Democratization and Globalization in Emerging Market Countries:
An Econometric Study*

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ABSTRACT

The argument that global markets impose costs and constraints on governments is now well established. The causal mechanisms whereby these costs are imposed are only partly understood, however. Of particular interest is how global markets react to politics in new and emerging democracies. How do markets evaluate electoral and related events in countries where democracy is just taking root? And what costs do markets impose on democratizing countries? These questions are addressed for four Asian countries. Using political data of various kinds—including a new events data series—and a model from financial economics, we show that in new and emerging democracies politics continuously causes changes in the probability of experiencing different currency market equilibria, one of which connotes high currency volatility and hence, by implication, reduced trade, investment, and national income. The kind of political events that affect currency market equilibration varies cross-nationally depending on the degree to which the polity of a country is democratic and its policy making is transparent. In a new democracy like Thailand, which has relatively established democratic institutions and processes, the probability of shifts to and from market equilibria with socially harmful currency volatility depends on familiar variables like the size of the government’s legislative majority. On the other hand, when democratic institutions are less developed and policy making is more opaque as in Indonesia, the probability of shifts to harmful, volatile currency market equilibria depends on extragovernmental politics such as riots and other forms of social violence. Countries like the Philippines and South Korea represent intermediate cases where both intra and extragovernmental politics affect the probability of experiencing currency market volatility. The results help us better gauge how and the extent to which democratization is compatible with globalization.
Much has been written in recent years about globalization, particularly the economic benefits associated with the rise of global markets. However, recently scholars have questioned whether globalization is compatible with democracy. They have expressed concern that global markets impose costs and constraints on governments in ways that limit the possibilities for democracy. Illustrative is Rodrik’s (2000) “political trilemma.”¹

There is considerable anecdotal evidence that financial markets react in socially harmful ways to political events in new and emerging democracies. Take Southeast Asia, for example. Analysts are convinced that revelations about corruption in the Estrada administration and uncertainty about Estrada’s ability to survive an impeachment trial caused volatility in the Philippine peso, and conversely that the smooth Presidential transition from Estrada to Arroyo produced positive reactions in the Philippine currency and stock markets.² In the case of Indonesia, uncertainty about the secession of provinces, the survival of the President, and other political factors presumably were responsible for the “chaos” in the rupiah-dollar exchange rate (Figure 1). This issue is important because “chaos” in the peso and rupiah has significant economic implications: currency volatility causes reduced trade, which diminishes national income, and contributes to the outbreak of financial crises like those that swept through Asia in 1997.³

But is democratic politics, in fact, responsible for currency market volatility? The answer is not clear. In recent years, much progress has been made in understanding how uncertainty stemming from elections, legislative politics, and other political variables affects the behaviors of currency, equity and bond markets. This research has shown that certain political institutions—for example, particular kinds of electoral systems—mitigate the effects of political
uncertainty on global markets in countries like Germany. But, to date, most of this work has been focused on established democracies in North America and Europe rather than new and emerging democracies like those in the Philippines and Indonesia.

The research that has been done on new and emerging democracies—for instance, the important new book by Haggard (2000)—argues that because of the uncertainty they create about the government’s ability to generate mass support and manage (cooperate with) its opposition, less democratic and opaque political institutions produce more market uncertainty and hence the respective societies experience comparatively greater social costs in financial crises. For example, the costs of the crisis of 1997 were greater in Indonesia than in South Korea and Thailand because of the greater uncertainties created for markets by Indonesia’s nondemocratic institutions. Unfortunately, Haggard and others (e.g., MacIntyre, 2001) focus mostly on this crisis period. They do not analyze the continuous effect which (non)democratic politics may have on currency markets and hence on the economy. Nor do they attempt to characterize, let alone establish empirically, the causal mechanism that links political uncertainty and currency market behavior in new and emerging democracies.

These are the purposes of this paper. Using political data of various kinds—including a new events data series—and a well-established model from financial economics, we show that, in young and developing democracies, politics causes continuous changes in the probability of observing different market equilibria, one of which connotes high currency volatility and hence, by implication, reduced trade, investment and national income. The kind of politics that affects currency market equilibration varies cross-nationally depending on the degree to which a country is democratic and government policy making is transparent. In a new democracy like Thailand, which has relatively established democratic institutions and processes, the probability of shifts to
and from market equilibria with socially harmful currency volatility depends on familiar variables like the size of the government’s legislative majority. On the other hand, when democratic institutions are less developed and policy making is more opaque as in Indonesia, the probability of shifts to harmful, volatile currency market equilibria depends on extragovernmental politics such as riots and other forms of social violence. Countries like the Philippines and South Korea represent intermediate cases; both intra and extragovernmental politics affects the probability of experiencing harmful currency market volatility in these countries.

The discussion is divided into three parts. Part one reviews the relevant political science and economic literatures. It finds in the former some testable propositions about which political variables should affect market behavior. And it not only identifies in economics a useful framework with which to study the impact of democratization on currency markets, it also points out that much work in economics fails to incorporate the potential effects of political information on market trading in this context. Using data from four Asian countries at different stages of democratic development and the model from economics, the propositions are evaluated in part two of the paper. The debate about the compatibility of globalization and democratization is revisited in light of the findings in the Conclusion.

POLITICS AND CURRENCY MARKETS

Only a handful of political scientists have studied politics and currency markets. They have used a variety of research designs for this purpose. Their work provides some valuable insights into how currency traders evaluate politics in new and emerging democracies. Several studies suggest that elections and cabinet negotiations are sources of uncertainty for traders. For
instance, Leblang (2001) recently showed using a strategic probit model that, in developing
countries, governments’ willingness to defend their currency pegs depends on electoral factors
and on their partisan identity. Specifically, governments in less developed countries are more
prone to defend their exchange rates prior to rather than after elections and if they are liberal
rather than conservative. This suggests that currency traders expect fewer successful speculative
attacks on the currencies of emerging democracies when left wing incumbents are running for
reelection. In a parallel study of eight advanced democracies, Bernhard and Leblang
(forthcoming) show that politics influences the relationship between spot and forward exchange
rates. During electoral campaigns, cabinet negotiations, and cabinet dissolutions, forward
exchange rates are a biased predictor of future exchange rates. Frieden (2001) obtained similar
results in a pooled time series analysis of nominal exchange rates in fourteen OECD countries.
He found that electoral periods and indicators of the relative size of certain sectors of the
economy—indicative of the power of particular interest groups—affect average annual rates of
depreciation and coefficients of variation in exchange rates.  

