–77	—	1977–89
United States	—	—	—
West Germany	1973–78	1979–89	—

Source: Coffey 1984; IMF, *International Financial Statistics*, various years; OECD 1985.

3. Central Bank Independence: [DEF]

a) *What:*

(1) Legal (*de jure*) or Behavioral (*de facto*) [in developing countries, studies have shown only latter seems matter; in developed ctrys, same studies find results using either measure].

(2) Legal CBI: features of central-bank statute(s)/provisions, such as...

(a) Appointment, dismissal, tenure-length of CB decision-makers;

(b) Procedures of dispute resolution;

(c) Objectives of monetary policy as defined in bank law;

(d) Whether bank may or must buy govt bonds & under what terms;

b) *Where & When:* until recently, very rarely changed; seemed almost a constitutional feature. More change, a trend toward indep., since 1990s

(1) The new conventional wisdom (part of rational-expectation revolution in economics) is that, if bank credibly anti-inflationary with monetary policy, no real cost. So indep. ctrl bnk reduces inflation at no real cost. Ctry's w/ dep CB's began create indep ones.

(2) ECB/Euro project: when there were still separate monetary-policymaking CB's, part of project toward the Euro & 1 ECB was progress toward indep of previous dep banks. Then, with the shift to 1 ECB, it designed heavily indep (& along lines German *BB*).

c) *Measures:* 5 common indices (others also exist)

d) *Data:* TABLE 5.

TABLE 5. Alternative Measures of Central Bank Independence

	<i>AS</i> ^a	<i>BP</i> ^b	<i>GMT</i> ^c	<i>CWN</i> ^d
West Germany	4	4	14	0.69
Austria	—	—	9	0.63
Greece	—	—	4	0.53 ^e
Denmark	2.5	2	8	0.50
United States	3.5	3	13	0.49
Canada	2.5	2	11	0.45
Ireland	—	—	7	0.44
Netherlands	2.5	2	10	0.42
Australia	2	1	9 ^e	0.36 ^e
United Kingdom	2	2	6	0.34
Sweden	2	2	—	0.29
France	2	2	7	0.29
Finland	—	—	—	0.28
Italy	1.75	1.5	5	0.25
New Zealand	1	1	3	0.24
Japan	2.5 ^e	3 ^e	6	0.18
Spain	1.5	1	5	0.17
Norway	2	2	—	0.16
Belgium	2	2	7	0.16
Median	2.0	2.0	7.0	0.30
Mean	2.23	2.03	7.6	0.36

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

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

^bIndex proposed by Bade and Parkin (1982) and extended by Alesina (1988b).

^cSum of economic and political indexes provided by Grilli, Masciandaro, and Tabellini (1991).

^dIndex created by averaging Cukierman, Webb, and Neyapti's (1992) aggregate legal measure for the period 1960–89.

^eIndicates an above-median score for a country that is below the median on at least one other index.

II. Partisanship and Fiscal & Monetary Policy (Ch. 3)

A. Reconsider Garrett ('98): Partisan Politics in the Global Economy

1. Garrett's Arguments:

a) *Left+Lab* \Rightarrow pro- growth, employment, & equality [& less anti-inflation]: by public-spending, deficit, tax, monetary, & redistributive policy.

(1) [& also that these *Left* policies work better when strong, coordinated labor movement, *Lab*, to cooperate, acting supportively in wage bargaining.]

b) Globalization \Rightarrow \uparrow cap. compet. \Rightarrow \uparrow cost govt intervene; OR \Rightarrow \uparrow economic dislocate \Rightarrow \uparrow pub demand govt intervene; OR both \Rightarrow empirical Q which wins

2. G's Model & Measures: [...some important implications of including $\mathbf{a}_i + \mathbf{a}_t$ like this...]

$$\text{a) } POL_{it} = \mathbf{a}_i + \mathbf{a}_t + \text{CONTROLS}_{it} + rPOL_{i,t-1} + b_1 LLP_{it} + b_2 \underline{\text{Trade}}_{it} + b_3 \underline{\text{CapMob}}_{it} + b_4 LLP_{it} \times \underline{\text{Trade}}_{it} + b_5 LLP_{it} \times \underline{\text{CapMob}}_{it} + e_{it}$$

$$\text{b) } \Rightarrow \Delta POL / \Delta LLP = [\text{effect of LLP on POL}] = b_1 + b_4 \underline{\text{Trade}} + b_5 \underline{\text{CapMob}}$$

c) Measures:

(1) LLP: Left-Labor Power = Left-Party Cab-Share + lab-mrkt org'l encompassing score

(2) CapMob: Capital Mobility = # cross-border cap-mrkt restricts [n.b., 93% smpl ≤ 2]; $\text{Trade} = (X+M)/\text{GDP}$ [n.b., almost all smpl $\geq 30\%$, $\leq 120\%$].

(3) POL: Policies: 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 7. Predictions of the Partisan Model

Indicator	Predicted Relationship with <i>Left-labor power</i>
Total spending	+
<i>Spending on</i>	
Income transfers	+
Civilian government consumption	+
Subsidies to industry	+
Capital expenditures	+
Total revenues	+
<i>Revenues from</i>	
Personal income tax	+
Consumption taxes	-
Corporate income taxes	+
Employer contributions to social security	+
Macroeconomic policy	
Budget deficits	+
Interest rates	-

TABLE 8. The Estimated Effect of *Left-labor power* on Government Spending Conditioned upon the Degree of Trade and Capital-Market Openness

