HOW DO LONG-TERM INVESTORS “VOTE” IN DEVELOPING COUNTRY ELECTIONS?

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INTRODUCTION

From Vernon’s “obsolescing bargain” (1971) to Kobrin’s (1987) “bargaining hypothesis” and Henisz’s (2000) “policy uncertainty” perspectives, management researchers have sought models to explain political risk and investment behavior related to the divergent interests of multinational corporations (“MNCs”) and host governments in developing countries. But these efforts have not yet produced theoretical models or quantitative empirical evidence to guide our understanding of MNC risk and investment behavior when host government policies and politics are arguably most vulnerable to change, that is, during elections. Transformation since the 1980s of many socialist, military-led and one-party states into democracies with competitive electoral systems only highlights the need for theoretical and empirical study of MNC risk and investment during election periods. We respond with development and testing of a model of election-period MNC risk and investment behavior based on political business cycle (“PBC”) theory more familiar to political economy than management researchers. We find support for our PBC model in analysis of 408 MNC investment announcements worth $199 billion in 18 developing countries holding 35 presidential elections from 1987-2000.

THEORY, MODEL AND HYPOTHESES

Our PBC model appears in Table 1. To build our model, we make two assumptions derived from opportunistic and partisan branches of PBC theory. We assume first that host government incumbent politicians seek to retain office in election years by opportunistically implementing expansionary economic policies to garner voter support, even though such expansion may be detrimental to post-election economy and overall attractiveness for foreign investment (Nordhaus, 1975). The more an incumbent is embattled to retain office, the greater the incentive to engage in such opportunistic behavior (Schultz, 1995). Second, we assume that politicians have partisan preferences embedded in their election-year economic policies. Right-wing politicians champion expansionary policies favoring the interests of investors, while left-wing politicians favor the interests of workers (Hibbs, 1977). With these assumptions, our model proposes that MNCs observe developing country politicians during election years, anticipate these opportunistic and partisan PBC incentives, and moderate their election-year risk and willingness to invest in developing countries based on these PBC considerations.

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Place Table 1 approximately here
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For right-wing incumbents, shifts from likely re-election to a close call election and then a left-wing election victory decrease MNC willingness to invest during election-years. Right-wing incumbents are increasingly likely to be replaced by less investor-friendly left-wing challengers, and those embattled right-wing incumbents are more likely to engage in opportunistic spending sprees to avoid losing. Both partisan and opportunistic PBC considerations decrease MNC willingness to invest, moderately (-,-) in close call scenarios and strongly in left-wing victory scenarios (--,--):

**Hypothesis 1:** Given a right-wing incumbent, MNC investment will decrease as the likelihood of re-election decreases (shifts from likely re-election to close call to switch scenarios).

For left-wing incumbents, partisan and opportunistic PBC considerations oppose rather than reinforce each other as we shift from likely left-wing re-election to close call election and then likely right-wing election scenarios. Increasing prospects of investor-friendly right-wing victory increase MNC willingness to invest, but also increase incentives to stave off right-wing challenges with opportunistic spending sprees, which decrease MNC willingness to invest. These opposing considerations are moderate (+, -) in close call scenarios and stronger in right-wing victory scenarios (++, --). We, therefore, have no à priori basis for determining whether partisan or opportunistic PBC effects will dominate. Accordingly, Hypothesis 2 is formulated in alternative terms. If partisan PBC effects dominate, then we expect election-year MNC investment to increase relative to the base case left-wing-re-election scenario:

**Hypothesis 2a:** Given a left-wing incumbent, MNC investment will increase as the likelihood of re-election decreases (shifts from likely re-election to close call to switch scenarios).

On the other hand, if opportunistic PBC effects dominate, then we expect election-period MNC investment to decrease relative to the base case left-wing-re-election scenario:

**Hypothesis 2b:** Given a left-wing incumbent, MNC investment will decrease as the likelihood of re-election decreases (shifts from likely re-election to close call to switch scenarios).

