Political and *International Financial* Liberalization

Dennis P. Quinn

Professor

McDonough School of Business

Georgetown University

Washington, D.C. 20057

First draft, 18 November 1998

Current draft, 4 September 2002

ABSTRACT

Political and International Financial Liberalization

I propose that higher levels of democracy and political liberalization produce capital account liberalization in the medium to long-term because of the difference in incentives facing democratic and autocratic incumbents. I also propose that capital account openness and liberalization increase the risk of reversals of political liberalization in the medium to longer term. To investigate these hypotheses, I use data in non-overlapping five-year panels for 80 countries, 1950-1999, in pooled, cross-section, time-series regression models and three-stage least squares models. I examine emerging market nations, check for regional differences, and use Extreme Bounds Analysis regressions to assess the robustness of the results. The main results are that political liberalization leads to international capital account liberalization, not vice versa, and that capital account liberalization is associated with some subsequent reversals of political liberalization. Global tends in anti-capitalist sentiment influenced capital account liberalization.

Political and International Financial Liberalization

The causal link between regime type and policy choice is a modern topic with ancient antecedents. In the Fourth Century BC, Aristotle proposed that democratic, oligarchic, and tyrannical polities were distinctive in the types of policies each adopted. Aristotle also proposed that the policies a polity pursued, in turn, affected its regime type. His comments about the effects of what we term liberal international financial policies on the character of the polity were particularly pessimistic.[1]

I study a modern version of the policy choice ↔ political regime relationship. The policy choices I focus on are the laws that enable or limit international financial openness. These policy choices are among the most consequential a government makes. How open a nation's economy is to international financial transactions influences the value of its currency, its ability to sustain domestic macroeconomic policies, the relative prices within its economy, its distribution of wealth and income, the efficiency of its domestic investments, and the speed of economic adjustments. Indeed, we observe near hysteria from international financiers and activists alike about the magnitude of some of international finance's effects on democratic societies and economic development. (See Soros 1998; Oxfam America 2002.) In turn, is there a unique democratic policy stance toward international finance?

In this paper, I examine how the *prior liberalizations* of a nation's international financial transactions influence in the medium to long-term *subsequent* political *liberalizations* and vice versa. I, too, have a pessimist message about how capital account liberalization affects democracy. The data I use in the investigation extend as far back as 1950 for the financial liberalization and democracy measures. The length of the series allows me to capture what Huntington (1991) called the Second and Third Waves of democratization, as well as analogous third and fourth waves of international financial liberalization. Using

---

[1] On regime type and its policies, see *Politics*, book IV, ch. 11, §4 - §17, ch. 12, §1 - §6. On how policies affect regimes, see *Politics*, book V, "Causes of Revolutions and Constitutional Change." On liberal economic policies, see his discussion on whether states should be "marts of the world" (Book IV, ch. vi, §4). Aristotle harshly condemned what we would call financial services because "of all modes of acquisition, usury is the most unnatural" with bad consequences to the character of the polities that permitted these practices (Book I, ch. x, §4).

five-year average data, I employ Pooled, Cross-Section, Time-Series models and Three-Stage Least Squares models on panel data. To assess the robustness of the results, I check for parameter heterogeneity and use Extreme Bounds Analysis regressions.

I. EMPIRICAL CORRELATIONS

International financial transactions are cross-border payments and receipts, economic activities whose daily volume is in the trillions of dollars. Current account financial transactions are the financial proceeds of underlying transactions in goods or services. Capital account transactions are those between residents and nonresidents in which financial assets and liabilities are exchanged: e.g. foreign direct investment. In a financially open economy, residents enjoy freely the financial proceeds of their trades in goods and services, residents invest in international assets of their choice, and non-residents freely establish enterprises to compete with domestic enterprises. In contrast, in a financially closed economy, economic resources are generally allocated through political processes, and investor choices are highly constrained. Democratic societies are, of course, broadly characterized by open political participation and the possibility of elite replacement through open electoral mechanisms. Autocracies, an otherwise heterogeneous group, are united in denying their citizens open and fair elections.

How are measures of a country's openness to international finance and the openness of its political regime related? Table 1 shows positive contemporaneous correlations among level indicators of democracy, international capital account openness, financial current account openness, trade openness, and national income for the 80 nations, 1960-1999, used in the study. (The data used will be described below.)

Democracy	1.0000				
Capital Account Openness	0.41339	1.0000			
Financial Current Account Openness	0.38895	0.82878	1.0000		
Trade Openness (Exports+Imports/GDP)	0.21051	0.18213	0.21980	1.0000	
Income Per Capita	0.70877	0.52244	0.52481	0.26308	1.0000
	Democracy	Capital	Current	Trade	Income

These long-run cross-sectional correlations of level variables do not capture how capital account or current account financial liberalization and political liberalization might move together. Figure 1 graphs median observations of indicators for democracy, capital account and financial current account openness for the 80 countries that will be used in this investigation, 1940 (or independence) to 1998. Huntington's (1991)

second and third waves of democratization are clearly visible in Figure 1, with a democratic peak from 1960-2, an authoritarian trough in the 1970s, and rapid increases in democratization from 1980 on. Matching third and fourth waves of international financial liberalization are also evident.[2] To the eye of the author, the waves of democratization and financial liberalization are related.

[Figure 1 about here]

But, which causes what? From Figure 1, the second and third waves of political liberalization would seem to lead the second and third waves of financial liberalization, and the "reverse" wave of financial closure in the 1960s would appear to lead the autocratic surge in the 1970s. Without multivariate analysis, however, we cannot tell. To guide the study of the relationships, I extend some political economy theory.

II. THEORY

The question I ask in this paper is whether and how the prior level of and changes in political liberalization affect subsequent *changes* in financial liberalization, and vice versa. The time horizon of the study is medium to long-term.[3] Other scholars have recently examined the effects of democracy on trade liberalization (e.g., Milner and Kuboto 2001; Mansfield, Milner, and Rosendorff 2000) or economic globalization on democracy (Li and Reuveny forthcoming). An excellent review of the scholarly literature on the effects of economic globalization on democracy is Li and Reuveny forthcoming.[4]

I organize my discussion in three sections: 1) why incumbents in democracies have incentives to liberalize, and why incumbent autocrats do not; 2) why capital account liberalization might undermine

---

[2] The first wave was the financially open international economy of the pre-1914 period, and the second was the period between 1925 and 1929. See Eichengreen 1996.

[3] I study how liberalizations at $_{t-0\ldots t-4}$ are affected by prior liberalization at $_{t-5\ldots t-9}$ and prior levels of openness at $_{t-10\ldots t-14}$.

[4] They undertake an empirical investigation of the short-term effects of trade openness, portfolio flows, and foreign direct investment inflows on the yearly level of a nation's democracy. Among other ways, my investigation differs from theirs in that I use direct measures of international financial liberalization, treat both international financial and political liberalizations as dependent variables, estimate fixed effects models, examine long-time horizons, and use change indicators instead of level indicators as dependent variables.

democracy in the medium to long-term; and 3) how the diffusion of international values and institutions might influence political and financial liberalization.

1. Why Democracies Liberalize International Financial Transactions, But Autocrats Won't

Incumbent Democrats. I begin with a non-controversial assumption, which is that incumbents in democracies desire reelection. What incentives do incumbents face regarding the possible liberalization of international financial transactions and their reelection prospects?

From comparative economic voting studies, we know that a key determinant, perhaps the key determinant, in an incumbent's reelection bid is the voter's retrospective evaluation of the incumbent's responsibility for the state of the economy (see, e.g. Powell and Whitten 1993; Lewis-Beck and Paldam 2000). At least two facets of economic performance matter to voters: the rate of growth and the volatility (or predictability) of that growth. (See Quinn and Woolley 2001 and the studies reviewed therein.)

How should incumbent politicians expect international financial liberalization to affect growth, volatility, and their reelection chances? (See Kiewiet 2000 for a discussion of economic voting and incentives for policy reform.) Their expectations about the future, ex ante, growth benefits of the two types of liberalization need to be compared to their expectations about the benefits of international financial restrictions. Restricting the financial proceeds of current account transactions diminishes the gains from trade, thereby hurting growth. Regarding capital accounts, as became evident over the past decades, the growth possibilities of an economy closed to capital flows are limited.[5] (See Edison, Klein, Ricci, and Sløk 2002 and Eichengreen 2001 for a review of the evidence.) Economies closed to international transactions did not remain on a stationary growth path, however, but underwent economic stagnation: not a recipe for reelection. (See McKinnon 1973 for the classic exposition of the consequences of financial repression.) Once an incumbent finds that the growth possibilities of a closed economy are diminishing, international financial liberalization becomes an attractive option.

---

[5] The sources of the benefits of capital account liberalization are two-fold. It generally reduces the marginal cost of capital in previously repressed economies, and generally reduces the incentives of private and public actors to undertake poor quality investments.

Capital account liberalization, more so than financial current account liberalization, has risks. While capital account liberalization appears to generate growth for many countries, it also increases the risk of speculative currency attacks, exposure to international shocks, and increased volatility (Voth 2002). Some proportion of liberalizing experiments can be expected, ex ante, to fail, partly because of the uncertainty of the consequences of integrating a previously closed economy with the world economy.

Democratic incumbents, in simplified form, therefore have following incentives. They have to choose a policy in advance of an election, the effects of which, ex ante, are uncertain. The electorate will evaluate the incumbent based upon its evaluations of past economic performance. Liberalization is likely, but not certain, to enhance growth. Restrictions, in contrast, can be expected to lead to stagnation. In the more likely and better case, liberalization is successful and the incumbent's chances for reelection are enhanced. In the less likely but worse case, liberalization is not successful, and the incumbent's chances of becoming a member of the political opposition grow.

These incentives for democratic incumbents to liberalize international finance were not likely to have obtained prior to WWII and the development of modern tools of macroeconomic management. Without macroeconomic management policies, liberalizing democratic incumbents would have enhanced either macroeconomic volatility (as capital flows are pro-cyclical) or domestic adjustment costs or both.

Incumbent Autocrats. Incumbent autocrats also seek to maintain power, but their incentives regarding international financial liberalization differ from those of incumbent democrats. Autocrats do not subject themselves to meaningful elections, so they retain power, absent a successful coup or revolution. While they might prefer growth to stagnation, the upside benefits of liberalization are limited: they stay in power, enhanced growth from liberalization or not. A failed financial liberalization might, however, increase economic instability and contribute to the ouster of the autocrat. Unlike defeated democratic incumbents, who join the opposition benches or retire to play golf, ousted autocratic incumbents face jail, death, or both. Liberalization offers limited upside, but potentially unlimited downside, risks for autocrats.

Moreover, capital account liberalization has costs to an autocrat that are less costly to incumbent democrats. Capital account outflows are a constraint on the policy discretion of the autocrat, whereas democratic incumbents are already constrained by the political market and by veto points.

International investors are also less like to trust liberalizing autocratic regimes, ceteris paribus, thereby diminishing the likelihood of capital inflows. Imagine that an autocratic regime liberalizes its international finance transactions. International investors inevitably look for signals about how likely a regime is to sustain liberalization. (See Bartolini and Drazen 1997.) Gourinchas and Jeanne 2002 show that a government's commitment to capital account liberalization needs to be credible for there to be benefits.

The problem of ruler credibility has no evident solution for an autocrat, however. Consider: why wouldn't an autocrat change his or her liberalized policies or renege on agreements, if circumstances made it advantageous to do so? What kind of credible promises or escape institutions are autocrats able to make that they won't subsequently change policies and thereby trapping investors' capital on-shore? As Olson (1993, 571) notes, the legal logic of an autocracy is not consistent with agreement keeping, as "….the promises of an autocrat are never completely credible." In contrast, even when governments in democracies change, the consensual features of most democracies make radical reversals of policies unlikely (Lijphart 1984).

At the limit, imagine that, after initially authorizing international investments, an autocrat seizes these assets. What recourse do citizens have if voting is not allowed, and neither moral nor legal logic constrains an autocrat who already rejects a citizenry's more basic rights? The "right" to undertake international financial transactions is really a revocable privilege in an autocratic state. After all, what procedures can safeguard citizens against an autocrat? If such procedures were to exist, the autocrat would not be an autocrat (or less of one)! Because international investors have ample reason to invest less in autocratic regimes than in democratic regimes, autocrats have fewer incentives to liberalize.

Given the divergent incentives facing incumbent democrats and incumbent autocrats:

H_{1a}: *Democracies, compared to autocracies, liberalize their capital account transactions*.

As a nation democratizes, its elections turn more on economic issues because the conditions that enable economic voting become more common (Duch 2001). As a nation democratizes, therefore, its incumbent has increasing incentives to liberalize.

H_{1b}: *Political liberalization leads to liberalized capital account transactions*.

International financial current account transactions are governed by international agreements that are enforced by international actors. Not restricting of the financial proceeds of current account transactions is a condition for Article VIII status (full membership) of the International Monetary Fund (IMF). The World Trade Organization has ruled that financial restrictions on current account transactions, if they inhibit trade, are a non-tariff barrier. The threat of sanctions limits the autocrat's discretion regarding trade transactions.

Capital account liberalization, however, is not mandated by international bodies, and is subject to fewer multilateral agreements. Increased restrictions on capital transactions are permissible under IMF rules.

H_2: *Democracies and autocracies do not differ on liberalizing current account financial transactions*.

2. Why International Capital Liberalization Might Lead to Democratic Reversals.

Theorists in the social sciences have long been fearful that democratic choice is at odds with an international capitalist economy. (For a recent review and analysis, see Freeman, Hays, and Stix 2000.)

Part of their fear is rooted the consequences of financial liberalization, even in the case of successful reforms. We know that capital account liberalization is robustly associated with subsequent increased income inequality (Quinn 1997). Increased income inequality, in turn, has deleterious effect on polities. Increased inequality increases political strife and violence (Muller and Seligson 1987), is associated with democratic collapse in some middle-income countries (Muller 1995), and decreases the "expected life" of democracies (Przeworski, Alverez, Cheibub, and Limongi 1996).

While successful liberalizing experiments may place stress on democratic institutions, failed international financial liberalizing experiments are potentially catastrophic. Financial deregulation risks reversals of political liberalization through financial sector bankruptcy and financial contagion in particular.

1) Diaz-Alejandro 1985 was perhaps the first to propose the link between financial sector crises and financial liberalization. Reinhart and Kaminsky 1999 and Williamson and Mahar 1998 extend Diaz-

Alejandro's analysis, and report strong evidence that international financial liberalization is associated with subsequent banking crises, which have obvious negative implications for subsequent economic growth.

