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Do Investors Assess the Credibility of Campaign Commitments? The Case of Mexico's 2006 Presidential Race

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Abstract

Do investors assess the credibility of campaign rhetoric? To answer this question, I develop several alternative arguments for how investors might consider candidates' policy platforms and apply them to Mexico's 2006 presidential race. Statistical analysis of polling trends and the Mexican stock market shows that rising electoral uncertainty lowered market returns, while rising support for either the left-leaning Andrés Manuel López Obrador (PRD) or the market-friendly Felipe Calderón Hinojosa (PAN) reduced market volatility. These findings reveal that investors discounted López Obrador´s left-leaning rhetoric but they did not ignore the effect of a tight race on the value of their assets.

Resumen

¿Los inversionistas toman en cuenta la credibilidad de la retórica de las campañas electorales? Para responder esta pregunta, desarrollo en este artículo una serie de argumentos alternativos acerca de cómo es que los inversionistas podían evaluar las plataformas de campaña de los candidatos, y aplico estos argumentos al caso de la campaña presidencial de México en 2006.

El análisis estadístico de las preferencias electorales y de las tendencias de los mercados de valores, muestra que la creciente incertidumbre electoral disminuyó los retornos del mercado, mientras que el incremento en apoyo para cualquiera de los candidatos puntero, López Obrador (del partido de izquierda PRD) o Felipe Calderón (del partido de derecha PAN), redujo la volatilidad de los retornos. Estos hallazgos revelan que los inversionistas descontaban de sus cálculos la retórica mantenida por el candidato de la izquierda, López Obrador, pero que no ignoraban el efecto que tendría una comptenecia cerrada sobre el valor de sus inversiones.

Introduction

After nearly two decades of progress on market reforms, Mexico's 2006 presidential race raised questions about the country's future economic policy trajectory. The leading contenders, Felipe Calderón Hinojosa of the right-leaning Partido Acción Nacional (PAN) and Andrés Manuel López Obrador of the left-leaning Partido de la Revolución Democrática (PRD), faced off over the best way to achieve long-term economic growth. While Calderón pledged to continue the market-friendly policies of outgoing President Vicente Fox (PAN), López Obrador proposed increased state involvement in the economy to generate jobs and growth.

This was not the first time that position-taking during a Mexican election process was couched in terms of preferences toward the neo-liberal economic model. In 1988, Cuauhtémoc Cárdenas, founder of the PRD, challenged the then hegemonic Partido Revolucionario Institucional (PRI) and its candidate Carlos Salinas Gortari on similar grounds. Yet, two things distinguish the 2006 presidential race from prior years. First, there was a possibility that the left-leaning PRD could win.[1] Second, López Obrador´s anti-market rhetoric in a context of unpredictable policy results from left-leaning administrations in Latin America more generally raised questions about whether he would act upon his promises if elected. Venezuela's Hugo Chávez (Movimiento Quinto República-MVR) had dramatically increased the level of state presence since coming to power in 1998, as had Argentina's Néstor Kirchner (Partido Justicialista–PJ) since 2003. Bolivia´s Evo Morales (Movimiento al Socialismo-MAS) had followed an interventionist policy route since his January 2006 inauguration.

Mexico's economic debate amidst Latin America's leftward policy shift raised the profile of its presidential race among investors. López Obrador's anti-neo-liberal economic rhetoric and popularity should have frightened investors nervous about radical changes to Mexico's policy trajectory. Yet, for every Kirchner, Chávez and Morales there has been a Lula, Vázquez and Bachelet. Brazil´s Luiz Inacio "Lula" da Silva (Partido dos Trabalhadores-PT) and Uruguay's Tabaré Vázquez (Partido Socialista-PS) have both maintained the market policies of prior administrations. Chile's Michelle Bachelet's Partido Socialista (PS) has long accepted a neo-liberal economic approach. In such a context, López Obrador might have been likened to a Lula rather than a Chávez, reducing investor concern.

This article examines Mexico's 2006 presidential election and investor attitudes toward the candidates' policy promises and their chances of winning. Specifically, I pose two questions. First, were investors concerned

[1] In the months preceding the January 2006 campaign kick-off, many pollsters showed López Obrador ahead of both Calderón and the PRI´s Roberto Madrazo Pintado.

about a leftward policy shift in the case of a López Obrador victory? Second, did prior beliefs about López Obrador affect investment strategies during the race? To answer these questions, I develop a series of arguments about how investors would respond to shifts in the chances of victory of the candidates during the 2006 presidential campaign under several views about the risks associated with a López Obrador win. Rather than relying solely on scholarly research on the effect of politics on markets which have tended focus on industrialized nations, I also turn to market research on the expected market impact of the Mexican presidential race conducted by investment banks and independent market research firms to develop the alternative arguments considered here.