### EMPIRICAL METHODOLOGY

To test these two hypotheses, we define the following empirical model for estimation:

\[
P_{\text{Count}}_{it} = \beta_0 + \sum_{k=1}^{47} \gamma_k \text{Country}_i + \sum_{r=1987}^{1999} \xi_r \text{Year}_t + \sum_{j=1}^{11} \psi_j \text{Macro}_{it} \\
+ \beta_1 \text{Elec}_it + \beta_2 \text{Rinc}_it + \beta_3 \text{Rinc}^* \text{Elec}_it + \beta_4 \text{AD}^* \text{Elec}_it + \beta_5 \text{AD}^* \text{Rinc}^* \text{Elec}_it \\
+ \beta_6 \text{Elec}_{it+1} + \beta_7 \text{Rinc}^* \text{Elec}_{it+1} + \beta_8 \text{Elec}_{it-1} + \beta_9 \text{Rinc}^* \text{Elec}_{it-1} \\
+ \beta_{10} P_{\text{Count}}_{it-1} + \mu_{it} \tag{1}
\]

The dependent variable, \(P_{\text{Count}}\), is defined as the count of investments projects announced by foreign-domiciled MNCs for developing country \(i\) in year \(t\). To explain \(P_{\text{Count}}\) we first include controls for unobserved effects related to individual countries (\(\text{Country}\)) and years (\(\text{Year}\)). Next, we include 11 macroeconomic and related country control variables (\(\text{Macro}\)), which previous researchers have used to explain the broader attractiveness of countries for investment. These \(\text{Macro}\) terms (and predicted effects on \(P_{\text{Count}}\)) are: External Balance (+), External Debt (-), Per Capita Income (+), Economic Size (+), Economic Growth (+), Inflation (+), Fiscal Balance (+), Recent Default (-), Investment Grade Rating (+), Lack of Political and Civil Rights (-), and Checks on Political Authority (+).
We then include an election-year term, Elec \((\beta_1)\), a 0-1 dummy (1 if it is the year of an election, 0 otherwise) to probe for current year \(t\) effects on \(P\text{Count}\). We next include one-year lead and lagged election-year terms, \(Elec_{t+1}\) and \(Elec_{t-1}\) \((\beta_6 \text{ and } \beta_8)\), to probe for the persistence of PBC effects on \(P\text{Count}\). We next include a right-wing incumbent term, Rinc \((\beta_2)\), a 0-1 dummy (1 if incumbent is right-wing, 0 if left-wing), to control for the partisan orientation of incumbents. When interacted with current year election-year dummy, \(Rinc*Elec\) \((\beta_3)\), and with the one-year lead and lagged election year dummies, \(Rinc*Elec_{t+1}\) and \(Rinc*Elec_{t-1}\) \((\beta_7 \text{ and } \beta_9)\), we can partition current, lead and lagged election-year effects on \(P\text{Count}\) by the partisan orientation of the incumbent.

Two additional variables, \(Elec*\lambda D\) and \(Rinc*Elec*\lambda D\) \((\beta_4 \text{ and } \beta_5)\), deal specifically with MNC electoral expectations. The expectations term, \(\lambda D\), takes on three possible values related to three expected electoral outcomes MNCs consider. If \(\lambda D = 1\) then MNC expectations are that right-wing parties and policies will prevail. If \(\lambda D = -1\) then MNC expectations are that left-wing parties and policies will prevail. If \(\lambda D = 0\) then there is no clear MNC expectation either of a right- or left-wing parties and policies coming to power—a close call. We interact \(\lambda D\) with \(Elec\) and \(Elec*Rinc\) to permit examination of MNC expectations under different partisan incumbents (right-wing and left-wing). A final term in the empirical model is a one-year lagged dependent variable, \(P\text{Count}_{t-1}\). This term acts as a catch-all control for other unspecified past factors influencing current year \(P\text{Count}\).

Hypothesis 1 predicts decreasing annual MNC investment project announcement counts \((P\text{Count})\) as right wing base case scenarios of likely re-election \((\beta_1 + \beta_3 + \beta_4 + \beta_5)\) shifts to close call scenarios \((\beta_1 + \beta_3)\), and then to switch scenarios \((\beta_1 + \beta_3 - \beta_4 - \beta_5)\). A test of differences in this hierarchy reduces to: \(H_1: \beta_4 + \beta_5 > 0\). Hypothesis 2a predicts the dominance of partisan over opportunistic PBC considerations, thus increasing annual MNC investment project announcement counts as left-wing base case scenarios of likely re-election \((\beta_1 - \beta_4)\) gives way to a close call scenarios \((\beta_1)\) and then to switch scenarios \((\beta_1 + \beta_4)\). Hypothesis 2b predicts the dominance of opportunistic over partisan PBC effects, thus decreasing annual MNC investment project announcement counts for left-wing incumbent elections as we move from base case to close call to switch scenarios. A test of differences in these alternative hierarchies reduces to: \(H_{2a}: \beta_4 > 0\) or \(H_{2b}: \beta_4 < 0\).