2) Capital account openness allows for the rapid transmission of international shocks to domestic economies. As was recently demonstrated by the 1997 East Asian "flu," the financial crisis in Thailand spread to economies that were unconnected to the Thai economy, and which had good "fundamentals" in their macroeconomic policies. (See Eichengreen 1999.) The worldwide contagion, however, bypassed two nations in particular that maintain restrictions on their capital accounts – China and India. Hence, capital restrictions might allow for less electoral turbulence, and less stress on democratic institutions.

In the event of a failed liberalization experiment, incumbents in resilient democracies are replaced through constitutional procedures, and join the opposition, perhaps to compete again. But, in less resilient democracies, democracy itself might falter. Because democracies, but not autocracies, undertake international capital account liberalization, democracies are at risk. Put more pointedly, autocracies rarely risk capital account liberalization. Hence, capital account liberalization will be associated with reversals of political liberalization in democracies rather than regime reversal.

H_3: Capital account liberalization leads to reversals in political liberalization.

In the event that an open international financial regime is maintained by an autocratic regime, it might contribute to the rise of a socio-economic class that demanded political freedoms. The regime might then evolve into a more democratic one. Something like this is what Smith and Hume had in mind in their theorizing that economic liberty would lead to political liberty (Whitehead 1993). Modern theorists, e.g. Lipset 1994, would concur. (See also Li and Reveuny forthcoming) In a world where Western financial service firms employ tens of thousand of Chinese residents inside an ostensibly communist country, this view must be given weight.

H_4: International financial liberalization in stable autocracies leads to increases in democracy.

The combination of these hypotheses implies possible longer-term cycles in political and capital account liberalization. (On longer cycles in international relations, see Goldstein 1988 and Pollins 1996.) H_1 and H_2 hold that political democracy and liberalization lead to capital account liberalization. Hence,

democracies but not autocracies liberalize. H_3 holds that most of these (democratic) capital account liberalizing experiments succeed, but some fail. Of the financial liberalization failures, a proportion produce increased autocracy. Increasing autocracy, under H_1 and H_2, leads to further financial closures. Autocracies stagnate from closure. When a nation resumes political liberalization, H_1 and H_2 imply resumed capital account liberalization.   While the data are too limited to test directly for long cycles, the combined hypotheses suggest that those nations that liberalized their capital accounts in the 1990s are at risk of some significant reversals of political liberalization in the early years of the 21st Century.

3. Global Processes and Political and International Economic Openness.

The global diffusion of values and policies are likely to influence a country's democratic processes and its financial regulatory policies. These values and policies include change in normative values about democracy and autocracy, policy emulation arising from changing beliefs or demonstration effects, and the international financial policies of leading economies.   (See Simmons 2001 for a discussion.)

World Democratization. Democratization and Autocratization appear to move in fads, at least in some emerging market settings. (See Przeworski, Alvarez, Cheibub and Limongi 1996 on contagion in democratization.) Coppedge and Brinks 2002 found, as did Przeworski et al 1996, that global trends in democratization strongly influenced a country's propensity to liberalize.

H_5: World trends in democratization positively influence a country's democratization processes.

Anti-Capitalistic Sentiment. Anti-capitalist sentiment was widespread in the interwar and immediate postwar periods. Many widely respected economists doubted the long-term viability of capitalism, particularly internationalized capitalism, as an economic system.   (See especially Keynes 1933; Schumpeter 1942.) Anti-international capitalism was also common among those influenced by Soviet-style communist ideology, whose anti-capitalism was rooted in Leninist theory. (See especially Ch. V., "Export of Capital" in Lenin 1971 [1916].)   Lenin followed the analysis of Rudolf Hilferding (1981 [1910]) in understanding the internationalization of finance capital to be a unique developmental stage of capitalism. The export of capital by Western firms was the key mechanism of 1st World imperialism. If a nation were to accept the export of Western capital, it would set itself up for at best economic colonialism. Leninist theory, hence, proscribes

international capital mobility. An implication for the regulation of international financial transactions is that regulation is likely to be more restrictive as anti-capitalist sentiment was globally widespread. The effects of this sentiment should be distinguished from the effects of democracy. Democracies might reflect the sentiment of the times more clearly than do autocratic regimes, but public sentiment and open political arrangements are not identical.

H_6: *Increasing anti-capitalist sentiment is associated with decreasing international financial openness*.

International Financial Policies of Leading Economies. The degree of international financial openness of the world's leading economies might affect the international financial policies of other nations. The mechanisms of influence include: the demonstration effects of the results of their policies; the enhanced difficulties you encounter in trading with partners with a financial payments regime different from yours; the development of profit opportunities for economic agents in arbitraging differences in regulatory systems; overt political pressure from the governments of the leading economies to permit their firms greater economic freedoms in your country, and the influence of dominant actors in establishing the rules of international financial commerce. Sobel 1994 showed that, in financial market policies in particular, the U.S. as the dominant actor influenced the policies of others. My inference is that, once the leading economies deregulated, other countries would come under increasing pressure to do the same.

H_7: *Financial openness among leading economies leads other nations to liberalize international finance*.

IV. DESIGN, METHODS, DATA, and MODELS

Design and Methods.

The dependent variables in this investigation are *change* indicators of democracy, capital account regulation, and regulation of the financial proceeds of the current account. That is, I am examining political and financial liberalization, rather than democracy and financial openness per se. Pooled, cross-section, time-series (PCSTS) models are useful in evaluating the question of why, over time, some nations became more or less democratic, more or less financially open. Variation in the dependent variables comes from both the time series and the cross-sections, and some pooling of data is necessary to address the questions.

I estimate the PCSTS models using non-overlapping five-year averaged data. (The five-year period averages are denoted with the subscript *s*.) I use five year-average data because my hypotheses suggest that the effects are medium to longer term in nature. Moreover, in using five-year averages, I avoid arbitrary choices regarding lag periods for independent variables that I would need necessarily to make using annual data. Another consideration is that the democracy data I use have some interruptions in the annual series of some countries.[6] In using a five-year average summary, I avoid interpolating democracy data.[7]

In all PCSTS models, the dependent variable is at *s*, and the independent variables are lagged one (s-1) or two (s-2) periods. The key independent variables in the investigations are lagged changes and levels of democracy, capital account openness, and financial current account openness.

An important consideration in the investigation is that many of the key independent variables are, in levels, highly correlated among themselves, and are also highly correlated with other political economic variables. For example, rich democracies, with high levels of education and low birthrates, have generally adopted market determined exchange rates, open trade accounts, independent central banks, anti-inflationary policies, and open capital accounts. As policies are hard to measure precisely, the effects of mutually related policies are sometimes conflated. For example, capital account openness might proxy for a wide range of economic reform policies across countries. Moreover, even if economic policies could be measured precisely, because these economic policies are frequently collinear, the econometric difficulty of estimating the effects of any one policy is great. (See also Rodríguez and Rodrik 2000, 28-34, for a discussion.)

I overcome in part the correlation among variables problem by including change indicators of the key independent variables (i.e., political and international financial liberalization), while also including levels of democracy and financial openness (political and economic openness) along with many other control

---

[6] Polity IV contains interruption codes: -66, e.g., when one country was occupied by another.

[7] In earlier versions of the paper, I used Vector Autoregressive (VAR) Models to examine the relationship between democracy and financial liberalization. That procedure required me to interpolate the democracy data for many countries. Without interpolation, I cannot estimate an adequate number of VAR models, so I dropped the method.

variables in a pooled regression model: that is $\Delta Y_s = f(\Delta X_{s-1}, X_{s-2}...X_K)$.[8] Both change and level indicators carry relevant information, but in a time-series, cross-section research design, changes are less likely than levels to exhibit collinearity with other "cluster" variables. I also use Extreme Bounds Analysis, described below, to test for how sensitive the results are to the inclusion of other, possibly influential, cluster variables.

An assumption in estimating PCSTS models is that the relationship between independent and dependent variables are not simultaneously determined. In all cases, I estimate models where the dependent variable is regressed against lags of the independent variables. I also test for "weak exogeneity."[9]

An alternative investigation strategy is to estimate instrumental variable (IV) regressions, such as three-stage least squares (3SLS) regressions. Instrumental variable regressions have severe disadvantages in this investigation, however.[10] Even so, to assure the reader of the robustness of the results, I report the results of 3SLS models.

---

[8] The models I estimate are in the spirit of error correction models. In a standard error correction model, the level and change measures are have the same lag period. Kennedy (1998, 273) cites Alogoskoufis and Smith 1991 as making the point that the long-run coefficients also include information about short-term partial adjustment of coefficients, so part of the effect of the change indicator is captured in the level indicator. My interest in both the medium and long term leads me to include information at s-1 and s-2.

[9] That is, I use regression analysis to determine whether the dependent variable, Y, influences independent variable, X.

[10] For one, a contribution of this manuscript is the development and use of new extensions of international financial liberalization data that are perhaps the most precise measure of yet international financial openness. (These are described below.) Instrumenting this precise measure defeats the point of its creation. For another, the validity of IV procedures depends on the investigator finding good instruments for the endogenous explanatory variables. Bound , Jaeger, and Baker (1995) show that in the presence of weak correlation between an instrument and explanatory variables, OLS outperforms IV (e.g., 3SLS) estimations. (See also Angrist and Krueger 2001.) As I argued above, the key independent variables should be weakly correlated with other political economy measures (which could serve as plausible instruments) before we should accept the results. The key endogenous explanatory variables are, indeed, very weakly correlated with the instruments used. Fortunately, as I show below, the OLS and IV results are generally congruent.

The PCSTS equations are estimated by ordinary least squares using panel corrected standard errors (PCSE), as suggested by Beck and Katz 1995.[11] All models are fixed effects models[12] in which country dummy variables are used. I also use time dummies, omitting one period, to capture possible time trends. (The coefficient estimates of the country dummies are not reported, but are available from the author.)

I estimate all models with the level of the dependent variable, lagged one period, entered as an independent variable: $\Delta Y_s = f(Y_{s-1}, X_1 \ldots X_K)$. The inclusion of Y_{s-1} has the effect of representing the "state of the world" in the period prior to that studied. I assume that past levels of the dependent variable influence the likelihood of change. I also employ Y_{s-1} to control for unobservable forces, such as changes in ideas or technology, which affect political and economic liberalization, but which cannot be measured. Because the data for many countries show a smooth evolution over time, econometric considerations (e.g., possible first order serial correlation) also lead me to include Y_{s-1}. The coefficient estimates of the lagged level of the dependent variable should be negative, as the underlying dependent variables have upper bounds.[13]

The dependent variables used in the investigation are discrete. Even so, I use ordinary least squares methods because democracy and financial openness are continuous variables, albeit measured through coarse scales. Moreover, there are too many values in all three scales to use a model for ordinal data. (The distribution of the residuals is well approximated by the Normal distribution.)

Regional and Levels of Development Differences. I test for parameter heterogeneity between advanced industrial and emerging market nations, and for regional sub-groupings of nations. I have two concerns. The

---

[11] All PCSTS are run with both the POOL command with HETCOV option in *Shazam* 9.0 and in STAT 7.0 using the xtpcse command. As is to be expected, the results are identical.

[12] An alternative is to use random effects models. These data are not, however, from a random sample, but are the universe of that which is available. For a discussion, see Hsiao 1986, chapter 4. I also used the results of Hausman tests for the appropriateness of random and fixed effect models. In every case, the Hausman tests unconditionally reject the use of random effects models.

[13] An economy without financial restrictions cannot have fewer restrictions, e.g., such that an increase in the value of ΔY becomes progressively less likely as Y_{s-1} reach the upper limit of the scale, and vice versa.

less serious is that the estimated effects of the key independent variables differ for a particular region compared to those of the overall sample, but that important regional effects are masked. The more serious concern is that the overall estimated effects are driven by the results of a particular region or sub-sample. That is, the true null result is masked by an exceptionally strong effect from one region.

Robustness Checks. A standard concern in political economic research is how robust the reported results are. To assess robustness, I employ a version of Edward Leamer's (1983) Extreme Bounds Analysis (EBA). Leamer (1983) argued that "the fundamental problem facing econometrics is how adequately to control the whimsical character of inference..." (1983, 38). Leamer suggests that scholars undertake "sensitivity analysis" to see if their results are driven by their modeling assumptions. As he put it, "an inference is not believable if it is fragile, if it can be reversed by minor changes in [modeling] assumptions" (1983, 38). Here, I enter other macro political and economic variables into base models to determine how robust the reported results are to changes in modeling assumptions. Following Sala-i-Martin 1997, I assess how robust the reported results are by considering the resulting distribution of the estimates of the key independent variables. As in Sala-i-Martin 1997, I do not treat robustness as a zero-one construct.

Data and Measures.

In this section, I describe the dependent variables. The data used to create measures of the independent variables, the operationalizations of the dependent and independent variables, and the variables used in the EAB are described in Appendix A. The variables and sources are listed in Appendix Table A2. All data necessary to replicate the published results will be available from quinnd@georgetown.edu.

International Financial Regulation. To operationalize international financial openness or closure, I use a new extension of two variables, *CAPITAL* and *CURRENT*, which are described in Quinn 1997. *CAPITAL* and *CURRENT* are the main components of *OPENNESS* created from the text of an annual volume published by the International Monetary Fund, *Exchange Arrangements and Exchange Restrictions*. The text reports the text of the laws governments used to govern international financial transactions. These measures have been previously available for 21 OECD nations 1950-97, but for 42 emerging market nations for only a few years.

Here, I use data for 80 countries, 1950 (or independence) to 1997. (See Appendix Table A1 for a list of countries.) For reviews of *CAPITAL,* see Edison et al. 2002, Eichengreen 2001, and IMF 2001.

One indicator, *ΔCAP*, represents change in capital account openness. CAPITAL is scored on a 0-4, half-integer scale, with 4 representing a fully open economy. Another indicator is *ΔCUR*, which represents change in financial current account openness. CURRENT is an indicator of how compliant a government is with its obligations under the IMF's Article VIII to free from government restriction the proceeds from international trade of goods and services. It is scored 0-8, in half integer units, which represents the sum of the two components of current account scores: trade (exports and imports) and invisibles (payments and receipts for financial and other services). An economy with a score of 8 is in full compliance with its Article VIII obligations under the IMF Articles of Agreement.