This study differs from most prior analyses of the effect of elections on markets in that it draws from both theoretical and practical research. It also differs in its focus on Mexico, an emerging market nation. To conduct the analysis, I proceed like so: First, I describe the Mexican election campaign and the candidates´ policy positions. Second, I review polling trends to show that the outcome was far from certain. I then discuss the variety of possible investor attitudes toward the candidates found in scholarly and market research and develop a series of alternative arguments about the nature of investor interest in the Mexican election. In the sixth section, I discuss the variables and data used to evaluate the arguments statistically in the seventh section. I then conclude.

1. The 2006 Mexican Presidential Campaign

Mexico's 2006 presidential elections were held on July 2.[2] The presidential campaign began on January 17 and lasted until Wednesday, June 28. The election process, including the formal campaign season (January 17–June 28), the vote (July 2), the formal vote count by the Instituto Federal Electoral (IFE) (the week of July 3), the adjudication of complaints against the election by Tribunal Electoral del Poder Judicial de la Federación (TEPJF) by August 31, the certification of the final vote and the declaration of the winner by the TEPJF by September 6, and the inauguration of the new president on December 1, lasts a lengthy 10.5 months.

Five candidates registered to compete in the 2006 presidential race. On the right, Felipe Calderón Hinojosa represented the Partido Acción Nacional (PAN). On the left, Andrés Manuel López Obrador represented the Partido de la Revolución Democrática (PRD) who was joined in coalition by the Partido del Trabajo (PT) and the Partido Convergencia (Convergencia). In a relatively more centrist position, Roberto Madrazo Pintado represented the Partido Revolucionario Institucional (PRI) and was joined in coalition by the Partido

[2] Mexico's presidents are elected every six years.

Verde Ecologísta de México (PVEM). Two other small parties ran candidates as well. On the center-right, the newly formed Partido Nueva Alianza (PANAL) ran Roberto Campa Cifrián as its candidate, while on the left Patricia Mercado represented the newly formed Partido Alternativa Socialdemócrata y Campesina (Alternativa). Mexican electoral law stipulates that newly formed parties must compete alone in their first national race.

The PANista Calderón's platform highlighted the need to maintain macro-economic stability to attract foreign investment that would create jobs, assure economic growth and reduce poverty. During the course of the campaign, Calderón reinvented himself as "El presidente del empleo" or "The Employment President". Calderón also focused on how improvements in governmental transparency, the rule of law and legal system, and public security would help attract foreign investment. Attention to macro-economic stability was used to distinguish Calderón from López Obrador who the PAN portrayed as someone who would undermine the government's achievements on this front. Calderón and his policy team expressed their support for economic reforms in printed materials and in meetings with private investors. In a document sent to leading television broadcaster *Televisa*, Calderón outlined his support for fiscal, energy, labor, social security reform (Calderón Hinojosa, 2005). He also highlighted the need for targeted social spending programs, scholarships to keep children in school, housing programs that provide subsidized loans to the lower classes, education spending to improve citizens' economic prospects.

López Obrador advocated an increased role of the state in the economy to beef up job creation and increase economic opportunities and growth. López Obrador's campaign highlighted Mexico's wide income disparities and his principal campaign slogan "Primero los pobres" or "The Poor First" emphasizes this point. Infrastructure development was seen as a way to generate jobs and stimulate the economy (López Obrador, 2005a). He claimed that he would reorient and increase spending on social programs, education and infrastructure development, generating the funds for such changes through a crack-down on tax evasion by businesses and elites and fiscal austerity and a reduction in redundant governmental spending and waste. His policies were laid out in the television program "Diálogos por México" broadcast on *Televisa* and in his book (López Obrador, 2005a, 2005b). López Obrador also rejected structural reforms preferred by investors and was known for complaining about the Banco de México's independence and its traditionally tight monetary policies and high reserve levels that he said could be used to help foster economic growth.