	Total Spending (1)		Income Transfers (2)		Civilian Government Consumption (3)		Subsidies to Industry (4)		Capital Spending (5)	
	$C_m = C_{mg}$	$C_m = C_{ml}$	$C_m = C_{mg}$	$C_m = C_{ml}$	$C_m = C_{mg}$	$C_m = C_{ml}$	$C_m = C_{mg}$	$C_m = C_{ml}$	$C_m = C_{mg}$	$C_m = C_{ml}$
	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)
<i>Left-labor power (Llp)</i>	0.082 (0.192)	-0.829*** (0.252)	0.068 (0.089)	-0.197** (0.106)	0.134* (0.097)	-0.168* (0.120)	-0.096** (0.051)	-0.156** (0.070)	0.081 (0.129)	0.038 (0.155)
<i>Trade</i>	-0.043* (0.024)	-0.043* (0.024)	-0.008 (0.011)	-0.008 (0.011)	-0.016* (0.009)	-0.016* (0.009)	-0.008 (0.007)	-0.008 (0.007)	-0.016 (0.012)	-0.016 (0.012)
<i>Capital mobility (Cm)</i>	-0.885*** (0.298)	-0.885*** (0.298)	-0.193 (0.151)	-0.193 (0.151)	-0.382** (0.155)	-0.382** (0.155)	-0.067 (0.083)	-0.067 (0.083)	-0.044 (0.181)	-0.044 (0.181)
<i>Trade · Llp</i>	0.008** (0.004)	0.008** (0.004)	0.001 (0.002)	0.001 (0.002)	0.001 (0.001)	0.001 (0.001)	0.003*** (0.001)	0.003*** (0.001)	0.000 (0.002)	0.000 (0.002)
<i>Cm · Llp</i>	0.228*** (0.058)	0.228*** (0.058)	0.066*** (0.028)	0.066*** (0.028)	0.075*** (0.028)	0.075*** (0.028)	0.015 (0.016)	0.015 (0.016)	0.011 (0.036)	0.011 (0.036)
Lagged dependent variable	0.806*** (0.025)	0.806*** (0.025)	0.859*** (0.030)	0.859*** (0.030)	0.860*** (0.026)	0.860*** (0.026)	0.785*** (0.040)	0.785*** (0.040)	0.709*** (0.052)	0.709*** (0.052)
<i>GDP growth</i>	-0.399*** (0.029)	-0.399*** (0.029)	-0.168*** (0.016)	-0.168*** (0.016)	-0.138*** (0.012)	-0.138*** (0.012)	-0.014* (0.007)	-0.014* (0.007)	-0.052*** (0.016)	-0.052*** (0.016)
<i>Unemployment</i>	0.086* (0.045)	0.086* (0.045)	0.068*** (0.019)	0.068*** (0.019)	0.008 (0.019)	0.008 (0.019)	-0.022* (0.012)	-0.022* (0.012)	-0.038* (0.022)	-0.038* (0.022)
<i>Old-age population</i>	0.241** (0.106)	0.241** (0.106)	0.134** (0.055)	0.134** (0.055)	0.006 (0.056)	0.006 (0.056)	-0.017 (0.025)	-0.017 (0.025)	-0.064 (0.055)	-0.064 (0.055)
Constant	5.291*** (1.651)	8.833** (1.744)	-0.141 (0.858)	0.630 (0.907)	1.972*** (0.751)	3.502*** (0.773)	0.642* (0.376)	0.909** (0.378)	1.873** (0.885)	2.047** (0.861)
F_{DW}	0.60	0.60	1.31	1.31	0.65	0.65	0.65	0.65	7.49	7.49
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	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 *Llp*, two-tailed otherwise.