An alternative approach is to use international financial flow data to measure international financial liberalization, as in Li and Reuveny forthcoming. I do not use financial flows as a measure of liberalization, however, as many partly closed economies received extensive inflows, whereas many fully open economies did not.[14] (See Edison et al 2002 for a comparison of flow and legal measures of openness.) Using inflow data in place of direct indicators of government policies produces different inferences about the relationship between political and financial liberalization. The World Bank's financial flow data are also unavailable prior to 1970, whereas *CAPITAL* and *CURRENT* are available from 1950 or independence onward.

---

[14] Financial flows respond in part to arbitrage opportunities. Fully open economies offer few gains from arbitrage, and ceteris paribus will have lower flows. As an example, note that two partly closed economies, China and Brazil, received FDI inflows of 4.9 and 2.4% of GDP respectively in 1997. The 1997 FDI inflow figures for the U.S. and Germany, fully open economies, were 1.19 and -0.02% respectively. (World Bank 2001.) The FDI inflow data imply that China and Brazil were more vastly open than Germany and the U.S. The World Bank's portfolio investment series is very thin, and contains some observations with extraordinary leverage. For example, in 1988, the year before the U.S. invasion that toppled its dictator, Panama's portfolio investment was 44% of its GDP, whereas the mean of World Bank's portfolio series is roughly zero. Panama's Polity IV indicator moved from −8 in 1988 to +8 in 1989.

Democracy. I use the "Democracy" plus "Autocracy" indicators from the Polity IV data set, which report

data from 1800 to 1999 for the countries used in this investigation.[15] See Gurr and Jaggers 2000. Autocracy

is scored on a –10 to 0 scale, Democracy is scored on a 0 to 10 scale, and both are summed to produce the

main political indicator of this investigation, *DEMOCRACY*. ΔDEM_s is change in the index of the

democracy indicator, and is a dependent variable. Its possible range is –20 to 20.

The use of an interval change measure of democracy (compared to 0,1 level measures) as a

dependent variable has an important advantage. I am able to treat change in democracy as a having both

evolutionary and discontinuous properties, which matches our observations of historical processes. (See

Elkins 2000 for a discussion of the advantages of graded democracy scales over dichotomous measures.)

Models.

PCSTS Models. I use a panel variant of the standard Barro 1991 economic growth model. The base model

includes changes and levels of per capita income (ppp adjusted), investment (as a percentage of GDP), and

trade openness (imports + exports as a percentage of GDP). I also include annual rates of population growth,

in part because of the relationship between fertility and democracy. (See Feng, Kugler, and Zak 2000.)

Because educational attainment data for the early 1960s and for so many African countries are unavailable, I

use education as a variable to test for robustness, rather than as a base variable. The income, trade, and

investment data are logged for standard econometric reasons. These economic and demographic variables are

important control variables. The models employ five-year non-overlapping data, with, i=1,2,...,80 and s=1,

2, …8 where the index s represents five year intervals, starting at 1960-4 and continuing to 1995-9. This

means, e.g., that $\Delta DEM_{i,s}$ (or change in democracy) for the 1995-1999 period is examined using data from

the 1985-94 period. The models are unbalanced panels. The main equations analyzed in the paper are below.

(For variable definitions and sources, see Appendix Table A2.)

---

[15] An alternative approach is to use the Freedom House (or Gastil) indicators of democracy. (See Burkhart 1997 for

comparisons of these two, highly correlated, measures.) The Gastil indicators begin in 1972, however, and their use

would thereby limit the range of estimation. The Polity IV scores are unavailable for one country, Barbados, for which

the PWT 6.0 and financial liberalization data are available. I use Freedom House data on the Polity IV scale for it.

$\varDelta DEM_{i,s} = ß_0 + ß_1(DEMOCRACY_{i,s\text{-}1}) + ß_2(WD5^{(i)}_{s\text{-}1}) + \beta_3(\varDelta GDP_{i,,s\text{-}1}) + \beta_4(logIncome_{i,s\text{-}2})$ **[eq. 1]**

$+\ \beta_5(\varDelta logInvestment_{i,s\text{-}1}) + ß_6(logInvestment_{i,s\text{-}2}) + \beta_7(Population\ Growth_{i,s\text{-}1})$

$+\ \beta_8(\varDelta logTrade\ Openness_{i,s\text{-}1}) + \beta_9(logTrade\ Openness_{i,s\text{-}2}) + \beta_{10}(RevolutionsCoups_{i,s\text{-}1})$

$+\ \beta_{11}(\varDelta OilPrice_{i,s\text{-}1}) + \beta_{12}(OilPrice_{i,s\text{-}2}) + \beta_{13}(Year_{i\text{-}1}) + \beta_{14}(\varDelta Capital_{i,s\text{-}1})$

$+ß_{15}(Capital_{i,s\text{-}2}) + ß_{16}(\varDelta Current_{i,s\text{-}1}) + ß_{17}(Current_{i,s\text{-}2}) + ß_{18,\ 19...}(Country\ Dummy\ Variables) + \varepsilon_{i,s}$

i=1,2,...,80; s=1960-4, ..,1995-9.

$\varDelta CAP_{i,s} = ß_0 + ß_1(Capital_{i,s\text{-}1}) + ß_2(\varDelta FiveCap_{s\text{-}1}) + ß_3(\varDelta CPVote_{s\text{-}1}) + \beta_4\varDelta(GDP_{i,,s\text{-}1})$ **[eq. 2]**

$+\ \beta_5(logIncome_{i,s\text{-}2}) + \beta_6(\varDelta logInvestment_{i,s\text{-}1}) + \beta_7(logInvestment_{i,s\text{-}2})$

$+\ \beta_8(Population\ Growth_{i,s\text{-}1}) + \beta_9(\varDelta logTrade\ Openness_{i,s\text{-}1}) + \beta_{10}(logTrade\ Openness_{i,s\text{-}2})$

$+\ \beta_{11}(RevolutionsCoups_{i,s\text{-}1}) + \beta_{12}(\varDelta OilPrice_{i,s\text{-}1}) + \beta_{13}(OilPrice_{i,s\text{-}2})$

$+\ \beta_{14}(Year_{i\text{-}1}) + ß_{15}(\varDelta Democracy_{i,s\text{-}1}) + ß_{16}(Democracy_{i,s\text{-}2})$

$+\ ß_{17,\ 18...}(Country\ Dummy\ Variables) + \varepsilon_{i,s}$ i=1,2,...,80; s=1960-4, ..,1995-9.

$\varDelta CUR_{i,s} = ß_0 + ß_1(Current_{i,s\text{-}1} + ß_2(FiveCur_{s\text{-}1}) + ß_3(\varDelta CPVote_{s\text{-}1}) + \beta_4(\varDelta GDP_{i,,s\text{-}1})$ **[eq. 3]**

$+\ \beta_5(logIncome_{i,s\text{-}2}) + \beta_6(\varDelta logInvestment_{i,s\text{-}1}) + \beta_7(logInvestment_{i,s\text{-}2})$

$+\ \beta_8(Population\ Growth_{i,s\text{-}1}) + \beta_9(\varDelta logTrade\ Openness_{i,s\text{-}1}) + \beta_{10}(logTrade\ Openness_{i,s\text{-}2})$

$+\ \beta_{11}(RevolutionsCoups_{i,s\text{-}1}) + \beta_{12}(\varDelta OilPrice_{i,s\text{-}1}) + \beta_{13}(OilPrice_{i,s\text{-}2})$

$+\ \beta_{14}(Year_{i\text{-}1}) + ß_{15}(\varDelta Democracy_{i,s\text{-}1}) + ß_{16}(Democracy_{i,s\text{-}2})$

$+\ \beta_{17,\ 18...}(Country\ Dummy\ Variables) + \varepsilon_{i,s}$ i=1,2,...,80; s=1960-4, ..,1995-9.

Note that I am reducing the likelihood that the coefficient estimates of the independent variables will be spuriously statistically significant by using fixed-effect models with lagged levels of the dependent variable and lagged averages of the key independent variables. Let me also note that the correlation between various indicators of *Capital* and *Current* are very high in the overall same (ranging between .83 and .85),

and higher yet in some subsamples. This introduces the possibility of an upward bias in the estimates of the standard errors as both are in **eq. 1**.

Three-Stage Least Squares Models. Please see Appendix B for the models and other details.

Heterogeneity and Robustness. The heterogeneity and robustness tests are described in Appendix B.

V. RESULTS

For readers interested in the summarized results, I present Table 6 at the end of the paper, which reviews the empirical analyses for each hypothesis and offers a summary assessment. I review below (in order) the graphical evidence, the PCSTS regression results, the PCSTS results for emerging markets, the 3SLS results, regional results, and the robustness tests.

Figures.

In 1950, or at independence, 36 of the 80 countries for which PWT 6.0 and financial liberalization data are available were democratic (i.e., a score of 5 or higher on the Polity IV scales).[16] Twenty-six of the 36 sustained democratization, and all 26 deregulated in part or in whole their financial regulations.[17]

See Figure 2, which shows the data for the continuous democracies.   High levels of democratization act seemingly as a magnetic force on the iron filings of capital account and current account liberalization, pulling them upward toward nearly full openness. The reverse wave of financial closure, evident in Figure 1, is missing from the democratic countries in Figure 2. Of the 26 nations that were continuously democratic during the time of this investigation, only three - Botswana, India, and Israel - retain substantial restrictions

---

[16] The democracy threshold of five is that which is recommended by the Polity authors (Polity IV 2002).

[17] Barbados, Canada, Costa Rica, Jamaica, Trinidad, the U.S., India, Israel, Japan, Austria, Belgium, Denmark, Finland, Germany, Iceland, Ireland, Italy, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom, Australia, New Zealand, Botswana, and Mauritius. The ten democracies that suffered some degree of reversal are Brazil, Fiji, France, Malaysia, Nigeria, Philippines, Sierra Leone, Singapore, Sri Lanka, and Turkey. The Polity IV scores for France dropped from 10 to 5 in 1958 as the Algerian war of independence intensified and the 4th Republic collapsed. Because of missing data on financial regulation, Soviet-Bloc countries are excluded from this investigation.

on international financial flows, and each is partly open. None of the continuously democratic countries,

once they had substantially liberalized international finance, returned to the old levels of restriction.

See Figure 3, which graphs median levels of democracy, capital account openness, and current

account openness for the thirteen nations[18] that have been continuously autocratic (measured by averaged

Polity IV scores of zero of below from 1950 or at independence to 1999). At times, autocrats have

liberalized, but autocratic liberalization has not been sustained.   Figures 2 and 3 offer support for the

hypothesis that autocracies are less likely to liberalize international finance than democracies, and are less

likely to sustain liberalization when they do.

The absence of any democracy substantially closed to international financial transactions, and the

absence of any continuously financially open autocracy, is compelling. It suggests, reminiscent of

Lindblom's 1977 conjectures about democracy and markets, that democracy and international financial

openness are profoundly and positively connected in the post-WW II period.

Transition Countries. Figure 4 shows median observations for 41 countries that were neither always

democratic nor always autocratic. Note that median levels of capital account openness were much higher for

these transition economies in the late 1950s and early 1960s than for the continuously democratic countries.

The direction of the relationships is not clear, so I turn to econometric analyses.

Regression Models.

Change in Democracy. Table 2, Model 2a, contains the results for change in democracy, or ΔDEM. The

model accounts for 35% of the variance. The residual plots and diagnostics showed no sign of serial

correlation, and the dependent variable was weakly exogenous to the key independent variables.[19]

[Table 2 about here]

---

[18] Algeria, China, Egypt, Gabon, Indonesia, Iran, Ivory Coast, Jordan, Morocco, Rwanda, Senegal, Syria, and Tunisia.

[19] Assessing serial correlation panel data can be difficult. I follow Kennedy 1998, 130, ¶3. The residual from the

PCSTS estimate is entered as a dependent variable, and the old regression is rerun. The F-test is calculated as [*T-*

K/p]*R^2. In all cases, the R^2 was 0. I also reestimated the main equations using xtpcse (ar1) in Stata, and found no

autocorrelation. Regarding exogeneity, the t-statistic for Y_S regressed on the key X_{S-1} variables was 1.03 or smaller.

The results of model 2a shows that the coefficient estimates of $Capital_{S-2}$ were statistically significant and negative at beyond the .01 level. Change in the capital account index, $\Delta Capital_{S-1}$, had statistically significant negative coefficients at beyond the .05 level. For the current account indicators, the estimated coefficients were statistically insignificant. The indicator of World Democracy had a statistically significant (at the .1 level) and positive coefficient estimates, and the lagged level of each country's democracy index had a negative and statistically significant coefficient estimate.

Regarding the control variables, I found that higher levels of national income and investment, increasing trade openness, high levels of trade openness, lower economic growth, and decreasing numbers of revolutions and coups were associated with subsequent democratization. These findings about the control variables generally conform to those in the literature. (See, e.g., Helliwell 1994 and Feng 1997 for reviews.) The positive, statistically significant association between the two trade openness variables and subsequent democratization are, however, the reverse of the results in Li and Reuveny forthcoming.[20]

A related question is whether stable autocracies that liberalize finance subsequently liberalize politically. I identified two sets of cases, one where autocratic regimes had been in power for at least ten years and the other for 20 years. Using interaction terms, I examined whether financial liberalization had a different effect for those countries. None of the interaction terms were statistically significant. The mean for capital account liberalization for stable autocracies was nearly zero, and the mean for capital account openness was 8.8 (out of a possible 100). Stable autocracies rarely risked capital account liberalization. *Change in Capital Account Regulation.* Table 2, model 2b reports the results where change in capital account regulation was the dependent variable, or ΔCAP. The model accounted for 44% of the variance. The residual plots and diagnostics showed no sign of serial correlation, and the dependent variable is weakly exogenous to the key independent variables.

---

[20] Their study does not use fixed effects models except in one instance. In that instance, their coefficient for trade openness (t-1) on levels of democracy had a positive, statistically insignificant coefficient.

The coefficient estimates of change in democracy $(\Delta Democracy_{S-1})$ and past levels of democracy $(Democracy_{S-2})$ were statistically significant and positive at beyond the .01 level. In accounting for capital account liberalization, other variables also had statistically significant coefficient estimates. The coefficient estimate for vote share received by leading Communist Parties was statistically significant and negative. This is as expected, and suggests that anti-capitalist sentiment is an important determinant of financial openness. Higher levels of national income and lower birthrates were associated with subsequent capital account liberalization. The capital account policies of the leading economies had no apparent effect on subsequent capital account liberalization by other countries.