Research on politics and security markets yields complementary findings. Illustrative is
Lin and Roberts (2001) demonstration that returns for certain stocks were affected by
expectations about the outcome of the March 2000 Presidential election in Taiwan. Also,
Pantalzis et. al (2000) discovered that stock price movements—patterns of strongest abnormal
returns—occur in the weeks immediately preceding but not following elections. This is because
in the final weeks of the campaign the resolution of political uncertainty—especially in closed or
“less free” countries—causes stock prices to rise.  

The implications of these findings are that currency markets continuously monitor and
react to information about the workings of new and emerging democracies, particularly with
respect to electoral politics and government formation (maintenance). Electoral outcomes affect the course of economic policy. Therefore where polls are regularly conducted as in countries like the Philippines popular opinions about the electoral prospects of candidates and, conceivably, about the performance of chief executives have a continuous impact on currency trading and on the possibility of currency volatility. Who controls key ministries also affects economic policy and so the information traders receive about cabinet negotiations (survival) also affects their behavior.

As regards the possibly mitigating effects of institutions, previous work has shown that in advanced industrial democracies the proportional representation (PR) election systems associated with consensual forms of democracy tend to buffer currency markets from the effects of political uncertainty; where PR is used information about elections and cabinet stability does not affect currency market behavior. In contrast, majoritarian democracies with their first-past-the-post electoral systems do not insulate currency markets from the effects of political uncertainty (Freeman, Hays, and Stix, 2000). To the extent that this familiar distinction—consensual versus majoritarian (Lijphart, 1999)—applies to new and emerging democracies then our expectations are clear. Thailand and other countries that have PR electoral systems should like Germany not experience any impact of electoral politics and cabinet stability on currency volatility.  

But what of countries like Indonesia where democracy is a just taking root? In such cases, there is a possibility of coups and democratic reversals. Hence political uncertainty is of a different character and perhaps greater magnitude than in young democracies. Research on these cases is more qualitative and suggestive than quantitative and empirical. It suggests that the key determinants of market uncertainty are 1) political transparency or “information symmetry”
between currency traders and policy makers and 2) the government’s ability to generate mass support and manage its opposition.

Transparency means traders can be relatively certain about the content and aims of economic policy and therefore better able to anticipate macroeconomic performance than in countries where policy making is more opaque. In turn, trading should be less susceptible to political speculation and contagion. Less currency volatility should be the result. Of course political transparency is a key correlate of democracy; it is embodied in such variables as press freedom. So there should be a direct relationship between the degree of democratic development and the amount of currency market volatility we observe in countries’ exchange rates. The more transparent and democratic a country the less likely currency markets should be to exhibit socially costly volatility. 9

The second factor has to do with governments’ abilities to implement their policies. Opposition from parties not in the government and from the general population can undermine the effectiveness of economic and other kinds of policies. Uncertainty about the depth of such opposition will make it much harder for traders to anticipate macroeconomic performance. Trading therefore is more susceptible to speculation and contagion creating market volatility and financial crises. Haggard (2000:51) in his account of the Indonesian and Malay experiences in the late 1990s writes:

The absence of institutionalized mechanisms [in the former country] to generate mass support and to manage opposition—as existed [in the latter country] ultimately generated profound uncertainty. When serious opposition emerged, the very fate of the [Indonesian] regime and the property rights associated with it, were at stake. It is no accident that the authoritarian regime facing the most extensive political challenges, and ultimately undergoing the most wide-ranging political change was also the country that experienced the deepest policy uncertainty and most profound [financial] crisis.
The implication is that in more opaque, emerging democracies social unrest—especially riots and other forms of violent opposition to government policy—are indicative of uncertainty about the content and effectiveness of government policy (survival). Where democracy is less developed as in Indonesia, electoral data and assessments of cabinet stability may not have an impact on currency volatility; extragovernmental factors like riots are more likely to be expressions of opposition to government policy and therefore social unrest should be more likely to spawn currency volatility. In contrast, electoral polls and intragovernmental variables such as those that reflect the degree of legislative support for the executive to affect on currency volatility in young democracies like South Korea and Thailand; in these cases, any social unrest may not be indicative of opposition to government policies and hence it may not have any impact on currency markets. In contrast,\textsuperscript{10}

These then are our general expectations about the way politics is linked to currency market behavior within and across new and emerging democracies. But what causal mechanism is at the heart of this linkage? Political science has few answers to this question. The economics literature is more useful in this regard.

\textit{Economic Understandings of Currency Markets}

For many years, economists theorized that economic fundamentals such as the money supply move currency prices. There is, in fact, some evidence that economic fundamentals have a long-term impact on exchange rates, but the respective models have great difficulty explaining short-term currency movements. This is especially true for the period roughly after 1978. For the years following 1978, the forecasting performance of so-called fundamental models is generally
inferior to that of simple random walk models of exchange rates (MacDonald and Taylor, 1992:9ff).

Experimental research in economics has produced a number of finding about currency prices. For example, currency returns are nonstationary (contain unit roots), display periods of marked turbulence and quiescence, and exhibit extreme values more often than one would expect if the series were normally distributed (fat tail property). 11 A formalism that accounts for these properties is the so-called segmented trends or Markov switching model (Hamilton, 1989; Engel and Hamilton, 1990). This model holds that currency markets can be in two or more states. Each state corresponds to a separate dynamic market equilibrium or “regime,” that is, a condition in which traders use a particular decision rule for choosing their portfolio allocations. These states are represented by different statistical models, for instance, two random walks with different drifts and (or) variances. The exchange rate series we actually observe is a mixture of these regimes, the proportions of which are determined by probabilistic transitions between states.