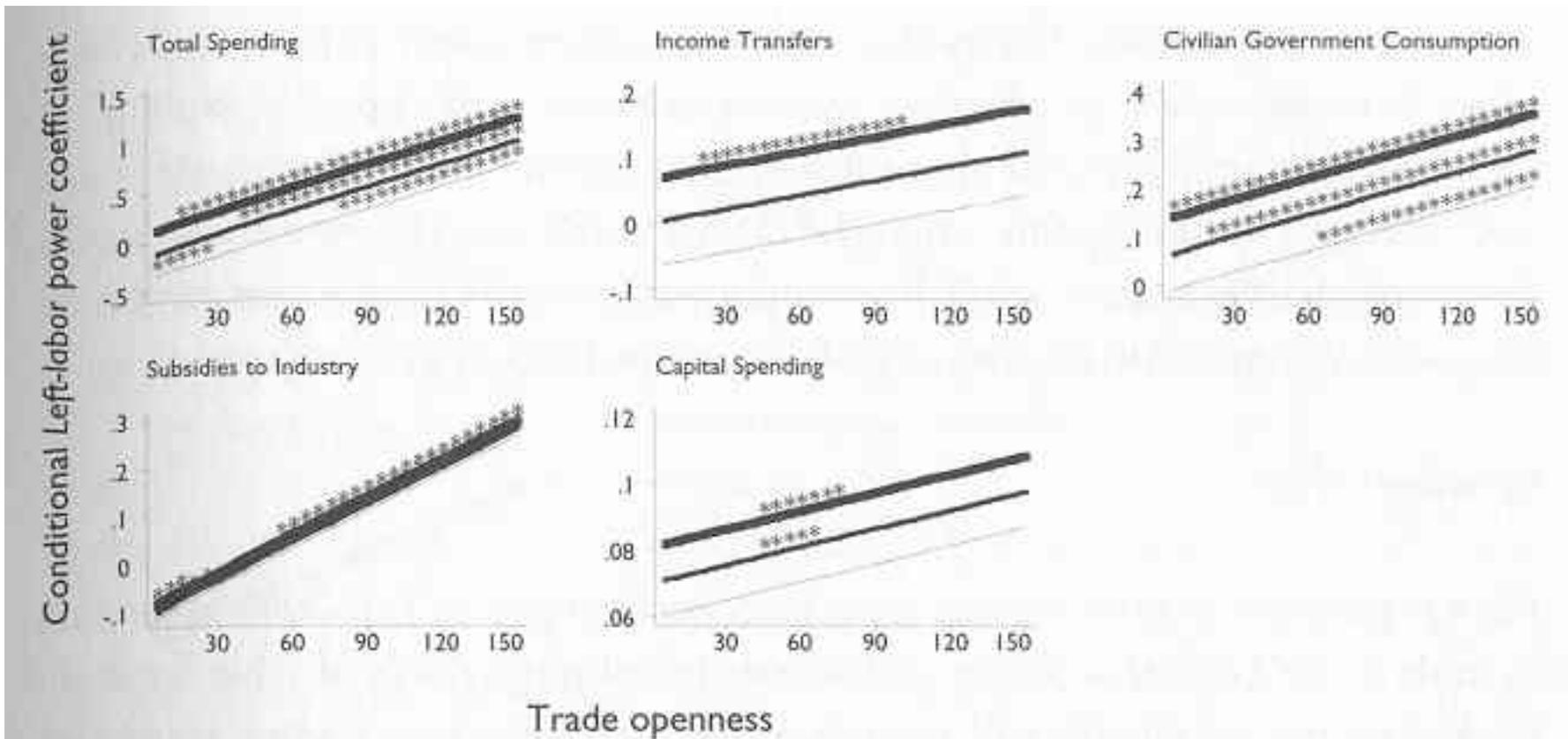


Fig. 5. The estimated effect of *Left-labor power* on government spending at various levels of trade and capital-market openness. Darker lines denote increased capital-market liberalization. (Note: * indicates coefficient is significant at $p < .10$, one-tailed.)

a) Spend:

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

(2) Least strong for Transfers & Capital Spending, but results basically Partisan as expect (mostly signifly so as **) & \uparrow in both $CapMob$ & $Trade$ (mostly signifly so), so this would suggest "globalization \Rightarrow \uparrow public-demand for social policy" side of arg dominating

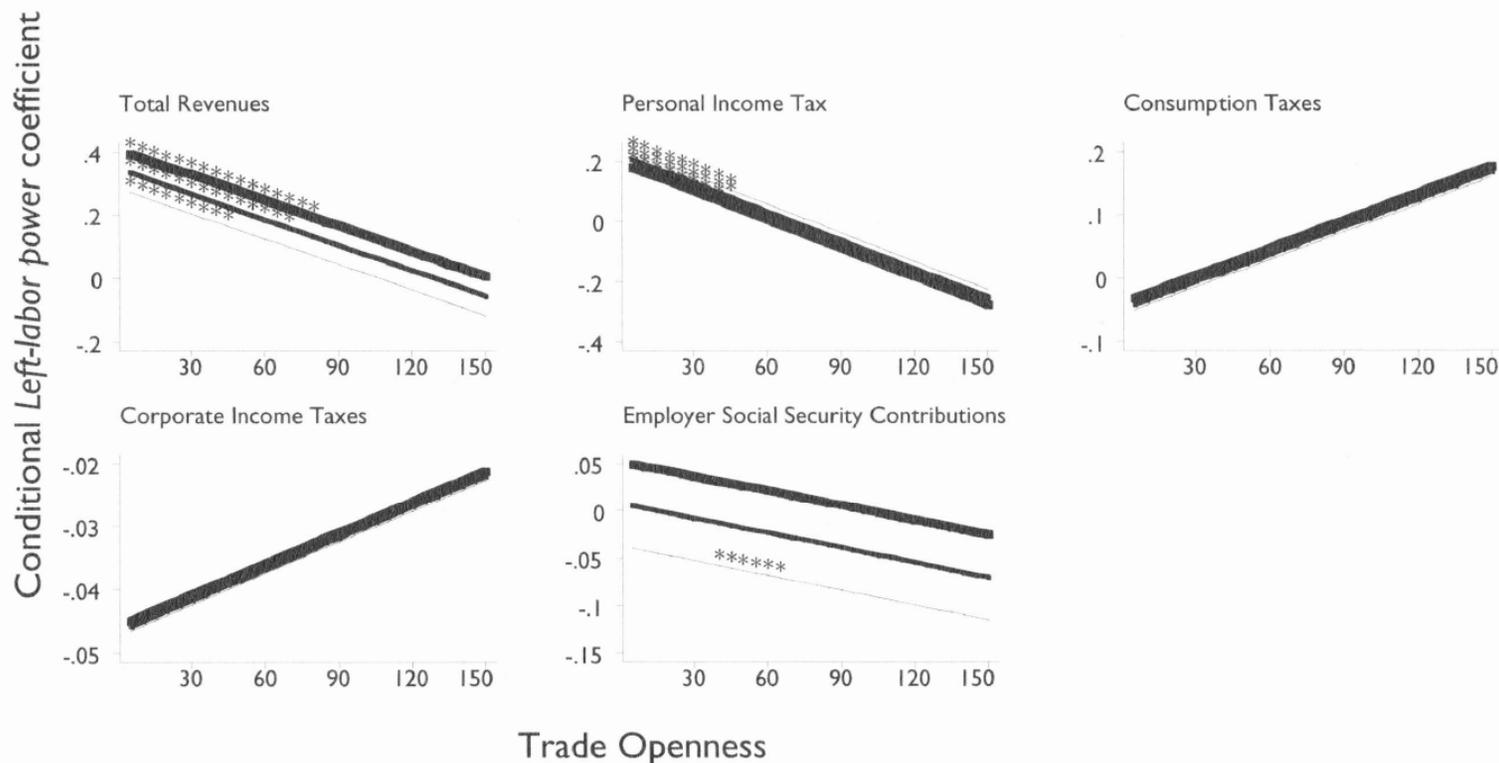
b) Tax:

(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 ↑ (slightly) in *CapMob* which is odd.