Change in Current Account Regulation. Model 2c in Table 2 reports the results where ΔCUR, or change in how compliant a nation is with IMF rules regarding current account liberalization, is the dependent variable. The model accounted for 47% of the variance. The residual plots and diagnostics again showed no sign of serial correlation, and the dependent variable is weakly exogenous.

The coefficient estimate of past levels of democracy $(Democracy_{S-2})$ was positive and statistically significant at beyond the .01 level. For $\Delta Democracy_{S-1}$, the coefficient was positive and statistically significant at the .1 level. Of the other variables, the coefficient estimates for the financial current account policies of the leading five economies were statistically significant and positive. Change in trade, numbers of revolutions and coups, and the indicator of the financial regulatory policies of the leading economies were positively and statistically significantly associated with increasing current account liberalization in some.

Emerging Markets

An important question is whether emerging market nations differed in parameter estimates from advanced industrial nations. In table2, models 2d-2f, I reanalyze the models in table 2a-2c, once I exclude the OECD nations (including Greece, Spain, and Portugal). All models show no signs of serial correlation or residual problems. The dependent variables are weakly exogenous to the key independent variables.

Omitting these 22 nations risks sample selection bias, however. Hence, in Table 3, I also re-analyze models 2a, 2b, and 2c, using the full sample, but entering a dummy variable for emerging market nations plus interaction terms between the dummy variable and the democracy and capital account variables.

[Table 3 about here]

In table 2d and 3a, I examined how financial liberalization affected political liberalization in emerging markets. The parameter estimates for the emerging markets were broadly consistent with those of the full sample. None of the emerging market interaction terms are statistically significant at conventional levels (Table 3a). In the model omitting the industrial nations, capital account openness has a negative and statistically significant coefficient at beyond the .05 (model 3a) level. Capital account liberalization has a negative and statistically significant coefficient at beyond the .1. The main findings remain that capital account liberalization and openness are associated with subsequent decreases in political liberalization.

In table 2e and 3b, I examined how democracy affected capital account liberalization in emerging markets. Here too, the parameter estimates were consistent with those in the overall model. None of the interaction terms are statistically significant, and the democracy terms had highly statistically significant and positive coefficients.

In table 2f and 3c, I examined how democracy affected financial current account liberalization in emerging markets. In 3c, I see ample evidence of parameter heterogeneity. The interaction term between *Emerge* and *Democracy*$_{s-2}$ was negative and highly statistically significant. In model 2f, the democracy terms were not statistically significant at conventional levels. Higher levels of political liberalization led to higher levels of compliance with IMF rules regarding current account liberalization for advanced industrial nations only. My interest in this paper is in examining relationships that are not driven by those of a particular region or sub-sample. Because financial current account liberalization does not have consistent determinants between industrial and emerging market nations, I will omit further discussion of it as a dependent variable.

Two of the three other independent variables of interest, World Democratization and Changes in Anti-Capitalist Sentiment, had results that are consistent between emerging market nations and the whole sample. The third variable, the financial market policies of the leading economies, continued to have statistically insignificant coefficients in Table 2, models 2b and 2e. I will omit further discussions of it.

Three-Stage Least Squares Models

The results for the 3SLS estimations are reported in Table 4. As expected, the instruments are weakly correlated with the endogenous explanatory variables.[21]

For the models (4a and 4d) with political liberalization as the dependent variable, $Capital_{s-2}$ and $\Delta Capital_{s-1}$ had negative and statistically significant coefficients in both the full-sample and emerging market models. The endogenous explanatory indicator of capital account liberalization, $\Delta Capital_s$, had a negative and statistically significant coefficient at beyond the .05 level (full-sample) or .1 level (emerging markets). One point of note is that the financial current account variables now had positive and statistically significant coefficient estimates.

[Table 4 about here]

For the models with capital account liberalization (4b and 4e), $Democracy_{s-2}$, continued to have positive and statistically significant coefficient estimates. Both the $\Delta Democracy_{s-1}$ and the endogenous political liberalization variable, $\Delta Democracy_s$, had positive and statistically significant coefficient estimates at beyond the .01 level in the emerging market sample, but not in the full-sample model. (The results for current account liberalization are presented in models 4c and 4f for comparison purposes.)

Regional Variation

A key question is whether the estimated relationships were driven by the results of a given region. In Table 5a and 5b, I interact regional dummy variables with key independent variables.

---

[21] I follow the recommendations of Bound et al (1995, 444) in assessing how high the correlation between the explanatory endogenous variables and instruments are in the first stage by excluding the exogenous variables common to all three stages, and obtaining the partial R^2. In the full sample, the partial R^2 for the first stage equation where political liberalization is the endogenous explanatory variable is .04; .05 for capital account liberalization; and .07 for current account liberalization. In the emerging market sample, the partial R^2 for the first stage equation for political liberalization is .07; .04 for capital account liberalization; and .08 for current account liberalization. Note that the traditional R^2 has no direct interpretation in the stage of 3SLS regressions.

In table 5a, where political liberalization is the dependent variable, the parameter estimates for the regional dummy*capital account liberalization interaction term never approached statistical significance. The capital account openness interaction term with EAP (the World Bank's East Asia and Pacific region) was negative and highly statistically significant, but the base capital account openness term remained negative and statistically significant. The capital account openness interaction term for South Asia was positive with a p-value of .11. Overall, the findings regarding capital account liberalization and openness and their effects on political liberalization differed little by region.

In table 5b, where capital account liberalization is the dependent variable, the base-line democracy terms remained positive and highly statistically significant. I found, however, two cases where the parameter estimates varied from the overall results. For the countries in the South Asia region, higher levels of political liberalization and higher levels of democracy were associated with lower levels of capital account liberalization. For the countries in the Middle East and North Africa (MENA) region, higher levels of democracy are associated with decreases in capital account liberalization. Note that the overall results in Table 2 are not driven those of a region. Rather, the overall results mask regional differences: in South Asia, political liberalization and, in South Asia and MENA, higher levels of democracy were associated with increasing capital account restrictions.

The results for World Democracy $_{s-1}$, in contrast, were driven by results of the Latin American and Caribbean region. The interaction term between LAC and World Democracy was positive and highly statistically significant. The coefficient of the baseline term, while positive, was no longer statistically significant at conventional levels. (These results are not presented to save space, but are available.)

Changes in Anti-Capitalist Sentiment, or CPVote$_{s-1}$, were not driven by regional results. The baseline term was always negative and highly statistically significant. Several of the regional interaction terms have statistically significant coefficients: Latin America, negative; Middle East and North Africa, positive (marginally so); and Sub-Saharan Africa, positive. CPVote$_{s-1}$ has consistent effects.

Robustness Tests

I next turn to the EAB results. The negative effects of capital account openness (at s-2) on subsequent political liberalization are highly robust to changes in the conditioning information, and the accompanying changes in the samples. (See Appendix Table 3a.) The coefficient estimate of capital account openness is statistically significant at beyond the .05 level in all full-sample models. Considering the regional and EAB results together, capital account openness has a negative and statistically significant effect on political liberalization in fifteen of the fifteen equations. The coefficient estimates ranged from -.031 (Latin America interaction model) to -.058 (Financial Liquidity model), and the t-statistics ranged from – 2.127 (colonial legacy model) to –3.59 (financial sector liquidity model).

The estimated effects of ΔCapital(s-1) were also robust to changes in the conditioning information. For every EAB equation in the full sample, the coefficient estimate for capital account liberalization is negative and statistically significant at either the .1 level (for FDI, colonial heritage and the Sachs Warner indicator of trade openness) or at beyond the .05 level (for the other variables). Considering the EAB and regional analysis together, capital account liberalization has a statistically significant and negative coefficient in fourteen of fifteen equations. The coefficient estimates ranged from -.023 (Latin America interaction model) to -.042 (financial sector liquidity model), and the t-statistics ranged from –1.46 (Latin American model) to –2.639 (financial sector liquidity model).

Appendix Table 3b shows the EAB results where capital account liberalization is the dependent variable, and political liberalization and democracy are the independent variables. The coefficient estimates for both levels and changes of democracy are statistically significant at beyond the .05 level, and usually at beyond the .01 level, in all but two models. Considering the EAB and regional results together, levels of democracy have positive and statistically significant coefficients in fifteen of fifteen models, and political liberalization has positive and statistically significant coefficients in thirteen of fifteen models. The coefficient estimates for democracy ranged from .42 with a t-statistic 2.12 (for the Latin American model) to .822 with a t-statistic of 4.425 (South Asia model). The coefficient estimates for political liberalization ranged from .258 with a t-statistic of 1.180 (FDI model) to .587 with a t-statistic of 2.942 (South Asia).

Because the results regarding the negative effects of regarding capital account liberalization and openness on political liberalization are likely to be highly controversial, I undertook an additional robustness test. I re-ran the regressions over and over again, dropping in turn from the analysis each country that experienced a change in the dependent variable. The aim of this test is to ensure that one country's experience did not have excessive leverage on the results. For capital account openness, the coefficient estimate ranged from a low of –0.43 (Spain omitted) with a t-statistic of -3.021 to a high of –0.030 (Argentina omitted) with a t-statistic of -2.005. For capital account liberalization, the coefficient estimate ranged from a low of –0.040 (Brazil omitted) with a t-statistic of -2.751 to a high of -0.030 (Ghana omitted) with a t-statistic of -1.957. These capital account results are robust to the exclusion of any one case.

CPVote $_{s-1}$ has highly consistent effects in the EAB analysis (which is not reported here to save space). The coefficient estimates of CPVote $_{s-1}$ were negative and statistically significant coefficients at beyond the .05 level in all the models reported in Table A3b. These results are highly robust to changes in conditioning information.

<center>*DISCUSSION and CONCLUSION*</center>

I proposed that democratization leads to international financial liberalization because of differences in incentives faced by incumbent democrats versus incumbent autocrats. My expectation was that democracies, compared to autocracies, would liberalize capital accounts. The incentives facing incumbent democrats and autocrats were less different regarding financial current account liberalization, and I expected fewer differences in financial account liberalization between types of regimes. I further proposed that a certain proportion of capital account liberalization experiences would fail. As democracies but not autocracies liberalized capital, capital account liberalization is a risk factor to democracies.

Table 6 summarizes the results by hypothesis. Democracies are liberalizers of capital accounts, though I observe some regional variation. Capital account liberalization and higher levels of capital account openness are robustly associated with decreasing democratization many years later. Financial current account openness and liberalization, in turn, appear to offer no demonstrable risk of democratic reversal.

Let me conclude with one observation, a speculation, and one hope. The observation: if international financial liberalization is desirable from the perspective of international institutions and the U.S. and other governments, the message of this paper is that the surest route to sustained liberalization is enabling sustained democratization. The speculation: if capital account liberalization destabilizes some proportion of democratic regimes, we should expect some reversals of political liberalization in the early 2000s among those nations that liberalized their capital accounts in the 1990s. Indeed, consider Figures 1, 3, and 4 again. Note that these figures show a small reversal of political liberalization in 1999, which followed the crescendo of financial liberalization in the 1990s. Perhaps these reversals are a first manifestation of a longer cycle of political reversals? A significant number of liberalized emerging market countries are possibly at risk of democratic reversals in the next few years.[22] The hope: may history not repeat itself.

---

[22] Using information from the 1990-94 and 1995-99 panels, I can make limited forecasts about the contribution of capital account liberalization and openness to reversals of political liberalization in 2000-04. The countries most at risk of reversals from capital account liberalization are Argentina, Colombia, Costa Rica, Ecuador, Egypt, El Salvador, Haiti, Honduras, Kenya, Nicaragua, Paraguay, Peru, the Philippines, and Trinidad. Among all these countries, Freedom House has noted downward trends or reversals in political liberalization, 2001-2, in Argentina, Colombia, Ecuador, Egypt, Haiti, Honduras, and Trinidad, with an upward trend only in Peru (Freedom House 2002).

Appendix Table A1.
Countries and Initial Year of the Five-Year Periods Used in the Analysis
(The period starting in 1995 covers 1995-98)

Country	PWT 6.0	QT Data Coded	Country	PWT 6.0	QT Data Coded
Algeria	1970,.,1995	1963-99	*Jordan*	1960,.,1995	1950-99
Argentina	1960,.,1995	1950-99	Kenya	1970,.,1995	1963-99
Australia	1960,.,1995	1950-99	Korea	1960,.,1995	1950-99
Austria	1960,.,1995	1950-99	Malaysia	1970,.,1995	1957-99
Barbados	1980,.,1995	1970-99	Mauritius	1975,.,1995	1968-99
Belgium	1960,.,1995	1950-99	Mexico	1960,.,1995	1950-99
Bolivia	1960,.,1995	1950-99	Morocco	1965,.,1995	1958-99
Botswana	1975,.,1995	1967-99	Nepal	1970,.,1995	1961-99
Brazil	1960,.,1995	1950-99	Netherlands	1960,.,1995	1950-99
Canada	1960,.,1995	1950-99	Nicaragua	1960,.,1995	1950-99
Chile	1960,.,1995	1950-99	Nigeria	1970,.,1995	1960-99
China	1965,.,1995	1950-99	New Zealand	1960,.,1995	1950-99
Colombia	1960,.,1995	1950-99	Norway	1960,.,1995	1950-99
Congo (Braz.)	1970,.,1995	1962-99	Pakistan	1960,.,1995	1950-99
Costa Rica	1960,.,1995	1950-99	Panama	1960,.,1995	1950-99
Denmark	1960,.,1995	1950-99	Paraguay	1960,.,1995	1950-99
Domin.Rep.	1960,.,1995	1950-99	Peru	1960,.,1995	1950-99
Ecuador	1960,.,1995	1950-99	Philippines	1960,.,1995	1950-99
Egypt	1960,.,1995	1950-99	Portugal	1960,.,1995	1950-99
Ethiopia	1960,.,1995	1950-99	Rwanda	1965,.,1995	1960-99
Fiji	1980,.,1995	1971-99	El Salvador	1960,.,1995	1950-99
Finland	1960,.,1995	1950-99	Senegal	1970,.,1995	1961-99
France	1960,.,1995	1950-99	Sierra Leone	1970,.,1990	1961-99
Gabon	1970,.,1995	1963-99	Singapore	1975,.,1995	1957-99
Ghana	1965,.,1995	1957-99	Spain	1960,.,1995	1950-99
Germany	1960,.,1995	1950-99	South Africa	1960,.,1995	1950-99
Great Britain	1960,.,1995	1950-99	Sri Lanka	1960,.,1995	1950-99
Greece	1960,.,1995	1950-99	Sweden	1960,.,1995	1950-99
Guatemala	1960,.,1995	1950-99	Switzerland	1960,.,1995	1950-99
Haiti	1970,..,1990	1950-99	Syria	1980,.1995	1950-99
Honduras	1960,.,1995	1950-99	Tanzania	1970,.,1995	1961-99
Hong Kong	1965,.,1995	1950-99	Thailand	1960,.,1995	1950-99
Iceland	1960,.,1995	1950-99	Trinidad & Tobago	1970,.,1995	1962-99
India	1970,.,1995	1950-99	Tunisia	1970,.,1995	1956-99
Indonesia	1965,.,1995	1950-99	Turkey	1960,.,1995	1950-99
Iran	1960,.,1995	1950-99	Uganda	1970,.,1995	1962-99
Ireland	1960,.,1995	1950-99	Uruguay	1960,.,1995	1950-99
Israel	1960,.,1995	1950-99	Venezuela	1960,.,1995	1950-99
Italy	1960,.,1995	1950-99	United States	1960,.,1995	1950-99
Ivory Coast	1970,.,1995	1961-99	Number of Countries	80	
Jamaica	1970,.,1995	1961-99			
Japan	1960,.,1995	1950-99			