With a first-order Markov switching process, the probability that a currency market is in either regime at time t is a function of the regime it was in at time t-1. One body of economic research argues that changes in fundamentals like money supply render the transition probabilities between two market regimes time varying. Shifts in fundamentals are “informationally relevant” insofar as they produce changes in the probabilities of shifts from one regime to another (Weinbach, 1993; Diebold, Lee, and Weinbach, 1994). Figure 2 is a schematic of this model.

The Markov switching model with time varying transition probabilities is potentially very useful. It is superior econometrically to the linear regression models used by Bernhard and Leblang (2001), Frieden (2001), and other political scientists because, with the regimes
expressed as random walks, the Markov switching model can account for both the observed nonstationarity in currency returns and the fat-tailed distributions in these returns (Meese, 1990:129-30; see also, Kim and Nelson, 1999). Linear regression models to not account for these properties. As a result, hypothesis tests based on the estimates from linear regression models are not as accurate as those based on Markov switching models.  

This is not to say that economists’ applications of the Markov switching model are adequate for our purposes. With a few exceptions, economic research is devoid of political analysis. Applications of the Markov switching model in economics usually make no provision for the possibility that regime change is precipitated by political factors of any kind. Those who apply the model in economics do not recognize that the economic fundamentals on which the transition probabilities depend may be mediated by, if not the result of, political variables. For example, Weinbach’s (1993) argument that the transition probabilities are functions of deviations from monetary fundamentals ignores the fact that such deviations have been traced by political economists to changes in the partisan identity of governments (e.g., Alesina, 1988). The idea that in new and emerging democracies social violence and other kinds of challenges to government authority might be a source of currency regime switching is nowhere to be found in the economic literature.

In general the economic research on exchange rates suffers from two problems. The first stems from its inconsistent treatment of economic and political information. Currencies and other economic variables are treated as random walks suggesting that currency traders process economic information quickly and efficiently. In contrast, when they do appear in models, political variables are represented as dummies or level variables (Bachman, 1992; Blomberg and Hess, 1997; Christodoulakis and Kalyvitis, 1997), which suggests that political information is not
anticipated and processed much more slowly than economic information. Moreover political information arrives in discrete quantities causing one-shot changes in behavior of currency traders. While this distinction may be justified (see below), the rationale behind it is almost never developed in the economics literature.

Second, economists generally study a large number of bilateral exchange rates without making any provision for the potential differences in the impact of political institutions across countries. They do not entertain, let alone analyze, the possibility that the impact of political variables might vary depending on the nature of the political institutions that exist in particular settings; certain political institutions might intensify or lessen the impact of public opinion changes, electoral, and other factors on the probabilities of switches between currency regimes.

The Markov switching model with time varying probabilities thus offers an econometrically powerful framework with which to represent the causal mechanism whereby currency markets evaluate politics in new and emerging democracies. But to realize its potential we need to give it a “politically relevant” interpretation and translate our theoretical expectations into testable propositions about regime switching.

A Synthesis

The Markov switching model can be interpreted in the following way. The log difference in the spot exchange rate follows a random walk because of the way traders form expectations about the content and consequences of government policy. The parameters of the random walk—its mean and variance—embody the (aggregation of the) prevailing decision rule of the traders; the random walk represents an equilibrium in this sense. But traders sometimes change their decision rules. And this, in turn, produces a regime switch: changes in the parameters of the
random walk (a new equilibrium). A random walk with a relatively high variance connotes a trading rule that produces large changes in exchange rates or currency volatility; in a high variance regime traders are comparatively more sensitive to information and this causes wider fluctuations in currency prices. The questions are (1) what factors cause currency traders to revise their decision rules so as to produce random walks with greater variance (volatility)? And (2) what institutions make switches to higher variance (more volatile) random walks more and less likely?

Existing research in political science shows that the behavior of currency traders is affected by reports of domestic political instability and political uncertainty. During times of potentially significant political change—for example, during periods of conflict over the future course of economic policy, uncertainty about the government’s ability to manage its opposition and generate popular support, and (or) uncertainty about the government’s survival prospects—political speculation abounds and the probability that traders make decisions on the basis of speculative rumors increases. We contend that it is the propensity of currency traders to verify these political rumors that distinguishes currency regimes. The tendency to switch to a decision rule based on unverified political rumors is the mechanism whereby politics in young and developing democracies spawns exchange rate volatility.

Recent work by Calvo and Mendoza (2000) and others is suggestive here. Calvo and Mendoza argue that the periods of high volatility that occur in emerging financial markets are caused by rational contagion, a situation in which traders choose not to pay for costly information to verify rumors about future returns on investments. When traders base their expectations on unverified rumors rather than fundamentals, their behavior shifts dramatically over time. Consequently, rumor driven investment decisions produce large capital flows into
and out of emerging market economies and this generates significant volatility in financial markets. If it is more costly for traders to verify political than economic rumors, then rumor driven investment decisions will likely prevail during periods of political uncertainty when these rumors are in abundant supply.

As noted above, much of the economic research on exchange rates treats political and economic information in a way that suggests the former is unanticipated or slowly processed by markets. Though economists rarely justify this differentiation, there is a large literature in political science that suggests it is easier for traders to forecast market prices than political outcomes. This literature argues that politics is inherently ill conditioned and complex and that there are no predictable political equilibria that are stable over the long term (McKelvey, 1976; Schofield, 1993; Richards, 1994). This complexity implies that confirming (or denying) the validity of political rumors will be problematic and costly, even in countries with established democratic institutions where credible political information is readily available. These problems will be magnified in new democracies and particularly acute in countries with nondemocratic political institutions and opaque political processes.

Thus, one can think of the regimes in the Markov switching model as being driven by two separate rumor mills. The first rumor mill is in operation during periods of political certainty (stability). It generates rumors that are largely economic in nature and, given the resources available to traders, relatively cheap to verify. As a result, traders confirm the veracity of these rumors and only respond to those that are true. This mill generates a “fundamentals” regime in which the observed log difference in the exchange rate has a low variance. During periods of potential political instability, the second rumor mill goes into operation. It generates a
much higher quantity of political rumors, which are relatively expensive to verify, and therefore produces a volatile “contagion” regime.