(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)

⇒ **Conclusion: Simple partisan tax-level & tax-instrument stories not well supported except for *Total Tax*, but some evidence of tax-competition & convergence (partic'ly in trade, tho, which odd).**

Fig. 6. The estimated effect of *Left-labor power* on government revenues 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.)

c) *Overall AD Policy Stance: Deficits & Interest Rates (real 1-yr G-Bonds)*

(1) [Garrett's IntRate model problematic:

(a) controls inflation (badly endog.), & US IntRate (\Rightarrow spatial dynamics & further endog.), & CBI (supposed to dampen partisan policies, not just an additive control), and...

(b) Policy instrument is *nominal* int-rates, which hard to back out of equation, but still...]

d) **Conclusions: pretty good for partisan policy & for Garrett on fiscal policy; perhaps some signs convergence on monetary policy,** [but again convergence responding trade-open, not cap-mob, which is odd].

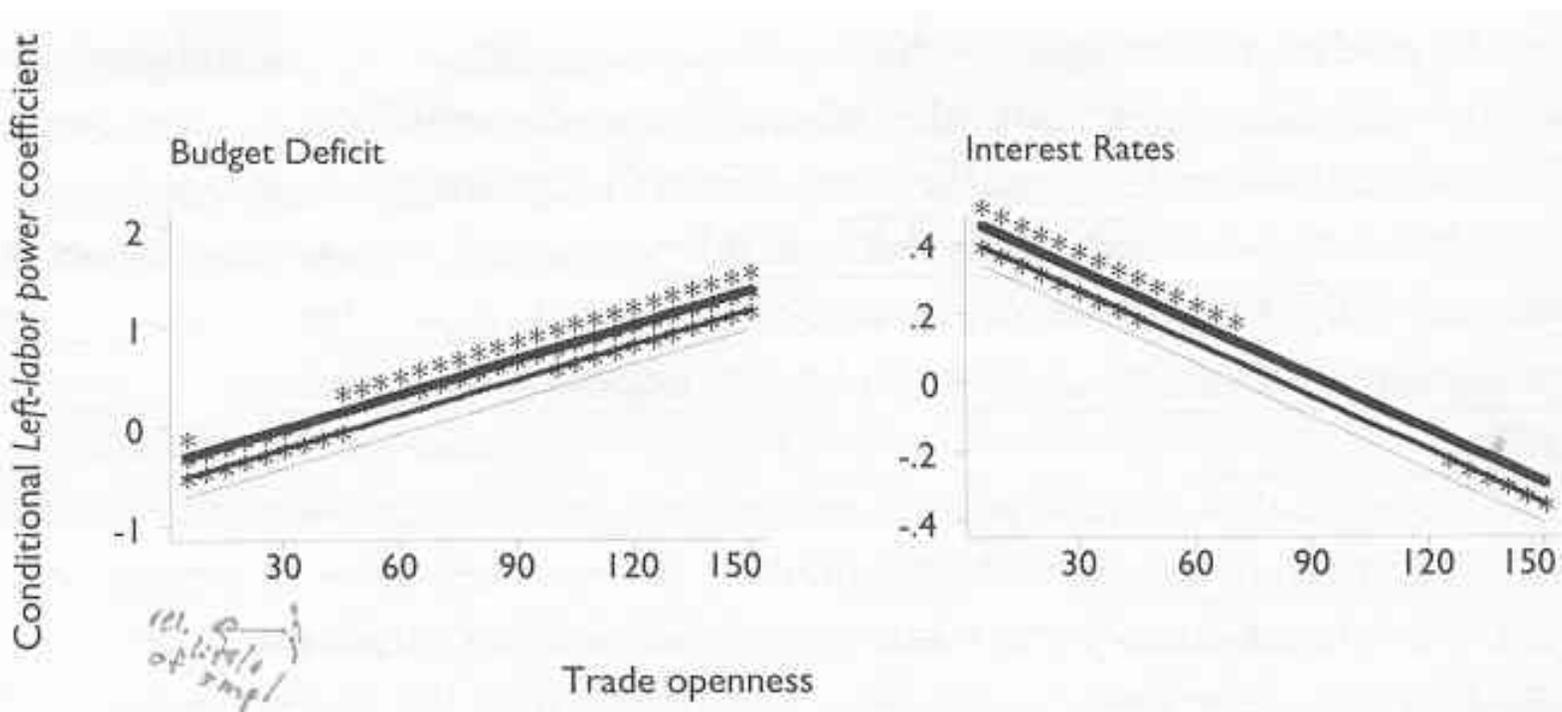


Fig. 7. The estimated effect of *Left-labor power* on macroeconomic policy at various levels of trade and capital-market openness. Darker lines denote increased capital-market liberalization. (Note: * indicates coefficient is significant at $p < .10$, one-tailed.)

e) CLARK: *Reconsider Spend, Tax, & AD Pol, conditional also upon Exchange-rate regime:*

$$(1) \text{ Model: } POL_{it} = \mathbf{a}_i + \mathbf{a}_t + C_{it} + rPOL_{i,t-1} + b_1 LLP_{it} + b_2 CapMob_{it} + b_3 Flex_{it} + b_4 LLP_{it} * CM_{it} + b_5 LLP_{it} * Flex_{it} + b_6 CM_{it} * Flex_{it} + b_7 CM_{it} * Flex_{it} * LLP_{it} + e_{it}$$

$$(2) \Rightarrow \Delta POL / \Delta LLP = b_1 + b_4 CM + b_5 Flex + b_7 CM_{it} * Flex_{it}$$

B. ELABORATION: All of Clark's empirical models some version of this:

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

Where *EP* (*ELYr* or *PrtyGov*) is either an electoral indicator (*ELYr*) or a govt-partisanship (*PrtyGov*) indicator, and *Policy* is a fiscal or a monetary policy.