Appendix A. Table A2. Variable description and Souces

$\Delta CAP_s, \Delta Capital_{s-1}$	Five-year average change in *CAPITAL*.
$Capital_{s-2}$	Average level of *CAPITAL*, lagged two periods.
$CPVote_{,s-1}$	Lagged levels of vote share of 23 Communist parties.
$\Delta CUR_s, \Delta Current_{s-1}$	Five-year average change in *CURRENT*.
$Current_{s-2}$	Average level of *CURRENT*, lagged two periods.
$\Delta DEM_S, \Delta Democracy_{s-1}$	Five-year average change in *DEMOCRACY* from Polity IV, Gurr and Jaggers.
$Democracy_{s-2}$	Average level of *DEMOCRACY*, lagged two periods.
BMP_{s-1}	Black Market Premium from Beck et al 2000.
Emerge	Dummy variable for nonOECD members (includes Korea, Mexico, & Turkey)
$ETHFRAC_{s-1}$	Ethnic Fractionalization Index from Krain 1997.
FDI_{t-4}	Foreign Direct Investment inflows as % GDP, initial period value, World Bank 2001.
$FiveCap5_{s-1}$	Lagged levels of capital openness for leading economies.
$FiveCur5_{s-1}$	Lagged levels of current openness for leading economies.
$\Delta Gov_{s-1}, Gov_{s-2}$	Change in and Level of Government Share from Heston et al, PWT 6.0.
$Growth_{s-1}, Income_{s-2}$	Change in and Level of Income from Heston et al, PWT 6.0.
$\Delta Investment_{s-1}, Investment_{s-2}$	Change in and Level of Investment from Heston et al, PWT 6.0.
$Liquidity_{s-1}$	Financial Sector Liquidity from Beck et al. 2000.
Mortality	Settler death rates as a proxy for colonial heritage from Acemoglu et al. 2001
$\Delta PI_{s-1}, PI_{s-2}$	Change in and Level of National Price Levels (P in Heston et al, PWT 6.0)
ΔPop_{s-1}	Change in Population from Heston et al, PWT 6.0
$REVCGCA_{s-1}$	Number of Revolutions, Coups, Guerrilla Wars from Banks 2001.
$Sachs\text{-}Warner_{s-1}$	0,1 Indicator of Trade Openness from Sachs and Warner 1997.
$SECFIVE_{s-1}$	Levels of secondary education achieved for 25 years-old from World Bank 2001
$\Delta Trade\ Openness_{s-1}, Trade\ Openness_{s-1}$	Change in and Level of imports + exports/gdp from Heston, PWT 6.0.
$WD5^{(j)}_{s-1}$	Level of World Democracy (Polity IV) from Gurr and Jaggers

Appendix Table 3a

Extreme Bounds Analyses; dep. var. = ΔDemocracy(s)

Variables	Coefficient	St. Error	t-ratio	R^2	Obs.
1. Government Expenditures [a], 1960-99					
i. Full Sample, 80 countries				34.98%	569
ΔCapital(s-1)	-0.030	0.015	-2.027**		
Capital(s-2)	-0.039	0.015	-2.671***		
ΔGov. Expend(s-1)	0.067	0.044	1.513		
Gov. Expend.(s-2)	0.057	0.039	1.474		
2. Sachs-Warner Index of Trade Openness, 1960-99					
ii. Full Sample, 76 countries				34.92%	547
ΔCapital(s-1)	-0.026	0.015	-1.77*		
Capital(s-2)	-0.035	0.015	-2.431**		
SW(s-1)	0.121	0.477	0.253		
3. Colonial Legacy, 1960-99					
iii. Full Sample, 47 countries				40.12%	334
ΔCapital(s-1)	-0.036	0.021	-1.736*		
Capital(s-2)	-0.047	0.022	-2.127**		
Mort(s-1)	-0.088	0.045	-1.968**		
4. BMP, 1960-99					
iv. Full Sample, 77 countries				34.98%	553
ΔCapital(s-1)	-0.032	0.015	-2.127**		
Capital(s-2)	-0.036	0.015	-2.492***		
BMP(s-1)	0.051	0.057	0.884		
5. Financial Sector Liquidity, 1960-99					
v. Full Sample, 75 countries				40.55%	464
ΔCapital(s-1)	-0.042	0.016	-2.639***		
Capital(s-2)	-0.058	0.016	-3.59***		
Liquid(s-1)	-0.508	1.295	-0.393		
6. Ethnic Fractionalization, 1960-99					
vi. Full Sample, 80 countries				34.63%	596
ΔCapital(s-1)	-0.031	0.015	-2.107**		
Capital(s-2)	-0.036	0.015	-2.498***		
EthFrac	0.035	0.139	0.251		
7. Educational Attainment, 1965-99					
vii. Full Sample, 73 countries				37.05%	491
ΔCapital(s-1)	-0.035	0.016	-2.134**		
Capital(s-2)	-0.053	0.017	-3.162***		
Ed. Attain.(s-1)	-0.012	0.021	-0.58		
8. Foreign Direct Investment Inflows as a % of GDP, 1975-99					
viii. Full Sample,80 countries				45.85%	370
ΔCapital(s-1)	-0.030	0.018	-1.622		
Capital(s-2)	-0.039	0.018	-2.108**		
FDI Inflows(s-1)	-0.036	0.1439	-0.251		
9. Price Inflation, 1960-99					
ix. Full Sample, 80 countries				35.97%	569
ΔCapital(s-1)	-0.030	0.015	-2.027**		
Capital(s-2)	-0.033	0.015	-2.284**		
ΔPI(s-1)	0.017	0.007	2.336**		
PI(s-2)	-0.006	0.008	-0.711		
* p-value < .10; ** p-value < .05; *** p-value < .01					

Appendix Table 3b

Extreme Bounds Analyses; dep. var. = ΔCapital(s)

Variables	Coefficient	St. Error	t-ratio	R^2	Obs.
1. Government Expenditures [a], 1960-99					
i. Full Sample, 80 countries				44.08%	569
ΔDemocracy(s-1)	0.499	0.187	2.667***		
Democracy(s-2)	0.744	0.177	4.205***		
ΔGov. Expend(s-1)	-0.342	0.239	-1.429		
Gov. Expend.(s-2)	0.045	0.188	0.238		
2. Sachs-Warner Index of Trade Openness, 1960-99					
ii. Full Sample, 76 countries				44.68%	547
ΔDemocracy(s-1)	0.566	0.196	2.889***		
Democracy(s-2)	0.785	0.183	4.293***		
SW(s-1)	4.652	2.105	2.210**		
3. Colonial Legacy, 1960-99					
iii. Full Sample, 47 countries				47.16%	334
ΔDemocracy(s-1)	0.448	0.248	1.805*		
Democracy(s-2)	0.810	0.256	3.161***		
Mort(s-1)	-0.155	0.131	-1.181		
4. BMP, 1960-99					
iv. Full Sample, 77 countries				44.85%	553
ΔDemocracy(s-1)	0.460	0.190	2.421**		
Democracy(s-2)	0.721	0.178	4.045***		
BMP(s-1)	-0.077	0.345	-0.223		
5. Financial Sector Liquidity, 1960-99					
v. Full Sample, 75 countries				50.56%	464
ΔDemocracy(s-1)	0.307	0.195	1.573		
Democracy(s-2)	0.681	0.180	3.777***		
Liquid(s-1)	-13.612	4.733	-2.876***		
6. Ethnic Fractionalization, 1960-99					
vi. Full Sample, 80 countries				43.69%	569
ΔDemocracy(s-1)	0.509	0.188	2.711***		
Democracy(s-2)	0.776	0.179	4.336***		
EthFrac	0.435	0.443	0.982		
7. Educational Attainment, 1960-99					
vii. Full Sample, 73 countries				46.85%	491
ΔDemocracy(s-1)	0.410	0.193	2.12**		
Democracy(s-2)	0.712	0.186	3.837***		
Ed. Attain.(s-1)	0.347	0.100	3.479***		
8. Foreign Direct Investment Inflows as a % of GDP, 1975-99					
viii. Full Sample, 80 countries				50.23%	370
ΔDemocracy(s-1)	0.258	0.219	1.180		
Democracy(s-2)	0.607	0.202	3.150***		
FDI Inflows(s-1)	-0.573	0.492	-1.164		
9. Price Inflation, 1960-99					
ix. Full Sample, 80 countries				43.61%	569
ΔDemocracy(s-1)	0.512	0.189	2.715***		
Democracy(s-2)	0.756	0.179	4.221***		
ΔPI(s-1)	-0.013	0.029	-0.442		
PI(s-2)	-0.011	0.029	-0.379		

* p-value < .10; ** p-value < .05; *** p-value < .01

Appendix A - Data and Sources

I create the key dependent and independent financial variables as follows:

$$Capital(s) = (\Sigma((Cap_{t\text{-}0} + \dots Cap_{t\text{-}4})\,/5) \text{ and } Current(s) = (\Sigma((Cur_{t\text{-}0} + \dots Cur_{t\text{-}4})\,/5)$$

where $Cap_t = 100*(Capital_t/4)$ and $Cur_t = 100*(Current_t/8)$. The dependent variables, ΔCAP and ΔCUR, are calculated in change terms as $\Delta CAP_s = (CAPITAL_s - CAPITAL_{s\text{-}1})$ and $\Delta CUR_s = (CURRENT_s - CURRENT_{s\text{-}1})$. The subscript s represents a five year period: s=1960-64, 1965-69,…, and the subscript t identifies the first year in the five year period: t=1960, 1961,…

Annual change in CURRENT (ΔCur_t) was not common, with 25% of the annual observations being non-zero. Most changes were small. Sixteen percent of the annual change observations of CAPITAL (ΔCap_t) are non-zero, with most change again being small. In the five-year data used here, zero remains the median and modal observation for ΔCAP_s (39% of the observations). The mean is 2.6%. For the five-year averaged data for ΔCUR_s, zero is the median and modal observation (25%), and 3.62% is the mean.

As with the financial regulation indicators, I create a democracy change measure as follows: $\Delta DEM_s = DEM_s - DEM_{s\text{-}1}$. Yearly changes, or ΔDEM_t, in political institutions are comparatively rare; approximately nine percent of the observations are non-zero. Of types of changes, an upward change is twice as common as a downward. Of increases in democratization, small change predominates. Of downward changes, large and small values are equally common. In the five-year averages (ΔDEM_s) used here, zero is the modal and median observation (51.3%). The mean is 0.52%

When using *Capital, Current,* and Democracy as independent variables, I need to model the potential influences of changes and levels of these variables over many years. I use five-year average changes, are calculated as $\Delta Capital(s\text{-}1) = Capital(s\text{-}1) - Capital(s\text{-}2)$, and five-year average levels, *Capital(s-2).* Corresponding variables for *Current* and Democracy are defined similarly. In cases of missing values, the averages are obtained over the number of observations available.

To capture the influence of international financial regulation in the leading five economies on other economies, I use a five-year lagged level of the mean value of the relevant financial regulatory indicator for the U.S., the U.K, Germany, France, and Japan: *FiveCap5$_{s\text{-}1}$* or *FiveCur5$_{s\text{-}1}$*, as appropriate.

Economic, Political, and Social Data. I use economic data from Penn World Tables Mark 6.0. The advantage of this data set is that I am able to estimate models using data from 1950/60 to 1997-8.[23] To represent external shocks associated with commodity price changes in energy, I use lagged changes and levels in the dollar cost of a barrel of crude oil. The data on revolutions, coups, etc. are updated Cross-National Times Series data from Banks 2001. Political data for Hong Kong are missing.

To represent anti-capitalist sentiment, I need an indicator of popular sentiment over time. Communist parties have unrelentingly opposed internationalized capital flows, and Soviet Bloc regimes (not considered here) tightly restricted financial transactions. I use a five-year average measure of the popular vote totals for the twenty-three Communist Parties permitted to freely compete in elections from 1950 to 1998. The data are taken from Mackie and Rose 1991, 1997, supplemented by *Keesings' Contemporary Archives,* or *CPVote5$_{s-1}$*. (The data are available from the author at [author@university.edu])

Let me note that I extract the information about the home country's level of democracy (where i represents the country of interest) for the countries in the investigation such that:

$$WD_t^{(j)} = WorldDemocracy_t^{(j)} = \sum_{j=n-i} Democracy_{i,t} ;$$

where j equals all countries except i. After this, the five-year average of world democracy is:

$$WD5_s^{(j)} = \frac{1}{5} \left(WD_{t-0}^{(j)} + WD_{t-1}^{(j)} + WD_{t-2}^{(j)} + WD_{t-3}^{(j)} + WD_{t-4}^{(j)} \right)$$

I lag the indicator: $WD5_{s-1}^{(j)}$ In estimating international financial liberalization models, I also include CPVote$_{s-1}$, and FiveCap $_{s-1}$ or FiveCur $_{s-1}$, depending on the model estimated.

---

[23] The growth series for Syria contain some unlikely numbers in the 1960s and 1970s, and these years of data for Syria are excluded from the analyses. German data post-reunification is excluded, with the pre-1990 German data provided by Prof. Alan Heston. Two sets of countries merged then split during the period of study: Malaysia and Singapore; Senegal and Gambia. The data for Malaysia and Singapore are post-merger, with enough observations for inclusion. Gambia's data are excluded because of insufficient numbers of observations.