To sum up, the arrival of credible information that signals the potential for political change (instability)—like a large drop in presidential approval, news that a party in the government coalition has defected, or reports of student riots in the capital city—jump-starts the political rumor mill. When this mill begins to operate, traders receive a new mix of unsubstantiated informational shocks (i.e., rumors) that alter their trading rules and this, in turn, switches the currency market from a “fundamentals” regime to a “contagion” regime. This is the mechanism whereby politics in young and developing democracies spawns currency volatility.\textsuperscript{17,18}

When recast in these terms, the political science literature on new and emerging democracies yields the following propositions:

Because, in the face of political uncertainty, traders employ decision rules which do not provide for the verification of political rumors, the probability of currency markets remaining in or switching to high volatility regimes increases

Proposition 1: during electoral periods—especially for elections in which there is a high degree of uncertainty about the election outcome

Proposition 2: the more opinion polls and other sources of political information show declining support for incumbent executives

Proposition 3: the less stable—more uncertainty there is about the survival of—incumbent coalitions are

Proposition 4: the higher the degree of overt popular opposition to the government and its policies (e.g., frequency of political riots)
To the extent that they produce less political uncertainty, certain political institutions will be associated with a higher probability of currency markets remaining in or switching to a fundamentals regime. In particular,

Proposition 5: Among new democracies, the more consensual the form of government, the less impact political uncertainty will have on the probability of currency market switching to a high volatility regime. [Propositions 1-4 will be less likely to hold the more consensual the young democracy.] \(^{19}\)

In emergent democracies, where institutions are just taking root, extragovernmental factors will be the primary source of political uncertainty; the markets in these countries will switch from fundamentals regimes to contagion regimes during periods of social unrest. Intragovernmental factors like cabinet negotiations will have comparatively less impact on regime switches:

Proposition 6: Only proposition 4 will hold for emergent democracies.

It is to a test of these propositions that we now turn.

**RESEARCH DESIGN**

We focus on the US dollar exchange rates for Indonesia, the Philippines, South Korea and Thailand between March 1998 and September 2000. The Philippines, South Korea, and Thailand all had democratic institutions in place throughout our sample period; Indonesia, on the other hand, did not. \(^{20}\) As noted above, however, there are important differences between the young democracies. The Philippines has a strong presidential political system; South Korea has a semipresidential system with both a popularly elected president and a parliamentary prime minister; and Thailand has a pure parliamentary system with electoral institutions that typically
produce large multiparty coalitions. Again, we expect that electoral and, in the cases of South Korea and Thailand, intra-governmental politics will be important in determining the probability of currency regime switching in the new democracies (Propositions 1-4). The somewhat consensual nature of Thai political institutions may mitigate their relationship to some extent (Proposition 5). And, because politics is more opaque, variables like social unrest will have an impact on the probability of currency regime switches in Indonesia (Proposition 6).

Daily exchange rates over the period 3/16/98 – 9/29/00 were used to estimate the models. Over the entire period in which the four countries’ currencies have floated, there are clearly three currency market regimes: a regime for the initial crisis period of extreme volatility, a moderately volatile regime, and a low volatility regime. Because we are estimating a two-regime model, it would be inappropriate to use the full sample. We therefore focused on the last two regimes. The starting point was determined by comparing the one-day currency returns with the average daily currency return over the floating period. Days when the log difference in the exchange rate was more than ten times the size of the average absolute value of the log difference over this period were excluded from the sample. These dates, which are listed in Table 1, are all concentrated in the period before March 16, 1998.

Several types of political variables were employed in the analysis. First, machine coded events data from the IDEA project (Bond, Jenkins, Taylor, and Schock, 1997) were used to construct measures of social conflict. In particular, these data were used to create three variables for the degree of social violence and coerciveness: maximum violence, maximum coercion and Bond et al.’s conception of conflict carrying capacity (CCC), which measures a regime’s ability to regulate contentious interaction without violence. These variables are indicative of the
kind of political uncertainty that exists in the four countries on any given day, especially uncertainty about the abilities of governments to manage opposition and implement their policies. In addition to these variables we also included election period dummies as well as some country specific variables. As Proposition 1 suggests, ceteris paribus, there will be political uncertainty in the run-ups to elections. Hence traders are more likely to receive and no verify political rumors in these periods.\textsuperscript{25}

Because of the importance of the presidency in Philippine politics, we included net presidential approval in our analysis of that case—that is, the percentage of people who approve of the president’s performance in office less the percentage that disapprove. There is substantial movement in this variable over our sample period. In the early part of 1998, the net approval for Ramos stays at or below 20\% until the election in May won by Estrada. In that month, net presidential approval jumps to 60\% and stays at that approximate level for more than a year. In July of 1999, Estrada’s net approval begins a steady decline, reaching a low in December of 1999 of 5\%. Drops in presidential approval should cause political uncertainty and hence a shift to currency regimes in which political rumors are not verified.\textsuperscript{26}

In South Korea, there are two important executive officers: the president and the prime minister. The former is popularly elected while the latter is approved by the parliament. In this semipresidential system, the potential for intragovernmental conflict is always present. We posit that the stronger the president’s party in the parliament, the less likely there will be conflict between the president and prime minister or between the president and the parliament more generally. Under these conditions, presidents will be better able to appoint prime ministers who share their political views (and dismiss those who do not). There will be little doubt about the political influence of the president vis-à-vis parliament. Therefore, we included the percentage
of parliamentary seats held by the president Kim Dae Jung’s party, which during our sample was the National Congress for New Politics (NCNP) until January 20, 2000 and the New Millennium Democratic Party (MDP) thereafter. This seat percentage gradually increases over the course of our sample. When Kim Dae Jung was inaugurated as president on February 25, 1998, the NCNP held 26.4% of the seats in the National Assembly. By March 30, 1999, as a result of by-elections and party defections, the NCNP increased its seat percentage to 35.1%. In the April 2000 elections, Kim Dae Jung’s party (now the MDP) increased its seat share to 42.1%. This should have created less political uncertainty and therefore lowered the probability that traders would use decision rules that connote the contagion regime.\(^{27}\)

Because coalition politics is a central feature of the Thai system we modeled the transition probabilities for the baht as a function of the percentage of seats held by the governing coalition of parties. The Chavalit government whose coalition members held 65% of the seats in parliament collapsed in November of 1997. It was replaced with a bare majority six-party coalition (53%) under the leadership of Chuan Leekpai of the Democratic Party. A little less than a year later, a seventh party joined the coalition thereby increasing its seat share in the parliament to 66%. The Social Action Party withdrew from the coalition in July of 1999 dropping the coalition’s percentage of seats in the parliament to 61%. This may have created enough uncertainty to increase the probability of traders switching to the contagion regime. But, once more, Thailand’s somewhat consensual institutions should be a mitigating factor.