C. 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., size of electoral cycles) depend on the combination of CapMob, Exchange-Regime, and CBI conditions according to:

$$\begin{aligned} \frac{\partial E(Policy)}{\partial EP} = & +\beta_4 + \beta_5 CapMob + \beta_6 Fix + \beta_7 CBI \\ & + \beta_{11} CapMob \times Fix + \beta_{12} CapMob \times CBI + \beta_{13} Fix \times CBI \\ & + \beta_{15} CapMob \times Fix \times CBI \end{aligned}$$

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:

$$\left. \frac{\partial E(MonPol)}{\partial EP} \right|_{CapMob=Fix=1} = +\beta_4 + \beta_5 + \beta_6 + \beta_{11} + (\beta_7 + \beta_{12} + \beta_{13} + \beta_{15})CBI = 0$$

$$\Rightarrow +\beta_4 + \beta_5 + \beta_6 + \beta_{11} = \beta_7 + \beta_{12} + \beta_{13} + \beta_{15} = 0$$

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:

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

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

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

And so on...

4. OK, back to Clark's Reconsider Spend, Tax, & AD Pol, conditional upon CBI, CapMob, and Exchange-Regime:

a) Model:
$$POL_{it} = a_i + a_t + C_{it} + rPOL_{i,t-1} + b_1 LLP_{it} + b_2 CapMob_{it} + b_3 Flex_{it} + b_4 LLP_{it} * CM_{it} + b_5 LLP_{it} * Flex_{it} + b_6 CM_{it} * Flex_{it} + b_7 CM_{it} * Flex_{it} * LLP_{it} + e_{it}$$

b)
$$\Rightarrow dPOL/dLLP = b_1 + b_4 CM + b_5 Flex + b_7 CM_{it} * Flex_{it}$$

c) Simple Convergence Story $\Rightarrow b_4$ & $b_4 + b_7$ opposite sign as b_1 (so cap-mob dampens political cycles, fiscal and monetary alike, regardless of exchange-rate regime)

d) Clark's Mundell-Fleming Story:

(1) fiscal convergence under flex, not fix [i.e., capital mobility dampens political fiscal cycles under float (b/c fisc relatively ineffective there) but not fix (b/c esp. effective there)] $\Rightarrow b_4 + b_7$ opp. sign b_1 , but not b_4

(2) [mon convergence under fix, not flex (b/c cap mob makes monetary cycles impossible under fix, but makes monetary policy extra effective under flex)] $\Rightarrow b_4$ opp sign b_1 , but not $b_4 + b_7$

(3) [Notes: M-F logic may not apply solely to G or to T, but jointly to G-T; ignoring CBI complication for now; and recall the sample range mostly $CM \leq 2$]

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

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

(2) 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.

(3) *Budget Deficit* & *Interest Rate* give some support partisan+M-F story

5. *Conclusion* [my version]:

a) Points where agree w/Clark:

- (1) Evidence of large partisan diff's in macroec policy not overwhelming.
- (2) Simple partisan tax story finds very little support in evidence.
- (3) Simple partisan convergence or divergence stories also at best mixed support.
- (4) Fisc. & mon. (Agg Demand) policies do seem conditional on combo *CapMob* & *E.R.*
- (5) Electoral cycle evidence [to come] more cleanly supports Clark's Mund-Flem model.

b) Points Clark may overstate:

- (1) Partisan differences in spending & responses to globalization seem largely as G argued, and, or albeit, 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's Mund-Flem partisan cycles in Deficits & Interest Rates better than the book credits;
- (4) *CapMob* constrains MonPol *even in Flex*, just more so w/ *Fix* than w/ *Flex*; also signs that *CapMob* similarly constrains FiscPol *even in Fix*

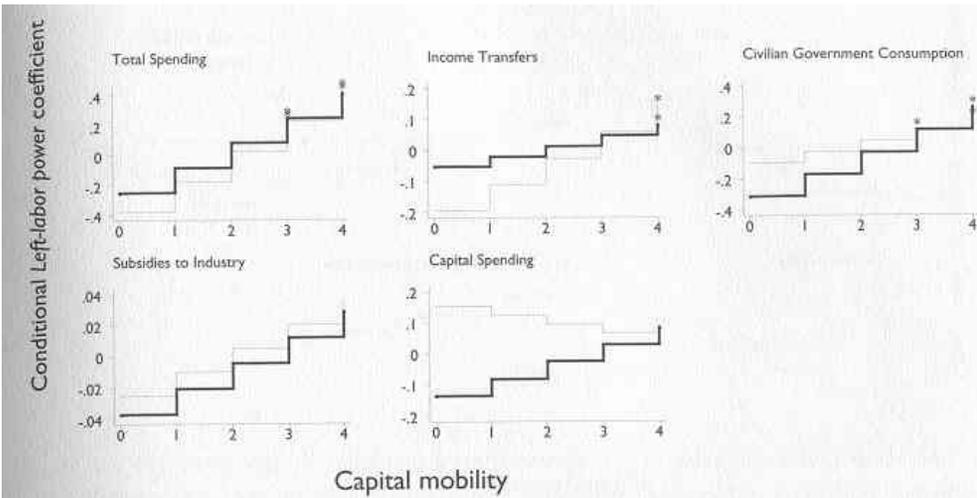


Fig. 8. The estimated effect of *Left-labor power* on government spending under various degrees of capital-market openness and alternative exchange rate regimes. Darker lines denote flexible exchange rate. (Note: * indicates coefficient is significant at $p < .10$, one-tailed.)