I use Variance Inflation Factors (VIF) to detect high levels of collinearity.[24] As is to be expected, levels of national income (Income(s-2)) have VIF numbers in these models ranging from 40 to 45. In the case of FiveCap and CPVote, VIF numbers well above 40 lead me to use the first difference of the series in some models.

For the extreme bounds analysis, I use data from many sources. Government expenditures data are from Penn World Table 6.0. The educational attainment measures are Barro/Lee indicators from the World Bank 2001. Educational data for seven African countries are entirely unavailable[25], as are educational attainment data for most countries in the 1960s. For social fragmentation, I use Krain's (1997) nuanced measure of ethnic (rather than linguistic) fractionalization over a number of points in time (*Ethfrac*). The black market premium data and the Liquidity measures are taken from Beck, Levine, and Loayza et al. (2001). Because the black market data have an extremely skewed distribution, but also contain negative numbers, I transform the series using a signLog transformation.[26] Foreign Direct Investment inflows as a percentage of gdp are from the World Bank 2001. The FDI data begin in 1970, so the dependent variables are examined from 1975 on. The colonial legacy indicator is from Acemoglu, Johnson, and Robinson (2001).

---

[24] One way of measuring the collinearity among variables is to examine a variable's Variance Inflation Factor (VIF). (See Kennedy 1998, 130 for a discussion.) VIF above 10 indicates harmful collinearity. Apart from levels of income, CPVote and FiveCap have the highest values of VIF, but their differenced series do not. For example, the VIF for CPVote in one of the models reported below is 47.2, whereas the VIF for CPVotes in changes was 3.09.

[25] Ethiopia, Gabon, Ivory Coast, Morocco, Nigeria, Tanzania, and Tunisia.

[26] Taking logarithms is a common practice when fitting linear regression models for several reasons. However, when X has negative values, or 0's, the logarithm is not defined. One alternative is to use the following transformation: sign(x)log(abs(x)+1). This is a monotonic transformation that achieves the same objective of making the distribution more symmetric such that the relationship with Y is better described by a straight line.

Appendix B – Heterogeneity and Robustness Tests

3SLS Model. The variables in **eq. 1, eq. 2,** and **eq. 3** are used as instruments for the endogenous variables in the 3SLS models in **eq. 4, eq. 5,** and **eq. 6**. I also use additional instruments in the first stage: levels and changes in lagged government spending, levels and changes in lagged prices, and several standard political economy instruments: a country's distance from the equator, its Islamic population percentage, and its ethnic fractionalization index. The domestic economic variables, and the contemporaneous political/legal variables, are treated as being endogenous explanatory variables, and are underlined and bolded below.

$\Delta \text{DEM}_{i,s} = \beta_0 + \beta_1(DEMOCRACY_{i,s-1}) + \beta_2(WD5_{s-1}^{(i)}) + \beta_3(\underline{\boldsymbol{\Delta GDP}}_{i,,s}) + \beta_4(log\underline{\boldsymbol{Income}}_{i,s-1})$ **[eq. 4]**

$\qquad + \beta_5(\Delta log\underline{\boldsymbol{Investment}}_{i\ s}) + \beta_6(log\underline{\boldsymbol{Investment}}_{i,s-1}) + \beta_7(Population\ Growth_{i,s-1})$

$\qquad + \beta_8(\Delta log\underline{\boldsymbol{Trade\ Openness}}_{i,s}) + \beta_9(log\underline{\boldsymbol{Trade\ Openness}}_{i,s-1}) + \beta_{10}(RevolutionsCoups_{i,s-1})$

$\qquad + \beta_{11}(\Delta OilPrice_{i,s}) + \beta_{12}(OilPrice_{i,s-1}) + \beta_{13}(Year_{i-1}) + \beta_{14}(\underline{\boldsymbol{\Delta Capital}}_{i,s})$

$\qquad + \beta_{15}(\Delta Capital_{i,s-1}) + \beta_{16}(Capital_{i,s-2}) + \beta_{17}(\underline{\boldsymbol{\Delta Current}}_{i,s}) + \beta_{18}(\Delta Current_{i,s-1})$

$\qquad + \beta_{19}(Current_{i,s-2}) + \beta_{20,\ 21...}(Country\ Dummy\ Variables) + \varepsilon_{i,s}$

$\Delta \text{CAP}_{i,s} = \beta_0 + \beta_1(Capital_{i,s-1}) + \beta_2(\Delta FiveCap_{s-1}) + \beta_3(\Delta CPVote_{s-1}) + \beta_4\Delta(\underline{\boldsymbol{GDP}}_{i,,s})$ **[eq. 5]**

$\qquad + \beta_5(log\underline{\boldsymbol{Income}}_{i,s-1}) + \beta_6(\Delta log\underline{\boldsymbol{Investment}}_{i,s}) + \beta_7(log\underline{\boldsymbol{Investment}}_{i,s-1}) +$

$\qquad \beta_8(Population\ Growth_{i,s-1}) + \underline{\boldsymbol{\beta_9(\Delta logTrade\ Openness}}_{i,s}) + \beta_{10}(log\underline{\boldsymbol{Trade\ Openness}}_{i,s-1})$

$\qquad + \beta_{11}(RevolutionsCoups_{i,s-1}) + \beta_{12}(\Delta OilPrice_{i,s}) + \beta_{13}(OilPrice_{i,s-1})$

$\qquad + \beta_{14}(Year_{i-1}) + \beta_{15}(\underline{\boldsymbol{\Delta Democracy}}_{i,s}) + \beta_{16}(\Delta Democracy_{i,s-1}) + \beta_{17}(Democracy_{i,s-2})$

$\qquad + \beta_{18,\ 19...}(Country\ Dummy\ Variables) + \varepsilon_{i,s}$

$\Delta \text{CUR}_{i,s} = \beta_0 + \beta_1(Current_{i,s-1} + \beta_2(FiveCur_{s-1}) + \beta_3(\Delta CPVote_{s-1}) + \beta_4(\underline{\boldsymbol{\Delta GDP}}_{i,,s})$ **[eq. 6]**

$\qquad + \beta_5(log\underline{\boldsymbol{Income}}_{i,s-1}) + \beta_6(\Delta log\underline{\boldsymbol{Investment}}_{i,s}) + \beta_7(log\underline{\boldsymbol{Investment}}_{i,s-1}) +$

$\qquad \beta_8(Population\ Growth_{i,s-1}) + \beta_9(\Delta log\underline{\boldsymbol{Trade\ Openness}}_{i,s}) + \beta_{10}(log\underline{\boldsymbol{Trade\ Openness}}_{i,s-1})$

$\qquad + \beta_{11}(RevolutionsCoups_{i,s-1}) + \beta_{12}(\Delta OilPrice_{i,s}) + \beta_{13}(OilPrice_{i,s-1})$

$\qquad + \beta_{14}(Year_{i-1}) + \underline{\boldsymbol{\beta_{15}(\Delta Democracy}}_{i,s}) + \beta_{16}(\Delta Democracy_{i,s-1}) + \beta_{17}(Democracy_{i,s-2})$

$+ \beta_{17,\ 18...}$ *(Country Dummy Variables)* $+ \varepsilon_{i,s}$ i=1,2,...,80; s=1960-4, ..,1995-9.

Heterogeneity. I test for parameter heterogeneity by level of development and by region. I reestimate the **eq. 1, eq. 2,** and **eq. 3** using PCSTS and SURE models while omitting advanced industrial nations, which I take as the traditional OECD member countries. I also use the World Bank's regional groupings to assign countries to regions.[27] I then create regional or development dummy variables, which I then interact with the main independent variables of interest in reestimations of **eq. 1, eq. 2,** and **eq. 3**. I follow the interaction term recommendations in Friedrich 1982. The key test is whether the interaction term is statistically significant, but the baseline term is not. This would imply that the results are driven by those of a subsample. Regional differences from the overall trend in the sample will be evident if the interaction term and the baseline term are both statistically significant. Also using interaction terms, I test the hypothesis that stable autocracies that liberalize finance, over the long-term, liberalize politically.[28]

Extreme Bounds Analysis. I use variables that other scholars have suggested are possibly influential either in political/financial liberalization or for other political economic outcomes, and for which prior levels of democracy or financial liberalization may be serving as proxies in my base model. The variables I rotate into the base models are indicators of government expenditures as a percentage of gdp, the Sachs-Warner measure of trade openness, a nation's colonial legacy, the black market premium for a country's currency, its financial sector liquidity, ethnic fractionalization, secondary educational attainment for the population over 25, foreign direct investment inflows, and price inflation. (The role of many of these variables is reviewed in Arteta, Eichengreen, and Wypolz 2001; and author. See also Acemoglu, Johnson, and Robinson 2001.) The EAB variables drawn from PWT 6.0, government expenditures and price inflation, can be entered in levels (s-2) and changes (s-1) without losing degrees of freedom, and I do so. The other variables are entered at s-1. I lose up to 40% of the countries in the sample, and up to 40% of the years in the EAB.

---

[27] These are MENA (Middle East and North Africa), LAC (Latin America and Caribbean), SSA (Sub-Saharan Africa), EAP (East Asia and Pacific), and SA (South Asia). Japan, New Zealand, and Australia are treated as OECD members.

[28] I create a dummy variable for stable autocracies using as a threshold 10 continuous years of autocratic rule (using "Durable" in Polity IV), and interacting that variable with the international financial liberalization variables.

REFERENCES

Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2001. "The Colonial Origins of Comparative Economic Development." *American Economic Review* 91(December):938-63.

Angrist, Joshua D. and Alan B. Krueger. 2001. "Instrumental Variables and the Search for Identification: From Supply and Demand to Experiments" J*ournal of Economic Perspectives* 15(Fall):69-85.

Arteta, Carlos O., Barry Eichengreen, and Charles Wyplosz. "When Does Capital Account Liberalization Help More Than It Hurts?" NBER Working Paper, #8414, 2001.

Banks, Arthur S. 2001. "Cross-National, Time-Series Data Archive." Available through http://www.databanks.sitehosting.net/.

Barro, Robert J. 1991. "Economic Growth in a Cross-Section of Countries." *Quarterly Journal of Economics* 106 (May):407-43.

Bartolini, Leonardo and Allan Drazen. 1997. "Capital-Account Liberalization as a Signal." *American Economic Review* 87(March):138-154.

Beck, Nathaniel, and Jonathan N. Katz. 1995. "What to Do (and Not to Do) with Time-Series-Cross-Section Data in Comparative Politics." *American Political Science Review* 89(Sept):634-47.

Bound, John, D.A. Jaeger, and R.M. Baker. 1995. "Problems with Instrumental Variables Estimation when the Correlation between the Instruments and the Endogenous Explanatory Variable is Weak." *Journal of the American Statistical Association* 90():443-50.

Burkhart, Ross E. 1997. "Measures of Democracy: Getting the Story Right." Department of Political Science, Boise State University. Typescript.

Coppedge, Michael, and Daniel Brinks. 2002. "How to Infer Diffusion Indirectly." University of Notre Dame Typescript Manuscript.

Diaz-Alejandro, Carlos. 1985. "Good-bye Financial Repression, Hello Financial Crash." *Journal of Development Economics* 19 (November):1-24.

Duch, Raymond M. 2001. "A Developmental Model of Heterogeneous Economic Voting in New Democracies." *American Political Science Review* 95(December):895-910.

Edison, Hali J, Michael J. Klein, Luca Ricci, and Torsten Sløk. 2002. "Capital Account Liberalization and Economic Performance: Survey and Synthesis." IMF Working Paper, May.

Edwards, Sebastian. 2001. "Capital Mobility and Economic Performance: Are Emerging Economies Different?" National Bureau of Economic Research Working Paper #8076.

Eichengreen, Barry. 1996. *Globalizing Capital: A History of the International Monetary System.* Princeton: Princeton University Press.

Eichengreen, Barry. 2001. "Capital Account Liberalization: What Do the Cross-Country Studies Tell Us?" *World Bank Economic Review* 15(3):341-65.

Eichengreen, Barry. 1999. *Toward a New International Financial Architecture.* Washington, D.C.: IIE.

Elkins, Zachary. 2000. "Graduations of Democracy? Empirical Tests of Alternative Conceptualizations." *American Journal of Political Science* 44(April):293-300.

Feng, Yi. 1997. "Democracy, Political Stability and Economic Growth." *British Journal of Political Science* 27 (July):391-418.

Feng, Yi, Jacek Kugler, and Paul J. Zak. 2000. "The Politics of Fertility and Economic Development." *International Studies Quarterly,* 44(December):667-693.

Freedom House. 2002. *Freedom in the World, 2001-2002: Country and Territory Reports.* Available at http://www.freedomhouse.org/research/freeworld/2002/countries.htm

Freeman, John R., Jude C. Hays, and Helmut Stix. 2000. "Democracy and Markets: the Case of Exchange Rates." *American Journal of Political Science* 44(July):449-468.

Friedrich, Robert J. 1982. "In Defense of Multiplicative Terms in Multiple Regression Equations." *American Journal of Political Science* 26(November):797-833.

Goldstein, Joshua S. 1988. *Long Cycles: Prosperity and War in the Modern Age.* New Haven: Yale.

Gourinchas, Pierre-Olivier and Oliver Jeanne. 2002. "On the Benefits of Capital Account Liberalization for Emerging Economies." Princeton University/IMF Typescript Manuscript.

Gurr, R. Ted and Keith Jaggers. 2000. *Polity IV Project*. http://www.bsos.umd.edu/cidcm/polity/

Helliwell, John F. 1994. "Empirical Linkages Between Democracy and Economic Growth." *British Journal of Political Science* 24(April): 225-248.

Heston, Alan, Robert Summers, and Bettina Aten. 2001. "The Penn World Table, Version 6.0." Center for
International Comparisons at the University of Pennsylvania (CICUP), December.

Hilferding, Rudolf. 1981 [1910]. *Finance Capital: a study of the latest phase of capitalist development*. ed.
Tom Bottomore; trans. Morris Watnick and Sam Gordon. Boston: Routledge, Kegan, Paul.

Hsiao, Cheng. 1986. *Analysis of Panel Data: Econometric Society Monograph, No. 11.* Cambridge:
Cambridge University Press.

Huntington, Samuel P. 1991. "Democracy's Third Wave." *Journal of Democracy* 2(Spring):27-?

International Monetary Fund. Various years, 1979 on. *Annual Report on Exchange Arrangements and
Exchange Restrictions.* Washington: IMF.

International Monetary Fund. 2001. "International Financial Integration and Developing Countries." *World
Economic Outlook,* October:145-173.

Keesings' Contemporary Archives. Various Years. London: Keesings' Ltd.