**Results**

The switching models were constructed in a couple of steps. First, pretests were performed to establish the model structure for each country. These tests were conducted in the
context of a fixed transition probability model. They included Garcia’s test for one versus two currency regimes and Wald tests for the equality of means and variances across regimes as well as simple versus Markov switching. Next, the time varying transition probability models were estimated using our political variables. If our propositions hold, these variables should indicate when political uncertainty causes traders to alter their decision rules and choose not to verify political rumors, shifting the market to a high volatility currency regime.

Table 2 contains the results for Indonesia. The constant transition probability estimates and pretests are reported in the first column. The pretests indicate that there are two currency regimes. The Garcia test statistic is statistically significant. Neither drift parameter is statistically significant so the two regimes are distinguished by their degree of volatility. In fact, the second regime is more than twelve times as volatile as the first. The test for simple switching ($H_0: p^{22} = 1 - p^{11}$) is rejected. Currency rates in Indonesia are governed by a Markov switching process where the probability of being in each regime depends on the previous state of the market.

Columns 2-6 of Table 2 report the estimated impact of our political variables on the transition probabilities for the rupiah-dollar currency market. The coefficients $\beta_{10}$ and $\beta_{20}$ are the constants in the logistic expression for $p^{11}$ and $p^{22}$ respectively while $\beta_{11}$ and $\beta_{21}$ are coefficients for the political variable ($x_{1,t-1}$) listed at the top of each column (cf. Figure 2 above). Indonesian politics clearly affects the behavior of currency traders. Individual coefficient and likelihood ratio tests for the maximum daily coercion score are statistically significant. Moreover, the sign of the coefficient is consistent with our expectations. The exchange rate and coercion series are plotted in Figure 3a. It shows that on days when there are highly coercive events, the market is
more likely to persist in the high volatility regime. For example, when the maximum daily coercion score is 2, the probability of staying in high volatility currency regime is .56, giving an expected duration in this regime of a little over two days. When the maximum daily coercion score is increased to 4, the probability of staying in the high volatility regime increases to .88 and the expected duration rises to over eight days (See Figure 3b). No such results are found for the maximum daily violence or for Bond et al.’s CCC measure (cf. fn. 24). Nor did the Indonesian election on June 7, 1999 have an impact on currency trading. Rather, in this case, it is government coercion that causes the change in traders’ decision rules.

The results for the Philippines are contained in Table 3. Again, there are two regimes distinguished by their volatility, the estimated variance in the second regime being almost sixteen times as great as the variance in the first regime. Individual coefficient and likelihood ratio tests show that domestic politics has an impact on regime switching. The election period dummy is statistically significant. During election periods, in the Philippines, the market is more likely to switch out of the low volatility regime. The coefficient on Bond et al.’s conflict carrying capacity variable is positive and also statistically significant in the low volatility regime. (The exchange rate series and conflict carrying capacity are plotted in Figure 4a.) As conflict carrying capacity rises, the market is more likely to persist in this regime. For example, when CCC is .85, the expected duration in the low volatility depreciation regime is a little over 3 weeks. When CCC rises to 1, the expected duration increases to a little less than three months (See Figure 4b). Interestingly, government coercion, maximum daily violence, and Presidential approval do not affect the dollar-peso market.
Table 4 provides the results for South Korea. Again, the Garcia test indicates that there
are two regimes. Since neither drift parameter is statistically significant, the regimes are
distinguished by their volatility with the variance in the second regime more than 17 times that in
the first. The estimated coefficients on the maximum daily violence score and the NCNP/MDP
parliamentary seat percentages are both statistically significant and the estimates have the
expected sign. The higher the maximum daily violence score the more likely the market is to
switch out of the low volatility currency regime. The higher the parliamentary seat percentage of
the president’s party the longer the market will persist in the low volatility currency regime: the
expected duration in the low volatility regime increases from 2.7 days to more than 70 days as
the seat percentage of the NCNP/MDP increases from 25 to 40 (See Figures 5a and 5b). Neither
government coerciveness nor Bond et al.’s CCC variable have any impact on regime switching
in the Korean case.

The results for Thailand are presented in Table 5. As in all of the previous cases, there
are two regimes. The Garcia test statistic is significant at the .01 level. Neither drift parameter is
statistically significant. The currency regimes, therefore, are distinguished by their volatility
with the variance in regime two being eleven times as great as the volatility in regime one.
There is no evidence that extragovernmental variables cause shifts in traders’ decision rules. But
there is evidence that intragovernmental variables cause these shifts. The coefficient on the
coalition seat percentage variable is statistically significant in the low volatility currency regime
and has the anticipated sign. Because of the fluidity of coalitional politics in Thailand, this
variable may serve as a good proxy for the probability of cabinet dissolution. The withdrawal of
the Social Action Party from the government coalition in July of 1999 is an example of this
fluidity. Because the government had a supermajority in this period, the defection was largely inconsequential. However, had the SAP withdrawn when during the first Chuan government, the impact would have been much more significant: the coalition would have lost its majority status in the parliament.

Our results suggest that as the governing coalition’s seat percentage drops, the market is more likely to switch out of the low volatility regime. For example, when the percentage of parliamentary seats held by the governing coalition is 65, the average of the two periods of supermajority coalitions, the market is essentially locked into the low volatility currency regime with an expected duration of close to 460 days. When the percentage of seats drops to 53, which is the percentage of parliamentary seats held by the first Chuan government from November 1997 to November 1998, the expected duration in the low volatility currency regime falls to just 4 days (See Figures 6a and 6b). It should be noted that the likelihood ratio statistic for this model is highly significant (p-value < .001).