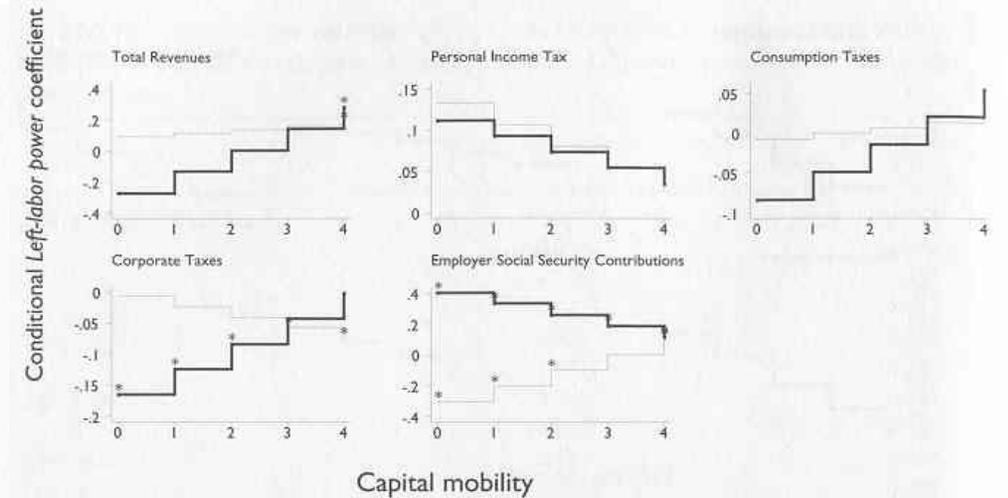


Fig. 9. The estimated effect of *Left-labor power* on government revenues under various degrees of capital-market openness and alternative exchange rate regimes. Darker lines denote flexible exchange rate. (Note: * indicates coefficient is significant at $p < .10$, one-tailed.)

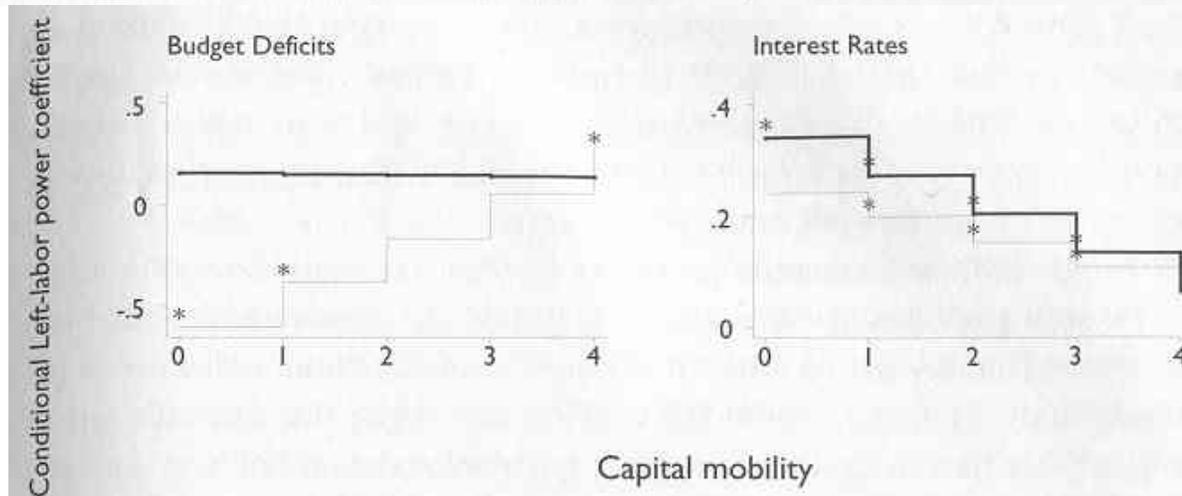


Fig. 10. The estimated effect of *Left-labor power* on macroeconomic policy under various degrees of capital-market openness and alternative exchange rate regimes. Darker lines denote flexible exchange rate. (Note: * indicates coefficient is significant at $p < .10$,

III. *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 \Rightarrow sense?
3. Clark et al.'s previous work:
 - a) CBI constrains electoral cycles; CapMob & Fix also constrains
 - b) Leaves an open and a more-refined question:
 - (1) Fiscal policy not necessarily constrained by these conditions;
 - (2) CBI constrains monetary cycles when *CapImmob*, or *CapMob&Flex*, but should not be able to do so when *CapMob&Fix* (beyond constraining effect that mobility & peg already).
4. \Rightarrow Reconsider w/ this fuller story: [n.b., some Δ s 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) [Now only *CapMob*, post-BW, post-OPEC period; & assume *CapMob* constant]
 - d) [Monetary-policy instrument now more appropriately $d(M1)$]
 - e) [No time-period dummies in monetary-policy models]
 - f) [*Partisan* tests used Left+Lab combo; *Electoral* tests use pure EleYr indicator.]