Kennedy, Peter. 1998. *A Guide to Econometrics*, 4th Edition. Cambridge: MIT Press.

Keynes, John Maynard. 1933. "National Self-Sufficiency." *The Yale Review* 22(June):755-69.

Krain, Matthew. 1997. "State-Sponsored Mass Murder: The Onset and Severity of Genocides and
Politicides." *Journal of Conflict Resolution 41*(3):331-360.

Kiewiet, D. Roderick. 2000. "Economic Retrospective Voting and Incentives for Policymaking." *Electoral
Studies* 19-20(June-September):427-44.

Leamer, Edward. 1983. "Let's Take the Con out of Econometrics." *American Economic Review*
73(March):31-43.

Lenin, V.I. 1971. *Imperialism, the Highest Stage of Capitalism*. Reprinted In *Selected Works: One Volume
Edition*. New York: International Publishers.

Lewis-Beck, Michael S., and Martin Paldam. 2000. "Editorial: Economic Voting: An Introduction."
Electoral Studies 19(June-September):113-121.

Lindblom, Charles E. 1977. *Politics and Markets.* New York: Basic Books.

Lijphart, Arend. 1984. *Democracies: Patterns of Majoritarian and Consensus Government in Twenty-one
Countries.* New Haven : Yale University Press.

Lipset, Seymor Martin. 1994 "The Social Requisites of Democracy Revisited: 1993 Presidential Address." *American Sociological Review* 59(February):1-22.

Li, Quan, and Rafael Reuveny. forthcoming. "Does Economic Globalization Hinder of Promote Democracy?" *British Journal of Political Science*: In Press..

Mackie, Thomas T., and Richard Rose. 1991. *The International Almanac of Electoral History,* 3rd Edition. Washington, D.C.: Congressional Quarterly Press.

Mackie, Thomas T., and Richard Rose. 1997. *A Decade of Election Results: Updating the International Almanac.* Glasgow: Center for the Study of Public Policy, University of Strathclyde.

Mansfield, Edward D., Helen V. Milner, and B. Peter Rosendorff. 2000. "Free to Trade: Democracies, Autocracies, and International Trade." *American Political Science Review* 94(June):305-322.

McKinnon, Ronald I. 1973. *Money and Capital in Economic Development.* Washington: Brookings.

Milner, Helen, and Kieko Kuboto. 2001. "Why the Rush to Free Trade?: Democracy and Trade Liberalization in the LDCs." Paper presented at APSA, San Francisco.

Muller, Edward N. 1995. "Economic Determinants of Democracy." *American Sociological Review* 60(December):966-982.

Muller, Edward N. and Mitchell A. Seligson 1987. "Inequality and Insurgency." *American Political Science Review* 81(2):425-452.

Olson, Mancur. 1993. "Dictatorship, Democracy and Development." *American Political Science Review* 87 (September):567-576.

Oxfam America. 2002. *Global Finance Hurts the Poor.* Boston: Oxfam America.

Pollins, Brian M. 1996. "Global Political Order, Economic Change, and Armed Conflict: Coevolving Systems and the Use of Force." *American Political Science Review* 90(March):103-117

Polity IV. 2002. "Research Note: Using Polity Data and "Standardized Authority Codes" in Time-Series Analyses." Available at http://www.bsos.umd.edu/cidcm/polity/.

Powell, G. Bingham, Jr., and Guy D. Whitten.1993. "Cross-National Analysis of Economic Voting: the Political Context." *American Journal of Political Science* 37(May):391-414.

Przeworski, Adam and Michel Alvarez, José Antonio Cheibub and Fernando Limongi. 1996. "What Makes
  Democracies Endure?" *Journal of Democracy* 7(1):39-55.

Quinn, Dennis P. 1997. "The Correlates of Change in International Financial Regulation." *American
  Political Science Review* 91(September):531-51.

Quinn, Dennis P., and John T. Woolley. 2001. "Democracy and National Economic Performance: The
  Preference for Stability." *American Journal of Political Science* 45(July):634-57.

Reinhart, Carmen and Graciela Kaminsky. 1999. "The Twin Crises: The Causes of Banking and Balance-
  of-Payments Problems." *American Economic Review* 89(June):473-501.

Rodríguez, Francisco, and Dani Rodrik. 2000. "Trade Policy and Economic Growth: A Skeptic's Guide to
  the Cross-National Literature." University of Maryland/Harvard U. Typescript Manuscript.

Sachs, Jeffrey D., and Andrew M. Warner. 1997. "Fundamental Sources of Long-Run Growth." *American
  Economic Review* 87(May):184-188.

Sala-i-Martin. Xavier X. 1997. "I Just Ran Two Million Regressions." *American Economic Review*
  87(May):178-83.

Schumpeter, Joseph A. 1942. *Capitalism, Socialism, and Democracy*. New York: Harper.

Simmons, Beth. 2001. "The International Politics of Harmonization: the Case of Capital Market
  Regulation**."** *International Organization* 55(Summer):589-620.

Sobel, Andrew C. 1994. *Domestic Choices, International Markets.* Ann Arbor: U. Michigan Press.

Soros, George. 1998. *The Crisis of Global Capitalism: the Open Society Endangered.* NY: Public Affairs.

Voth, Hans-Joachim. 2002. "Does Globalization Lead to Higher Volatility?" MIT Typescript Manuscript.

Whitehead, Laurence. 1993. "Introduction: Some Insights from Western Social Theory." *World
  Development* 21(8):1245-61.

Williamson, John and Molly Mahar. 1998. "A Survey of Financial Liberalization." *Princeton Essays in
  International Finance*, November, #*211*.

World Bank. 2001. *The World Development Indicators.* Washington, D.C.: The World Bank.

Table 2.
Dependent Variable = Change In Y_s

Variable	Model 2a ΔDEM PCSTS	Model 2b ΔCAP PCSTS	Model 2c ΔCUR PCSTS	Model 2d ΔDEM PCSTS (EMC)	Model 2e ΔCAP PCSTS (EMC)	Model 2f ΔCUR PCSTS (EMC)
Level of Dependent Variable , Y_{s-1}	-0.477*** (0.057)	-0.447*** 0.050	-0.427*** (0.046)	-0.547*** (0.06)	-0.577*** (0.066)	-0.506*** (0.059)
Level of *WORLD DEMOCRACY* (*WD5*$_{s-1}$)	**0.080*** **(0.043)**			**0.193***** **(0.053)**		
Five cap or five cur		-3.883 (4.787)	**9.204***** **(1.584)**		-4.793 (6.426)	**11.994***** **(1.997)**
Cpvotes s-1		**-7.058***** **(2.677)**	-2.610 (2.118)		**-11.722***** **(3.593)**	**-5.083*** **(3.021)**
Growth (s-1)	-0.144** (0.066)	0.204 (0.268)	-0.305 (0.253)	-0.166** (0.07)	0.145 (0.281)	-0.385 (0.274)
Income (s-2) (Per Capita, PPP-adjusted)	1.6208** (0.739)	7.794*** (2.724)	-5.823* (3.245)	1.052 (0.903)	1.841 (3.273)	-12.764*** (3.898)
Change in Investment (s-1)	0.410 (0.733)	-0.334 (2.637)	0.959* (2.717)	0.646 (0.777)	2.17 (2.793)	2.561 (2.898)
Level of Investment(s-2) (share of GDP)	1.056* (0.630)	0.549 (2.293)	3.638* (2.287)	0.918 (0.686)	3.901* (2.506)	6.07** (2.517)
Population Growth (s-1)	0.029 (0.297)	-4.799*** (1.231)	-2.158* (1.146)	-0.018 (0.317)	-5.286*** (1.465)	-2.595* (1.437)
Change in Trade Openness(s-1) (Imports + Exports) /GDP	1.412* (0.763)	3.787 (2.786)	7.120*** (2.887)	1.453* (0.811)	4.599* (2.983)	8.067*** (3.198)
Level of Trade Openness(s-2)	1.5027** (0.658)	-2.175 (2.296)	1.212 (2.423)	1.28* (0.749)	1.695 (2.637)	3.801 (2.911)
Revolutions & Coups (s-1)	-0.238* (0.125)	0.740 (0.518)	1.405*** (0.471)	-0.353*** (0.127)	0.944* (0.59)	1.417*** (0.547)
Change in Oil Prices(s-1)	-0.001 (0.014)	-0.113 (0.073)	-0.338*** (0.064)	0.018 (0.018)	-0.257*** (0.096)	-0.488*** (0.091)
Oil Prices(s-2)	0.241 (0.020)	-0.009 (0.128)	-0.112 (0.133)	0.052** (0.025)	-0.294* (0.173)	-0.358* (0.189)
Years (I-1)	-0.000 (0.000)	-0.003** (0.001)	-0.008*** (0.002)	0.000 (0.000)	-0.003* (0.002)	-0.01*** (0.002)
ΔCapital(s-1)	**-0.031** **(0.015)**			**-0.031*** **(0.019)**		
Capital Account Openness(s-2)	**-0.036***** **(0.015)**			**-0.044*** **(0.02)**		
ΔCurrent(s-1)	0.011 (0.016)			-0.002 (0.019)		
Current Account Openness(s-2)	-0.008 (0.017)			-0.005 (0.021)		
ΔDemocracy(s-1)		**0.503***** **(0.188)**	**0.321*** **(0.179)**		**0.531*** **(0.216)**	0.137 (0.209)
Democracy(s-2)		**0.756***** **(0.179)**	**0.543***** **(0.163)**		**0.746***** **(0.227)**	0.219 (0.212)
Intercept	-13.314** (5.873)	-27.477 (21.72)	39.251 (23.93)	-16.186*** (4.991)	7.790 (20.54)	33.764* (20.75)
R2	34.61%	43.58%	46.59%	39.65%	47.26%	48.99%
Number of Countries	80	80	80	396	396	396
Number of Observations	569	569	569	58	58	58

(Standard errors are listed below the coefficients) * p-value < .10; ** p-value < .05; *** p-value < .01

Table 3 – Are Emerging Markets Different?

Variables	Coefficient	St. Error	t-ratio	R2	Obs.
a. Emerging Market Interactions – Model 1a – dep. var = ΔDemocracy					
Model 2a				34.61%	569
ΔCapital(s-1)	-0.031	0.015	-2.104**		
Capital (s-2)	-0.036	0.015	-2.499***		
ΔCurrent(s-1)	0.011	0.016	0.667		
Current (s-2)	0.008	0.017	0.499		
Model 3a				34.98%	
ΔCapital(s-1)	-0.042	0.019	-2.243**		
Capital (s-2)	-0.010	0.016	-0.637		
ΔCurrent(s-1)	0.017	0.022	0.778		
Current (s-2)	-0.032	0.021	-1.515		
Emerge	-6.462	2.544	-2.540***		
Emerge*ΔCapital(s-1)	0.013	0.027	0.504		
Emerge*Capital(s-2)	-0.010	0.025	-1.529		
Emerge*ΔCurrent(s-1)	-0.010	0.029	-0.350		
Emerge*Current(s-2)	0.035	0.029	1.224		

Variables	Coefficient	St. Error	t-ratio	R2	Obs.
b. Emerging Market Interactions – Model 1c – dep. var = ΔCapital					
Model 2b				43.58%	569
ΔDemocracy(s-1)	0.503	0.188	2.670***		
Democracy (s-2)	0.756	0.179	4.227***		
Model 3b				43.63%	
ΔDemocracyl(s-1)	0.232	0.252	0.920		
Democracy (s-2)	0.669	0.193	3.459***		
Emerge	5.279	7.582	0.696		
Emerge*ΔDemocracyl(s-1)	0.328	0.326	1.006		
Emerge* Democracy (s-2)	0.127	0.297	0.428		

Variables	Coefficient	St. Error	t-ratio	R2	Obs.
c. Emerging Market Interactions – Model 1e – dep. var = ΔCurrent					
Model 2c				46.59%	569
ΔDemocracy(s-1)	0.321	0.179	1.796*		
Democracy (s-2)	0.543	0.163	3.329***		
Model 3c				47.05%	
ΔDemocracyl(s-1)	0.613	0.277	2.214**		
Democracy (s-2)	1.106	0.178	6.196***		
Emerge	-31.071	9.819	-3.164***		
Emerge*ΔDemocracyl(s-1)	-0.395	0.346	-1.142		
Emerge* Democracy (s-2)	-0.788	0.276	**-2.852***		

Notes: Country dummies for the United States and China are omitted in Models 3a, 3b, and 3c.