Discussion

Overall, our results provide support for Propositions 1, 3, 4 and 6. With regard to Proposition 1, we found that during the period surrounding the Philippine presidential election, the peso-dollar currency market was more likely to switch out of the low volatility currency regime. Given that this election was “strongly contested but highly uncertain” (Haggard, 2000:130), this result is consistent with the idea that electoral politics causes currency traders to adopt decision rules whereby they do not verify political rumors (Proposition 1). We also found
that during the periods when the Thai coalition government’s future would have been most uncertain—that is, periods when the government had a minimal share of the legislative seats and therefore was most vulnerable to defection—the baht-dollar market was less likely to persist in the low volatility currency regime; this evidence supports Proposition 3 but refutes Proposition 5. Proposition 5 was derived from previous research that focused on the advanced industrial democracies, specifically Germany. The different impacts that coalition politics has on the Thai and German currency markets may reflect differences between new and established democracies. Or, it may be attributable to differences in their respective party systems like the presence of strong parties and government coalitions that are a dimension-by-dimension medians with empty winsets in the latter country but not in the former (Laver and Shepsle, 1996; MacIntyre, 2001:118).

In the cases of Indonesia, the Philippines, and South Korea we found support for Proposition 4: during periods of high social violence and/or coercion, traders use decision rules whereby they do not verify political rumors hence currency markets are more likely to remain in or switch to high volatility regimes. The fact that none of our social conflict variables affected regime switching in the baht-dollar market most likely reflects the degree of democratic development in Thailand. Conversely, in the emerging democracy, Indonesia, we found that the fact that maximum daily coercion and not the more familiar political variable, in this case an election dummy, had a statistically significant impact on currency market switching. This result is consistent with Proposition 6. Finally, our results provide mixed support for Proposition 2. Net presidential approval did not have a statistically significant impact on regime switching in the peso-dollar market. But changes in the legislative seat percentage of Kim Dae Jung’s
party—which rose over the period of our sample partly as a result of his popularity—did have a statistically significant impact on currency regime switching in the won-dollar market.

CONCLUSION

Our research both reinforces and develops the existing arguments about democratization and globalization. We agree with, and our results support, Haggard’s (2000) conclusions about the linkages between transparency, political certainty, and financial crises. Because politics generates substantial uncertainty in countries with less democratic institutions and more opaque policy processes, these countries suffer more from volatility in international financial markets. In fact, our estimate of the variance of Indonesia’s high currency volatility regime was more than ten times larger than the estimated variances for the other countries. In this sense then, globalization and democratization in emerging market countries are compatible processes. At the same time, however, because it is difficult to verify political rumors, we have stressed the possibility that the globalization of financial markets will impose some costs on all types of emerging market countries regardless of their specific institutions and degree of democratic development. Our empirical results suggest this is true. None of the developing democracies we studied were able to escape Rodrik’s “golden straightjacket” completely.

In some respects, our analysis is consistent with MacIntyre’s (2001) argument that most developing democracies are susceptible to financial crises because they either have widely dispersed or extremely concentrated veto authority as opposed to the advanced industrial democracies which have distributions of veto authority falling somewhere between the two extremes. Similarly, our empirical results lead us to conclude that most developing democracies are susceptible to currency volatility and that there are significant differences between the
advanced industrial democracies and developing democracies in this regard. Most important, because the nature of coalition politics seems to be more fluid in developing countries, PR electoral systems do not stabilize democratic politics in a way that reduces the uncertainty elections and cabinet dissolutions generate; consequently PR systems do not lessen the potential for politics to create currency market volatility in developing democracies.

MacIntyre’s framework is illuminating. But it is also too simple. Our research shows the value from adding political context to his veto points logic. MacIntyre may be right that the presidential system in the Philippines allows a mix of policy flexibility and restraint that, most of the time, is reassuring to international investors. However, we found that presidential elections create significant currency volatility, which suggests that because of the importance of the presidency in this system these elections can make traders very nervous. Our analysis of the Thai case highlights the important role that the size of governing coalitions plays in determining the amount of political uncertainty generated by coalition politics. The veto power of small parities in governing coalitions (a very important source political uncertainty) is maximized when governments are bare majorities rather than supermajorities. Finally, the South Korean case demonstrates the importance of political context in semipresidential systems. Simply put, intragovernmental conflict, a source of political uncertainty and hence currency market switching, is more likely in these systems when the president’s party is underrepresented in the legislature because parliament is more likely to challenge the president under these conditions.

By focusing on the post-crisis period, we have expanded the scope of research on domestic politics in emerging market countries and the behavior of international financial markets. Currency traders monitor and react to politics continuously. Therefore, research that goes beyond the politics of financial meltdowns, speculative currency attacks, and other “rare
events” is clearly needed (Haggard, 2000; Leblang, 2001; MacIntyre, 2001). We addressed this need by exploring the politics of currency market volatility. While periods of volatility have serious welfare consequences, they are, at the same time, much more frequent and “normal” than the events that consume much of the existing scholarly research.

Finally, we conclude by acknowledging there are many interesting and understudied topics of central importance to the debate over the compatibility of democratization and globalization. Perhaps the most important of these concerns the range and effectiveness of the policies available to developing democracies to help them cope with the constraints imposed by economic globalization. The most popular policy tool, to this point, has been capital controls. Malaysia imposed them in the fall of 1998; Indonesia followed suit in the winter of 2001. As for the effectiveness of these policies, the jury is still out. Most economists believe that Malaysia’s capital controls did not hasten economic recovery in that country, but there are some who disagree (e.g., Kaplan and Rodrik, 2001). It is still too early to pass judgment on the effectiveness of Indonesia’s controls, but to this point they have not reduced volatility in the rupiah-dollar market.