B. Electoral Policy-Cycle Hypotheses

TABLE 14. Electorally Induced Cycles in Macroeconomic Policy Instruments under Various Structural Conditions

	No Central Bank Independence	Central Bank Independence
Capital mobility and fixed exchange rates	Fiscal cycles; no monetary cycles	Fiscal cycles; no monetary cycles
Capital mobility and flexible exchange rates	Monetary cycles; no fiscal cycles	No fiscal or monetary cycles

C. Electoral Cycles in Monetary Policy:

$$1. \quad \text{Model: } m_{it} = \mathbf{b}_i + \sum \mathbf{b}_j m_{it-j} + e_{it} + \dots \\ \dots + b_1 E + b_2 CBI + b_3 Fix + b_4 E * CBI + b_5 E * Fix + b_6 CBI * Fix + b_7 E * CBI * Fix$$

$$2. \Rightarrow dm/dE = b_1 + b_4 CBI + b_5 Fix + b_7 CBI * Fix \quad [\text{for dum-var model, } \Rightarrow]$$

$$a) \quad dm/dE \Big|_{CBI=Fix=0} = b_1$$

$$b) \quad dm/dE \Big|_{CBI=Fix=1} = b_1 + b_4 + b_5 + b_7$$

$$c) \quad dm/dE \Big|_{CBI=1; Fix=0} = b_1 + b_4$$

$$d) \quad dm/dE \Big|_{CBI=0; Fix=1} = b_1 + b_5$$

e) Only 1st should be distinguishable from 0 [$\Rightarrow b_1 > 0$; and $b_4, b_5 \approx -b_1$; and $b_7 \approx b_1$]

3. Results (Table 16):

- a) Gen'ly as expect: CBI & *Fix* each gen'ly constrain monetary electoral cycles, but some possibility *Fix* | CBI actually allows (which is odd). [n.b., “statistically insignificantly different from 0” & “equals 0” are very different things]
- b) Fig 1 1: continuous measure CBI \Rightarrow similar flavor, although slightly less clean

TABLE 16. Conditional Effects of Elections on Monetary Policy

Central Bank Independence	Exchange Rates	
	Flexible	Fixed
	Calculated from column 1 in table 15	
High	-0.118 (.429)	0.866 (.655)
Low	1.071** (0.499)	0.859** (0.413)
	Calculated from column 3 in table 15	
High	-0.202 (0.540)	0.159 (0.922)
Low	1.56** (0.725)	0.533 (0.553)

Note: The coefficients are conditional coefficients with conditional standard errors in parentheses.

* $p < .10$, ** $p < .05$, one-tailed test.

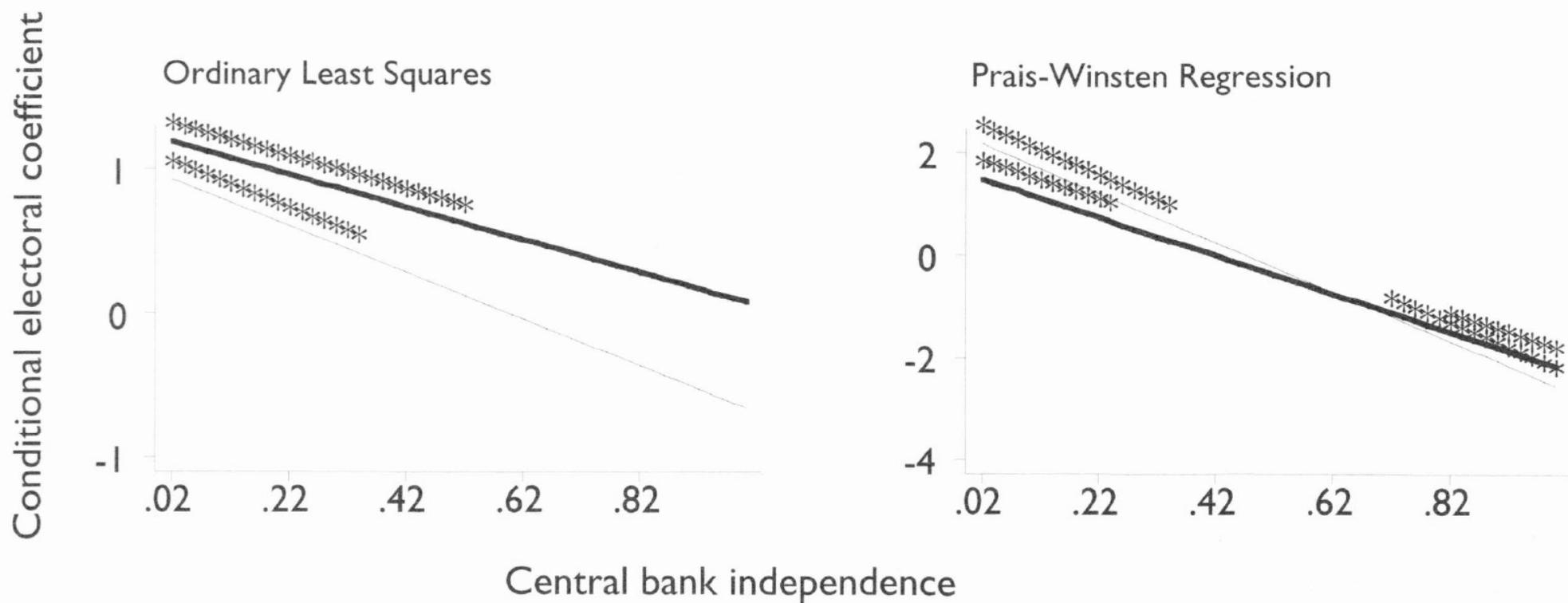


Fig. 11. The estimated effect of an election on the money supply under fixed and flexible exchange rates and various degrees of central bank independence. Darker lines denote ~~fixed~~ floating exchange rate. (Note: * indicates coefficient is significant at $p < .10$, one-tailed.)