Table 4 – Three Stage Least Squares Models
Dependent Variable = Change In Y_s

Variable	Model 4a ΔDEM 3SLS	Model 4b ΔCAP 3SLS	Model 4c ΔCUR 3SLS	Model 4d ΔDEM 3SLS (EMC)	Model 4e ΔCAP 3SLS (EMC)	Model 4f ΔCUR 3SLS (EMC)
Level of Dependent Variable , Y_{s-1}	-0.373*** (0.075)	-0.409*** (0.050)	-0.371*** (0.050)	-0.494*** (0.063)	-0.480*** (0.050)	-0.453*** (0.061)
Level of *WORLD DEMOCRACY*	0.114 (0.078)			0.177** (0.063)		
Fivecap or Fivecur		1.453 (4.729)	3.634 (5.704)		4.402 (5.740)	2.767 (6.237)
Cpvotes s-1		-2.720 (1.962)	-0.082 (3.662)		1.000 (2.264)	1.995 (4.620)
Growth (s)	0.087 (0.300)	-1.932** (0.800)	-2.664*** 0.847)	0.458** (0.201)	-2.156*** (0.748)	-2.785*** (0.922)
Income (s-1) (Per Capita, PPP-adjusted)	2.624 (2.062)	-4.756 (5.906)	-17.118*** (6.617)	3.745** (1.576)	-13.667** (6.302)	-22.688*** (7.457)
Change in Investment (s)	-4.856 (3.290)	8.080 (11.930)	3.761 (12.700)	-5.765* (2.657)	14.398 (12.750)	18.150 (15.340)
Level of Investment(s-1) (share of GDP)	-2.317 (1.597)	3.896 (5.803	3.704 (5.950)	-3.059** (1.361	11.785* (6.658)	14.076* (7.719)
Population Growth (s-1)	-0.978 (0.738)	-4.981*** (1.788)	-4.112** (1.945)	-0.114 (0.604)	-5.323** (2.117)	-3.730 (2.536)
Change in Trade Openness(s) (Imports + Exports) /GDP	5.969 (4.655)	44.168*** (11.810)	28.292* (16.660)	-1.764 (2.925)	23.158 (11.810)	26.058* (15.720)
Level of Trade Openness(s-1)	1.865 (2.315)	19.085*** (6.412)	16.692** (8.336)	-2.319 (1.767)	13.716*** (6.156)	20.498*** (8.097)
Revolutions & Coups (s-1)	-0.316* (0.189)	1.045** (0.521)	2.252*** (0.566)	-0.591*** (0.164)	1.843*** (0.609)	3.060*** (0.782)
Change in Oil Prices(s)	0.026 (0.032)	-0.177** (0.089)	-0.311*** (0.118)	0.090*** (0.028)	-0.322*** (0.103)	-0.463*** (0.172)
Oil Prices(s-1)	0.044 (0.040)	-0.127 (0.126)	-0.375 (0.285)	0.098** (0.041)	-0.400** (0.145)	-0.583* (0.348)
Years (I-1)	-0.001 0.001	-0.004** (0.002)	-0.004 (0.003)	-0.000 (0.001)	-0.004 (0.002)	-0.003 (0.004)
ΔCapital(s)	**-0.367** (0.154)**			**-0.173* (0.097)**		
ΔCapital(s-1)	**-0.173*** (0.059)**			**-0.100** (0.048)**		
Capital Account Openness(s-2)	**-0.195** (0.083)**			**-0.107* (0.065)**		
ΔCurrent(s)	0.261*** (0.090)			0.240*** (0.069)		
ΔCurrent(s-1)	0.116*** (0.045)			0.108*** (0.038)		
Current Account Openness(s-2)	0.115** (0.055)			0.108** (0.046)		
ΔDemocracy(s)		0.776 (1.079)	2.909*** (1.108)		**2.669*** (0.984)**	3.926*** (1.268)
ΔDemocracy(s-1)		0.524 (0.415)	1.272*** (0.434)		**1.658*** (0.415)**	2.115*** (0.568)
Democracy(s-2)		**1.246** (0.627)**	2.178*** (0.660)		**2.253*** (0.652)**	2.468*** (0.896)
Intercept	-11.297 (16.930)	25.413 (51.530)	127.900 (57.730)	-19.965* (10.130)	84.683** (44.260)	106.300** (52.150)
Number of Countries	80	80	80	396	396	396
Number of Observations	569	569	569	58	58	58

(Standard errors are listed below the coefficients) * p-value < .10; ** p-value < .05; *** p-value < .01

Table 5a – Regional Heterogeneity? - *ΔDemocracy*

Variables	Coefficient	St. Error	t-ratio	R2	Obs.	N
i. Regional Effects in Emerging Markets – Model 1a – dep. var = ΔDemocracy						
Model 2a				34.61%	569	80
ΔCapital(s-1)	-0.031	0.015	-2.104**			
Capital(s-2)	-0.036	0.015	-2.499***			
a. Latin America and Caribbean						
				34.70%	569	80
ΔCapital(s-1)	-0.023	0.016	-1.406			
Capital(s-2)	-0.031	0.014	-2.155**			
LAC	-3.980	2.441	-1.631*			
LAC*ΔCapital(s-1)	-0.017	0.022	-0.75			
LAC*Capital(s-2)	-0.013	0.021	-0.616			
b. Middle East and North Africa						
				34.70%	569	80
ΔCapital(s-1)	-0.030	0.015	-1.932**			
Capital(s-2)	-0.037	0.015	-2.488***			
MENA	-2.197	2.236	-0.983			
MENA*ΔCapital(s-1)	-0.020	0.042	-0.466			
MENA*Capital(s-2)	0.019	0.033	0.569			
c. Sub-Saharan Africa						
				34.72%	569	80
ΔCapital(s-1)	-0.033	0.015	-2.171**			
Capital(s-2)	-0.038	0.015	-2.535***			
SSA	-6.453	2.226	-2.898***			
SSA*ΔCapital(s-1)	0.038	0.038	1.019			
SSA*Capital(s-2)	0.030	0.033	0.918			
d. South Asia						
				34.7%	569	80
ΔCapital(s-1)	-0.034	0.015	-2.263**			
Capital(s-2)	-0.041	0.015	-2.81***			
SASIA	-1.682	3.067	-0.548			
SASIA*ΔCapital(s-1)	0.072	0.052	1.388			
SASIA*Capital(s-2)	0.103	0.064	1.597			
e. East Asia and Pacific						
				35.49%	569	80
ΔCapital(s-1)	-0.036	0.015	-2.343**			
Capital(s-2)	-0.035	0.015	-2.372**			
EAP	1.068	1.690	0.632			
EAP*ΔCapital(s-1)	0.019	0.030	0.621			
EAP*Capital(s-2)	-0.057	0.024	**-2.41****			
f. OECD (including Greece, Port., and Spain)						
				34.74%	569	80
ΔCapital(s-1)	-0.030	0.017	-1.737*			
Capital(s-2)	-0.042	0.018	-2.318**			
OECD	5.906	2.545	2.321**			
OECD*ΔCapital(s-1)	-0.008	0.023	-0.33			
OECD*Capital(s-2)	0.016	0.020	0.812			

Table 5b– Regional Heterogeneity? *ΔCapital*

Variables	Coefficient	St. Error	t-ratio	R2	Obs.	N
i. Regional Effects in Emerging Markets – Model 1a – dep. var = ΔCapital						
Model 2b				43.58%	569	80
ΔDemocracy(s-1)	0.503	0.188	2.670***			
Democracy(s-2)	0.756	0.179	4.227***			
a. Latin America and Caribbean						
				44.06%	569	80
ΔDemocracy(s-1)	0.367	0.200	1.833*			
Democracy(s-2)	0.420	0.198	2.12**			
LAC	-1.585	5.551	-0.286			
LAC*ΔDemocracy(s-1)	0.249	0.364	0.684			
LAC*Democracy(s-2)	0.686	0.356	**1.927***			
b. Middle East and North Africa						
				43.97%	569	80
ΔDemocracy(s-1)	0.478	0.193	2.471***			
Democracy(s-2)	0.792	0.180	4.387***			
MENA	4.729	7.429	0.637			
MENA*ΔDemocracy(s-1)	0.018	0.544	0.032			
MENA*Democracy(s-2)	-1.581	0.785	**-2.013***			
c. Sub-Saharan Africa						
				43.81%	569	80
ΔDemocracy(s-1)	0.460	0.205	2.241**			
Democracy(s-2)	0.814	0.187	4.362***			
SSA	-6.609	7.451	-0.887			
SSA*ΔDemocracy(s-1)	-0.003	0.478	-0.007			
SSA*Democracy(s-2)	-0.655	0.557	-1.175			
d. South Asia						
				44.09%	569	80
ΔDemocracy(s-1)	0.587	0.200	2.942***			
Democracy(s-2)	0.822	0.186	4.425***			
SASIA	10.851	7.194	1.508*			
SASIA*ΔDemocracy(s-1)	-1.279	0.305	**-4.192***			
SASIA*Democracy(s-2)	-1.377	0.351	**-3.922***			
e. East Asia and Pacific						
				43.58%	569	80
ΔDemocracy(s-1)	0.497	0.196	2.541***			
Democracy(s-2)	0.750	0.184	4.068***			
EAP	-9.646	7.758	-1.243			
EAP*ΔDemocracy(s-1)	0.054	0.651	0.083			
EAP*Democracy(s-2)	0.059	0.661	0.089			
f. OECD (including Greece, Port., and Spain)						
				43.53%	569	80
ΔDemocracy(s-1)	0.549	0.220	2.494***			
Democracy(s-2)	0.765	0.226	3.381***			
OECD	1.378	4.512	0.305			
OECD*ΔDemocracy(s-1)	-0.267	0.322	-0.829			
OECD*Democracy (s-2)	-0.072	0.288	-0.251			

Table 6 – Summary of Results

Hypothesis	Main Results	Developing Countries Different?	Regionally Driven?	Regional Differences?	Extreme Bounds Analysis Results	Accept or Reject
H_{1a}: *Democracies, compared to autocracies, liberalize their capital account transactions.*	Democracy (s-2)→+Δ***Capital***(s)	No	No.	Yes; Latin America, MENA and South Asia	Highly Robust	Accept
H_{1b}: *Political liberalization leads to liberalized capital account transactions.*	ΔDemocracy (s-1)→+Δ***Capital***(s)	No	No.	Yes; South Asia	Robust	Accept
H_2: *Democracies do not differ from autocracies on the liberalization of current account financial transactions.*	Democracy (s-2)→+Δ***Current***(s) ΔDemocracy (s-1)→+Δ***Current***(s)	**Yes**	**Yes. OECD only.**	Yes. Numerous.	**Fragile**	Accept
H_3: *Capital account liberalization leads to reversals in political liberalization.*	Capital (s-2)→-Δ***Democracy***(s) ΔCapital (s-1)→-Δ***Democracy***(s)	**No**	No.	No.	Highly Robust	Accept
H_4: *International financial liberalization in stable autocracies leads to increases in democracy.*	**Null**					Reject
H_5: *World trends in democratization positively influence a country's democratization processes.*	$WD5_{s-1}$→+Δ***Democracy***(s)	No	**Yes. Latin America only**	**Yes. Numerous.**		Reject
H_6: *Increasing anti-capitalist sentiment is associated with decreasing international financial openness.*	$CPVote_{,s-1}$→ -Δ***Capital***(s)	No	No	No.	Robust	Accept
H_7: *Financial openness among leading economies leads other nations to liberalize international finance.*	**Null**					Reject

Figure 1 - Democracy and International Financial Openness
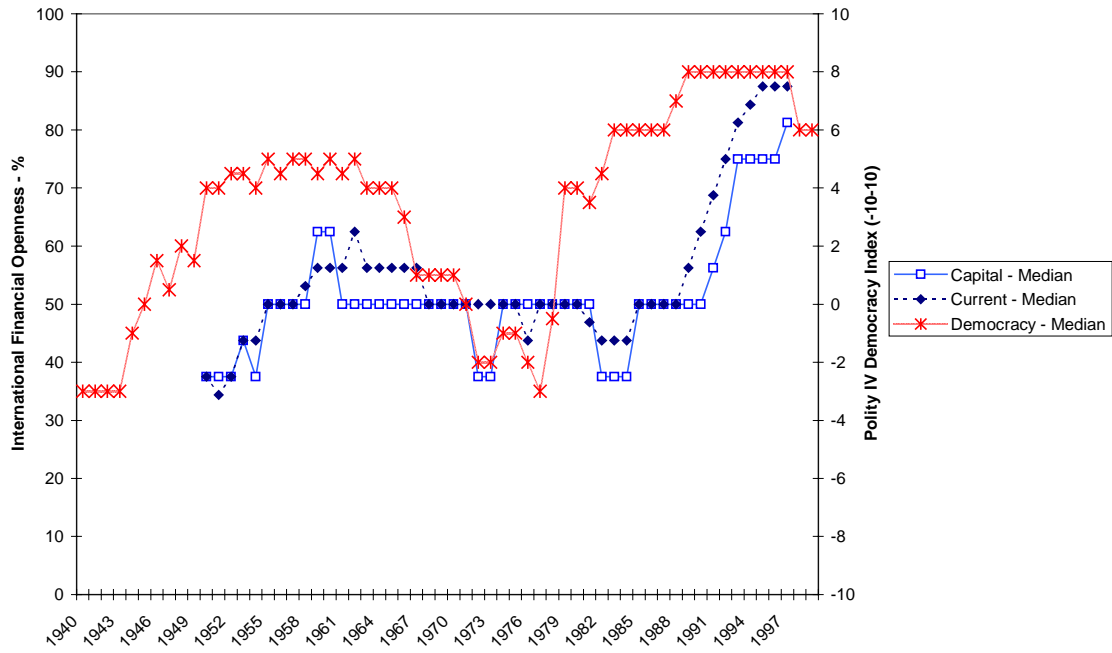**(80 countries, 1940-99)**

Figure 2 - Continuously Democratc Nations (>5) and International Financial Openness
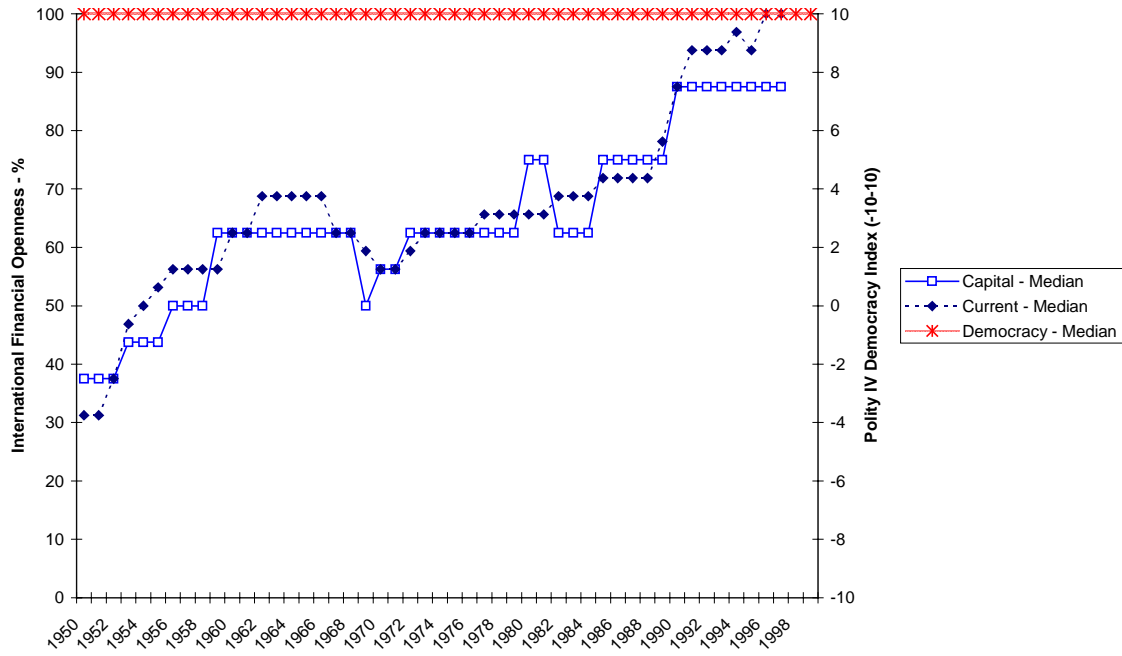**(26 countries, 1950-99)**

Figure 3 - Continuously Autocratic Nations and International Capital Openness
(13 countries, 1950-99)