Another line of work stresses the welfare consequences of private versus public information. It argues that, under certain conditions, it is best for public authorities not to disseminate information (Morris and Shin, 2001). Interestingly, the Taiwanese government tried to shut down polls in the lead up to a recent Presidential election (Lin and Roberts, 2001:8). This suggests that public authorities might try to control the flow of political information in order to prevent traders from shifting to decision rules that produce currency volatility. Capital controls can be viewed as an attempt to prevent contagion by limiting the ability of traders to respond to political speculation through currency transactions whereas policies that constrain the
flow of polling information can be seen as an attempt to stop volatility by reducing the
probability of political speculation that takes place at all. Which of these policies is a more
effective approach to controlling market volatility? For those of us who want to see both
national democracy and international markets flourish, questions like this should serve as a guide
for further research.
REFERENCES


FOOTNOTES

1 Arguing by analogy to the Mundell-Flemming conditions for open economies Rodrik (2000) contends that, given the pace and scope of international market integration, countries have to choose between a “golden straight jacket” in which there is little room for government maneuver and global federalism. Only the latter, in his mind, allows for any meaningful form of mass politics or popular sovereignty over the economy.


3 On the link between currency volatility and (reduced) trade see Rose (forthcoming); see also Leblang (2001). The relationship between trade and income (growth) is studied in such works as Frankel and Roemer (1999). The Asian financial crisis had a devastating impact on several of the region’s economies. Annual growth rates in Thailand, South Korea, and Indonesia went from above 5% before the crisis to below –5% in 1998 (Mishkin, 1999).

4 Representative of the burgeoning literature on politics and financial markets in countries in North America and Europe are Roberts (1990), Alesina, Roubini, and Cohen (1997), Bernhard and Leblang (1998, 1999, 2001), Herron et al. (1999), Herron (2000), Leblang and Bernhard (2000), and Lin and Roberts (2001). The extent to which different political institutions insulate markets from the effects of political uncertainty is studied in such works as Freeman et al. (2000) and Hays, Stix, and Freeman (2000). Both studies show that Germany’s institutions have this effect.

5 The work of Haggard, MacIntyre, and others on the political economy of Asian and other developing democracies is discussed in greater detail below.
Bernhard and Leblang (forthcoming) use dummy variables to represent the effect of campaign periods and cabinet politics. In a companion study of forward rate bias, the same authors (Leblang and Bernhard, 2000) employ an EGARCH set-up using dummy variables in the conditional variance expression. Among twenty-five elections, ten have effects on the conditional volatility in the log difference of the exchange rates and eight of these increased conditional variance. Lobo and Tufte (1998) report similar results for a GARCH model of currency movements. Frieden (2001) uses the annual average change and the coefficient of variation in the nominal exchange rate as his dependent variable and employs a simple, pooled cross-section, time series linear regression model in his analysis.

Lin and Roberts (2001) regress individual stock returns on the daily Iowa Electronic Markets contract for Chen in the weeks leading up to the March 2000 election and find that a number of stock returns are affected by this political variable. Pantzalis et al. (2000) also study security prices. Their study is based on the uncertainty information hypothesis of Brown et al. (1988). They argue that the asymmetry of information in closed (“less free”) political systems means that elections resolve more uncertainty than in open (“free”) political systems, especially when the incumbent is defeated.

Unfortunately, most of the well-known comparative works in political science (e.g., Lijphart, 1999, Chapter 4) do not include the Asian democracies. We recognize that the application of concepts like majoritarian and consensual democracy to these countries is somewhat problematic. For example, while Philippine institutions are ostensibly majoritarian, the parties in these countries are transient and weak in comparison to those in the advanced industrial democracies. Nevertheless these concepts provide a useful starting point for formulating
expectations about the impact of politics on currency markets. A related distinction is between presidential and parliamentary democracy. Note however that Leblang (2001, fn. 14) did not find this distinction of much utility in his study of speculative attacks. MacIntyre (2001) argues that the idea of classifying political systems by their number of veto points can be fruitfully applied to developing countries. (Veto points are also related to the consensus-majoritarian distinction.) However, MacIntyre argues that the distribution of veto authority will differ across developed and developing countries. In developing countries this authority will either be extremely concentrated or extremely dispersed. In developed countries the dispersion of veto authority will lie somewhere between these extremes. This means, for example, that in developing countries, the existence of many parties will create a wider dispersion of veto authority than it would, ceteris paribus, in developed countries and hence that the impact of coalition politics on the Thai baht will differ from the impact of coalition politics on the German mark.

9 For instance, Haggard (2000:16ff) contends, “nontransparent political relationships between politicians and particular firms contributed to the economic vulnerabilities [and risk associated with the South Asian financial crisis of the late 1990s].” One of the main arguments of his book is that this crisis “showed the democracies [of that region] to be resilient and has enhanced the cause of economic reform in the region. But…reforms will also require a parallel process of deepening democracy by enhancing accountability and transparency of government…” (Ibid.:3). Political risk analysts also consider transparency and democracy to less prone to market volatility; see, for instance, Howell (2001:24, 230).

10 In a number of places in his book, Haggard (2000:48, 91, 168) stresses that nonelectoral or unconventional forms of political participation like social violence deeply constrain governments’ abilities to cope with financial crises. Again, he argues that Indonesia’s less
democratically developed government was comparatively the least able to cope with such participation. In contrast, in countries like South Korea, political parties openly and constitutionally forged an agreement that reassured financial traders (Ibid.:51, 100ff).

11 DeVries (1992) lists sixteen key experimental facts about exchange rate series. The three most important are the unit root, fat tail and clustering properties. Excess returns in exchange rates are a function of both traders’ abilities to forecast prices and their knowledge of market equilibrium prices. We usually do not know the latter. So it is impossible to interpret price movements relative to the Efficient Market Hypothesis. Randomness in currency prices can be indicative of either market efficiency or of inefficiency.

12 Space does not permit a methodological critique of existing work on democracy and financial markets. Like most empirical studies in political science, Frieden’s (2001) measures, model, and diagnostics do not address let alone capture the three key properties of exchange rates. Hence the hypothesis tests reported in his study are problematic (e.g., the residuals on which they are based are nonnormal). Bernhard and Leblang’s (2001) investigation addresses the unit root property but not the clustering and fat-tail properties. Suffice it to say that GARCH models like those used by Leblang and Bernhard (2000) and Lobo and Tufte (1998) address the clustering property but do not adequately address the fat tail property of exchange rates. For this reason the distributional assumptions on which the authors’ hypothesis tests are based also are problematic (Freeman et al., 2000:459, fn. 20). Hays, Stix, and Freeman (2000) show, among other things, that the residuals from a Markov switching model are not plagued by the kurtosis in the same way as those from a linear regression model.