The PRI's Roberto Madrazo campaigned on a more centrist position, highlighting the need for improvements in public security to distinguish himself from the other two contenders (Madrazo Pintado, 2005a, 2005b). Madrazo and his campaign team also expressed an understanding of the importance of foreign direct investment and structural reforms to attract investors, including fiscal, social security and energy reform (Madrazo Pintado, 2005a, 2005b).

2. Polling Trends during the Mexican Campaign

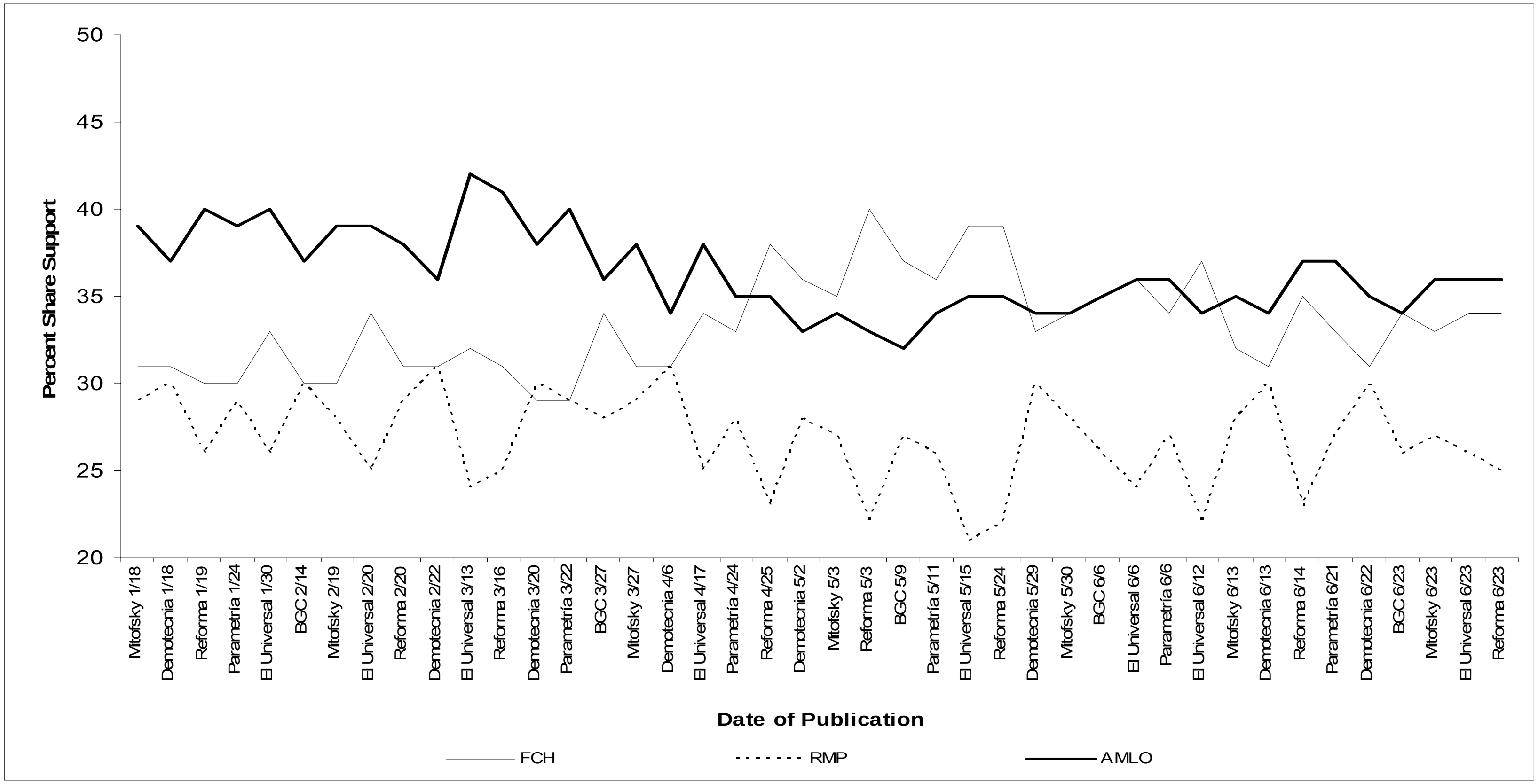
Polling data was regularly available during Mexico´s election campaign until the June 23 ban on its public dissemination. Figure 1 shows polling trends between January 18 and June 23, 2006. The left-leaning López Obrador (PRD) began the presidential campaign with a sizeable lead, depending on the poll, over the market-friendly Calderón (PAN). During the last half of January 2006, López Obrador counted between 6% and 10% more expected votes than Calderón, while the PRI's Madrazo held his own against Calderón.