Data for empirical model terms come primarily from: Thomas-Securities Data Company Project Finance Database (Thomson-SDC, 2003); The World Bank’s Database of Political Institutions and the International Federation of Electoral Systems (DPI, 2005; IFES, 2005); and The World Bank’s World Development Indicators (WDI, 2005). We have cross-sectional (country \(i\)), time-series (year \(t\)) panel data, so we use two panel data estimators: a panel generalized estimating equation (“GEE”) with negative binomial distributional assumptions to handle count data with over-dispersion and to permit clustering (on countries) and robust standard errors for panel heteroskedasticity (Hardin & Hilbe, 2003); and a dynamic panel generalized method of moments (“GMM”) estimator permitting consistent estimates with inclusion of a lagged dependent variable (Arellano & Bond, 1991).

**EMPIRICAL RESULTS**

The mean value of the dependent variable, \(P\text{Count}\), is 2.65 with a standard deviation of 3.40, a minimum value of 0, and maximum value of 19. On average, MNCs announce two to three investment projects in a country annually. The mean value of \(P\text{Count}\) in an election year is
2.60 with a standard deviation of 4.16. At first glance, elections and the PBC incentives they may engender appear to have little impact on the count of MNC investment projects.

The average US dollar value of an investment project is approximately $500 million for an annual dollar value of $1.3 billion in new project announcements for a given country. Though not reported here, preliminary estimations with country, year and Macro controls only yield eight of 11 Macro controls with the predicted sign, six of the 11 with significance at 10% or higher levels, and an overall model coefficient of variation ($R^2$) is 0.56. About 56% of the variance in MNC investment project announcements is explained by these controls alone.

Table 2 reports selected results from GEE estimation of annual $P\text{Count}$ rates and GMM estimation of annual $P\text{Count}$ levels (numbers) after addition of the nine PBC-related terms (and the lagged $P\text{Count}$ term in the GMM). Against the base case scenario of likely right-wing incumbent re-election ($\beta_1 + \beta_3 + \beta_4 + \beta_5 = -0.01$ for GEE and 0.15 for GMM) MNC investment project announcements decrease in close call ($\beta_1 + \beta_5 = -0.73$ for GEE and -1.00 for GMM) and likely switch scenarios ($\beta_1 + \beta_3 - \beta_4 - \beta_5 = -1.45$ for GEE and -2.15 for GMM). These differences are positive and significant ($\beta_4 + \beta_5 > 0.72$, p < 0.10 for GEE and 1.15, p < 0.10 for GMM) consistent with Hypothesis 1. When right-wing incumbents are likely to be re-elected, MNCs do not change the rate of election-year investment project announcements significantly. But when right-wing incumbents are likely to be replaced by less investor-friendly left-wing challengers the rate of MNC investment project announcement drops by 145%, effectively eliminating MNC investment during election years.

Results are similar for elections involving left-wing candidates. Against the base case scenario of likely left-wing incumbent re-election ($\beta_1 - \beta_4 = -0.61$, p < 0.01 for GEE and 0.15 for GMM) MNC investment project announcements increase in close call ($\beta_1 = 0.05$ for GEE and 2.63 for GMM) and likely switch scenarios ($\beta_1 + \beta_4 = 0.72$ for GEE and 6.99, p < 0.10 for GMM). These differences are positive and significant ($\beta_4 > 0.67$, p < 0.10 for GEE and 4.36, p < 0.05 for GMM) consistent with Hypothesis 2a and the dominance of partisan over opportunistic PBC considerations. When left-wing incumbents are likely to be re-elected, MNCs do not change the number of election-year investment project announcements significantly. But when left-wing incumbents are likely to be replaced by more investor-friendly right-wing challengers then MNC investment project announcements increase by approximately seven, which translates into billions of dollars more in foreign investment capital and capabilities during election years.

These PBC effects on MNC investment may persist. A year after elections where a left-wing president results, the rate ($\beta_8 = -0.88$, p < 0.05 for GEE) and level ($\beta_8 = -2.01$, p < 0.01 for GMM) of MNC investment drops significantly and substantially. Rates of MNC investment project announcements drop 88% in the year after left-wing parties win the presidency, again effectively eliminating MNC project investment for the year. PBC considerations may explain MNC risk and investment behavior well beyond election years, particularly in cases where elections lead to unfavorable partisan outcomes.