13 Although we represent our regimes as random walks, we make no claim of rational expectations or of market efficiency (fn. 11). Rather we use random walks because the
experimental work in economics suggests this is a useful way to capture equilibrium decision rules and the model is parsimonious. We lean toward a more behavioral interpretation of financial processes (Schleifer, 2000).

14 Calvo and Mendoza (2000) argue that globalization combined with short selling constraints and performance based incentives that punish poor portfolio performance more than they reward good performance makes contagion more likely. That is, globalization, short selling constraints, and performance based incentives increase the likelihood that it will be an optimal strategy for traders to make changes in their portfolio allocations on the basis of unverified rumors. Short selling constraints place limits on the ability of traders to profit from knowing the true value of future returns and performance based incentives make contagion equilibria stable by increasing the cost of deviating from the herd’s behavior. These incentives make it less likely that the effects of rumors will be undone by price corrections in the market.

15 See Freeman et al. (2000:453-454) for a more detailed discussion of this literature. Of course, the degree to which a country’s politics is unpredictable may be a function of its institutions.

16 If, for example, there were a rumor that several pro-reform ministers in a government were going to be sacked, this might generate pessimistic expectations about the future health of the economy. Regardless of the transparency of a country’s polity, because of the complexities of the cabinet dissolution and formation processes, it would be difficult to verify the long-term political and policy consequences of this rumor were it true. But in countries with more opaque political processes that have limited credible political information available, it would be either very costly or impossible for traders to determine whether there was or was not any intragovernmental conflict that threatened the stability of the government in the first place. In a
more transparent democracy, a rumor like this one could be readily disconfirmed by the (free) press, for instance.

17 Political information that is available to everyone, like a presidential approval poll, is a potential trigger for widespread speculation about the future. A big drop in presidential approval, for example, is the kind of event that is likely to start the political rumor mill by spurring important political commentators to speculate about the future. Because they do not conduct political research, measures of political risk are quite crude and temporally aggregated (Howell, 2001), and political processes are so complex, it will be costly for currency traders to evaluate the quality of these predictions. As a result, traders will maximize their utility by making investments on the basis of unverified rumors.

18 A more detailed exposition of our interpretation of the Markov regime-switching model is as follows. Each regime represents an equilibrium that is defined by a particular trading rule that specifies how traders respond to the arrival of unsubstantiated informational shocks. The low volatility “fundamentals” regime is produced when all traders follow the rule that says verify all rumors, adjust your investment in response to those that are true, and ignore those that are false. This regime is a dynamic equilibrium in the sense that the market persists in it when the above rule is utility maximizing for all traders. This happens when the cost of verifying rumors is low. The high volatility “contagion” regime is produced when traders follow the rule that says change your investments in response to rumors without verifying them.

19 On the insulating effects of consensual democracy in the context of a regime switching interpretation of currency markets, see Freeman et al. (2000:459ff). Leblang and Bernhard (2000) reach somewhat different conclusions: that majoritarian systems like those in the UK and France are less prone to produce political uncertainty because even if their cabinets fell the ruling
parties have a majority whereas more consensual systems like the Swedish and Belgian cases cabinet dissolution necessitates the formation of a possibly new coalition government. Until we have some indication of how seriously Leblang and Bernhard’s model is plagued by nonnormal levels of kurtosis, it will be difficult to assess the meaningfulness of their results. Again, a high (nonnormal) level of kurtosis is a sign of regime switching.

20 For example, the Polity IV scores for Indonesia, the Philippines, South Korea and Thailand in 1998 are 0, 7, 8, and 9 respectively with the low (high) numbers representing the absence (presence) of democratic institutions and procedures (Polity IV Project, 2000).

21 The other option was to estimate a three regime Markov switching model with time varying transition probabilities. Because of the inherent difficulties in estimating these models and the amount of programming it would have required to do so, we chose to shorten the sample.

22 Our sample period thus distinguishes our research from that of Haggard and others, which has tended to focus only on the crisis period. There is, of course, contagion and high volatility in the post-crisis period, but this volatility is not of the same magnitude as that of the crisis period.

23 Each event receives a score of 0, 1, 2, 3, or 4, with 0 representing low violence/coercion and 4 representing high violence/coercion. In the case of violence, a score of 0 is given to events that involve no significant physical force either threatened or used on another. At the other end of the scale, a score of 4 is given to events that involve explicit threats or the use of major physical force. Noncoercive events, given a score of zero, include events that involve no social, economic, or political costs imposed on another. Highly coercive events, which receive a score of 4, involve the use of major and explicit costs, either imposed or threatened on another. Our series for Indonesia, Malaysia, the Philippines, and Thailand are constructed from 56,648; 48,479; 31,708; and 39,339 coded events respectively.
More specifically, Bond et al. define conflict carrying capacity is one minus the proportion of contentious action to all action, multiplied by the proportion of violent to all contentious action. It ranges from 0 to 1. This CCC measure that we use is discussed in detail in Bond et al. (1997:559-562). This measure is refined in Jenkins and Bond (forthcoming).

The dummies are eighty-day periods, forty days up to and including the day of the election and forty days after.

The data is from the Social Weather Station’s special media release (12/22/2000) “Erap Hangs on to +9 net-Satisfaction, As Classes and Regions Polarize,” which is available online at http://www.sws.org.ph/pr122200.htm. In our analysis, missing monthly values were filled in using linear interpolation.

Some observers interpreted the 2000 elections as a setback for Kim Dae Jung because the opposition Grand National Party GNP gained seats at the expense of the UDL, the NCNP/MDP’s coalition partner. For an alternative interpretation, see Haggard (2000:107).

Simple switching models are those in which the probability of being in a particular state is the same regardless of the previous state. García (1998) provides a method for testing the null hypothesis of a single regime by deriving the nonstandard asymptotic null distribution of the LR statistic to obtain critical values.

The expected duration in a regime is $1/(1 - p^i)$, where $i = 1,2$.

Unfortunately, Morris and Shin (2001) make no distinction between economic and political information. Also, as we note above (fns. 16, 17, and 18), there are practical and normative problems in controlling the dissemination of political information, especially in democracies.