D. Electoral Cycles in Fiscal Policy

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

2. *Model B*:

$$dD = \mathbf{a}_i + b_8 dD_{t-1} + b_9 dU + b_{10} D_{t-1} (r - y) + b_{11} \text{GovType} + b_1 E + b_2 \text{CM} + b_3 \text{Flex} + b_4 E * \text{CM} + b_5 E * \text{Flex} + b_6 \text{CM} * \text{Flex} + b_7 E * \text{CM} * \text{Flex} + e$$

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 of E, EleYr (i.e., mine...), quite nicely supportive of Clark/M-F electoral budget cycles.

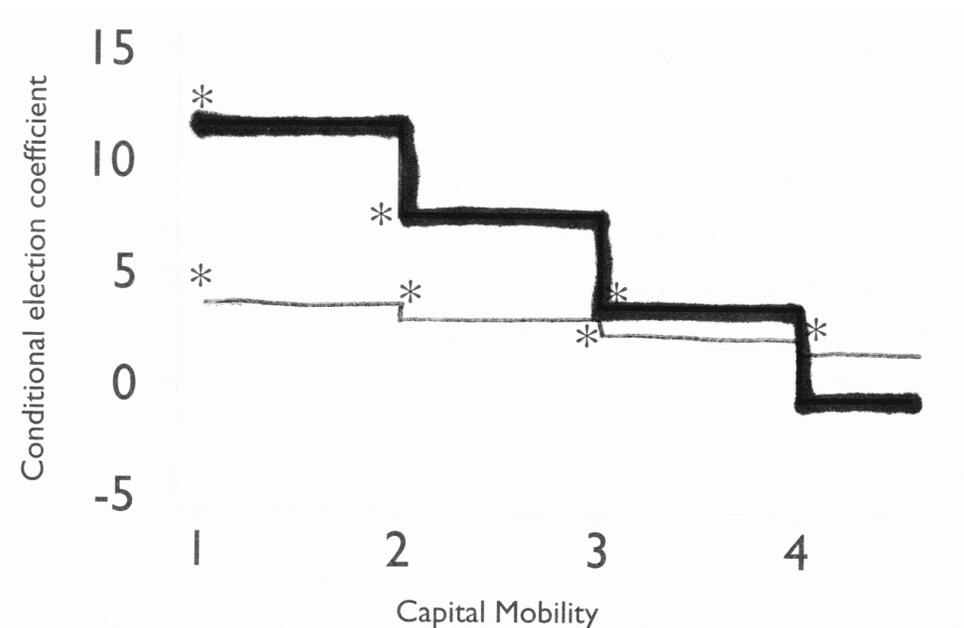


Fig. 12. The estimated effect of an election on government debt under fixed and flexible exchange rates and various degrees of capital-market openness. Darker line denotes flexible exchange rate. (Note: * indicates coefficient is significant at $p < .10$, one-tailed.)

TABLE 17. The Conditional Effects of Elections on Changes in Gross Debt in the Period 1982–92

	Coding of Elections		
	Standard (1)	Franzese (2)	Franzese (3)
<i>Election</i>	0.49 (0.60)	1.52** (0.75)	4.239 (3.341)
<i>Capital mobility</i>			0.549* (0.292)
<i>Flexible</i>	-0.20 (0.60)	0.14 (0.64)	-0.420 (3.839)
<i>Election · Flexible</i>	-0.26 (1.18)	-1.42 (1.25)	-0.742 (0.855)
<i>Election · Capital mobility</i>			11.320 (8.681)*
<i>Capital mobility · Flexible</i>			0.000 (0.972)
<i>Election · Capital mobility · Flexible</i>			-3.342* (2.253)
<i>d Debt_{t-1}</i>	0.47*** (0.10)	0.48*** (0.10)	0.442** (0.109)
<i>d Unemployment</i>	1.27*** (0.22)	1.27*** (0.22)	1.212** (0.216)
<i>d GDP</i>			
<i>d Debt costs</i>	0.38** (0.15)	0.39*** (0.14)	0.389** (0.142)
<i>Government type</i>	-0.17 (0.24)	-0.16 (0.25)	-0.257 (0.256)
Intercept	0.67 (0.59)	0.35 (0.63)	-1.098 (1.302)
Conditional coefficients			
<i>Election Flexible = 0</i>	0.49 (0.60)	1.52* (0.75)	
<i>Election Flexible = 1</i>	0.22 (0.85)	0.10 (0.98)	
<i>F_{DW}</i>	0.57	0.57	0.06
Prob. > <i>F</i>	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* \Rightarrow fiscal-policy dominant (although ECB in Frankfurt 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 \uparrow incentive to borrow (deficit).

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

b) EU Moves to Limit these Problems:

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

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

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

(1) *Alternatives:* negotiated budget targets or delegate to strong finance min (H&vonH).

(2) *Federal systems:* signs financial markets, *via* debt-interest premia, can induce states to self-regulate by anti-deficit &/or other tight rules in budgeting legislation (Poterba *et al*)

2. *Policy-Tool Choice*: Given *CapMob* [& *CBI*], choose *E.R.* to max macro pol maneuver & efficacy?

3. *Mon-Insts Choice*: Given *CapMob* [& *ER*], how choose *CBI* [would be joint...]

a) If *Flex*, $\uparrow CBI \Rightarrow \downarrow$ policy efficacy & autonomy [b/c only fiscal left & it ineffect]

b) If *Fix*, $\uparrow CBI \Rightarrow$ no loss autonomy or efficacy [b/c only fiscal effective & mon dedicated to *Fix* either way]. \Rightarrow relatively cheap to buy some added credibility?

c) [If *CBI*, $\uparrow Fix \Rightarrow$ 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 *CBI*, $\uparrow Flex \Rightarrow$ **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 *Fix+CBI* (& *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 of targeted policy maybe?

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.]