López Obrador's lead continued into mid-March when his fortunes began to change after a key event during his campaign. During a rally in the State of Oaxaca, he referred to incumbent President Fox as a "chachalaca", a small bird with a high-pitched chirp. The statement was widely seen as disrespectful of the popular president and his office and democratic institutions more generally. The PAN seized upon this opportunity and ran several campaign ads likening López Obrador to Venezuela's President Chávez who at the time had been speaking out in favor of López Obrador and against President Fox and his PAN for their ties to the US. The statement is widely believed among pollsters to have triggered the rise in Calderón's support and decline in López Obrador's. Figure 1 shows the effect of this event playing out from mid-March until mid-May, after the effect of López Obrador's decision not to participate in the first presidential debate on April 25 had moderated.

From mid-May, the election scene became much more competitive as the "chachalaca" comment and campaign ads against López Obrador became further away in voters' minds. In the week of June 23, most public opinion polls showed that the race was too close to call, with the difference between the two candidates within statistical margins of error. Pollsters were correct that the race was tight. No pollsters conducting exit polls on July 2 released formal statements of who they thought has won as well. IFE was forced to forgo announcing a final result, preferring to wait until it could conduct its full count later that week. On July 6, IFE announced that Calderón had won the most votes according to its count, though the margin was very narrow. The final, formal count was given in late August by the TEPJF who announced, after its adjudication of complaints against the election process, that Calderón posted a narrow victory, winning with just 35.9% to López Obrador´s 35.3% votes.

FIGURE 1

POLLING TRENDS FROM SELECTED POLLSTERS PUBLISHING IN MEXICO'S MAJOR NEWSPAPERS OR MEDIA OUTLETS FOR MEXICO'S THREE MAIN 2006 PRESIDENTIAL CONTENDERS, JANUARY 17-JUNE 23



Note: FCH=Felipe Calderón Hinojosa (PAN); RMP=Roberto Madrazo Pintado (PRI); AMLO=Andrés Manuel López Obrador (PRD). Mitofsky=Consulta Mitofsky, published with *Televisa*; Demotecia=Demotecnia, published with *Milenio*; Reforma=*Reforma*, published with *Reforma*; Parametría=Patrametría, published with *Nuevo Excelsior*; El Universal=*El Universal*, published with *El Universal*; BGC=Beltrán y Asociados, published with *La Crónica de Hoy*.

3. Financial Market Research and Mexico's Presidential Election

Investors were kept appraised of every twist and turn of the election through investment bank research and independent research houses. Major financial institutions´ research divisions wrote about the elections to keep their clients informed. Beginning in January 2006, Credit Suisse´s Economics Research Group wrote seven long reports about the elections, including reports on the candidates' likely policies if elected, the expected electoral outcome, and how the process and the outcome would affect investment interests.[3] This group also made frequent comments about electoral trends in their daily reports, as well as in frequent reports from other sales side areas such as Fixed Income Research. Likewise, Bear Sterns´ Equity Strategy Research Team wrote nine larger reports on the elections and their impact on equity markets, beginning in 2005, and supplemented them with regular comments on the election process in other more frequent publications.[4] Independent research house Medley Global Advisors wrote eleven reports on the elections, starting in January 2006.[5]

Research analysts spent considerable time examining the top three candidates' relative policy promises and the chances that they would follow them were they elected to office.[6] Some research teams wrote very lengthy reports on the election polling trends, in order to justify their predictions about the ultimate outcome, with some coming to the conclusion that Calderón was the most likely victor,[7] and others that López Obrador would carry the day.[8] As the race wore on, most analysts began to conclude that it would be very tight and that it was getting increasingly difficult to predict a winner.[9] Some wrote reports assessing IFE´s capacity to call a close race.[10] Credit Suisse took surveys of major investors to see how they thought about the election, and who they thought would win.[11]

The attention to the elections suggests that investors were concerned about the outcome. It is easy to assume that, given his anti-neo-liberal economic policy rhetoric, the prospect of a López Obrador victory was what raised most concern. Indeed, bank research would seem to support this conclusion. In February 2006, for example, Bear Stearns downgraded Mexico from market weight to underweight based on the prospect of a López Obrador