CONCLUSION

The principal aim of this study was to develop and test a model of MNC investment behavior during increasingly frequent election periods in democratizing developing countries. We
did so using opportunistic and partisan PBC theories, thus showing how management research might benefit from crossing disciplinary borders into political economy. We also bring political economy research into the management mainstream by extending the PBC empirical domain to examine the election-period behavior of MNCs and their strategic managers. They vary the rate and number of investments in plant, property, equipment and capabilities according to PBC considerations, particularly partisan PBC considerations. And these “votes” matter, since MNC investment projects are worth millions or billions of dollars annually and have life-spans measured in years or decades.

Future research should take advantage of the ever increasing number of developing country elections and MNC investments to investigate related issues including how PBC effects on MNC investment during election periods may be moderated by firm-specific factors such as MNC experience in the developing country, MNC political connections, MNC size, scope, and overall investment flexibility. Such future research will broaden and deepen understanding of the divergent interests of MNCs and democratizing host country governments.

REFERENCES


TABLE 1

PBC Theoretical Model of MNC Investment During Election Years

<table>
<thead>
<tr>
<th>Incumbent Partisan Orientation</th>
<th>Right-Wing</th>
<th>Left-Wing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MNC Electoral Expectation</strong>↓</td>
<td>0,0</td>
<td>(+,-,-)</td>
</tr>
<tr>
<td><em>Right-Wing Expected to Win</em></td>
<td>(Right-Wing Base-Case Scenario)</td>
<td>Left-Wing Switch Scenario</td>
</tr>
<tr>
<td><em>Closely Balanced Expectations</em></td>
<td>(-,-)</td>
<td>(+,-,-)</td>
</tr>
<tr>
<td><em>Left-Wing Expected to Win</em></td>
<td>(Left-Wing Close-Call Scenario)</td>
<td>Left-Wing Base-Case Scenario</td>
</tr>
</tbody>
</table>

Predicted direction of MNC investment based on PBC considerations: (Partisan, Opportunistic).

TABLE 2

Key Regression Results: Annual MNC Investment Project Counts Announced 1987–2000

<table>
<thead>
<tr>
<th>Variables ↓</th>
<th>Empirical Models And Estimators →</th>
<th>(1) GEE</th>
<th>(2) GMM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Election Year(Elec [\beta_1])</td>
<td>0.05 (0.51)</td>
<td>2.26 (2.12)</td>
<td></td>
</tr>
<tr>
<td>Right-Wing Incumbent (Rinc [\beta_2])</td>
<td>0.45 (0.45)</td>
<td>2.25* (1.11)</td>
<td></td>
</tr>
<tr>
<td>Rinc*Elec [\beta_3]\</td>
<td>-0.79 (0.81)</td>
<td>-3.63 (2.40)</td>
<td></td>
</tr>
<tr>
<td>Elec*\lambda D [\beta_4]\</td>
<td>0.67† (0.37)</td>
<td>4.36* (2.22)</td>
<td></td>
</tr>
<tr>
<td>Rinc<em>Elec</em>\lambda D [\beta_5]\</td>
<td>0.05 (0.44)</td>
<td>-3.21† (2.08)</td>
<td></td>
</tr>
<tr>
<td>Lead Election Year(Elec_{t+1}[\beta_6])</td>
<td>-0.52 (0.46)</td>
<td>-0.96 (1.46)</td>
<td></td>
</tr>
<tr>
<td>Rinc*Elec_{t+1}[\beta_7]\</td>
<td>0.36 (0.50)</td>
<td>0.43 (1.62)</td>
<td></td>
</tr>
<tr>
<td>Lagged Election Year(Elec_{t-1}[\beta_8])</td>
<td>-0.88* (0.40)</td>
<td>-2.01** (0.60)</td>
<td></td>
</tr>
<tr>
<td>Rinc*Elec_{t-1}[\beta_9]\</td>
<td>0.68 (0.44)</td>
<td>2.15** (0.74)</td>
<td></td>
</tr>
<tr>
<td>Lagged Dep Var (PCount_{t-1}[\beta_{10}])</td>
<td>0.08 (0.08)</td>
<td>0.08 (0.08)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>154</td>
<td>118</td>
<td></td>
</tr>
<tr>
<td>Wald \chi^2</td>
<td>8218.27**</td>
<td>534.55**</td>
<td></td>
</tr>
</tbody>
</table>

† p < 0.10, * p < 0.05, ** p < 0.