[3] See Credit Suisse (2006a, 2006b, 2006c, 2006d, 2006e, 2006f, 2006g).
[4] See Bear Stearns (2005a, 2005b, 2005c, 2005d, 2006a, 2006b, 2006c, 2006d, 2006e).
[5] See Medley Global Advisors (2006a, 2006b, 2006c, 2006d, 2006e, 2006f, 2006g, 2006h, 2006i, 2006j, 2006k).
[6] Bear Stearns (2005b, 2005c, 2005d, 2006a, 2006c), Medley Global Advisors (2006g, 2006h).
[7] See, for example, JP Morgan (2006).
[8] See Bear Stearns (2006b) for an excellent analysis early in the campaign.
[9] See Credit Suisse (2006e) and Medley Global Advisors (2006b, 2006d, 2006j).
[10] See, for example, Medley Global Advisors (2006f).
[11] See Credit Suisse (2006c).

victory (Bear Stearns, 2006e). However, other evidence suggests that investors were not as worried about the race. Credit Suisse expressed skepticism that López Obrador could change institutions guaranteeing the independence of the central bank, even though it explained that locals —that is domestic investors— did not share this opinion (Credit Suisse 2006f). Mexico´s strong fundamentals, such as its improving debt portfolio, low current account deficit, steady growth rates, and low inflation, moderated concerns about a López Obrador win (Credit Suisse, 2006f).

The level of investor curiosity about the election amidst conflicting evidence about the intensity and direction of concern raises the question as to what was the true position of investors. Were they concerned about the election out of fear of a shift in economic policy were López Obrador do win? Were they simply waiting for an investment opportunity once the election was over, regardless of who won?

4. The Scholarly Debate about Politics and Markets

Scholars have long argued that the partisan composition of government can have implications for the economic performance of nations and thus investment strategies. Hibbs (1987) and Alesina and Rosenthal (1995), and more recently Herron (2000), Franzese (2002) and Fowler (2006), for example, show that right-leaning parties that represent middle and upper class constituents tend to favor policies that support macro-economic stability and low inflation; left-leaning parties, whose constituents are from the working classes, push for policies that support redistribution and employment. Extending these observations to currency, financial and stock markets, scholars have shown that investors tend to prefer policies supporting macro-economic stability, often coming to the conclusion that investors prefer parties on the right. For example, Leblang (2002) shows that speculative attacks are more likely under left-leaning regimes. Leblang and Mukherjee (2005) and Leblang and Mukherjee (forthcoming) show that partisan politics affect stock market volatility.

That political processes like elections are the principal catalysts for changes in the policy orientation of governments has led scholars, like financial market research analysts, to focus considerable attention on election cycles and how they affect different asset classes.[12] Elections pit a diverse set of candidates and thus policy options against one another, raising the chances of partisan turnover in government and policy change. Echoing the concerns of financial market research analysts, Mauser and Fitzsimmons (1991), for example, discuss the negative consequences of left-leaning candidates on foreign exchange rates in Canada during federal elections. Martínez and

[12] Scholars like McGillivray (2003) also study how political institutions affect markets.

Santiso (2003) show how the rise in support for the leftist Luiz Inacio “Lula” da Silva in Brazil during the 2002 presidential campaign negatively affected Brazilian asset prices. Block, Schrage and Vaaler (2003) discuss the effect of partisan policy commitments during election periods on bond spreads, emphasizing the negative effect of left-leaning candidates on markets.

However, just as in several of the financial market research examples above, several scholars have shown that the uncertainty inherent to electoral processes, rather than partisan preferences, raises investor concern. Bernhard and Leblang (2002) found that as electoral uncertainty in several industrialized nations rose, so too did risk premiums on assets. In a study of the 2002 US presidential race, Bernhard and Leblang (2006) found that investors prefer policy continuity, more so than an uncertain policy future, even if this implies left-leaning rule. Though there have been markedly few studies of the effects of elections on markets in emerging market nations, in their study of the effect of public opinion polls on the Brazilian stock market during the 2002 presidential race, Jensen and Schmith (2005) find that electoral uncertainty, more so than rises in Lula’s support, raised stock market volatility.

Just as in the variety of conclusions drawn about the prospects of a López Obrador victory on assets described in the financial market research above, Bernhard and Leblang (2006) note that for every study showing that politics matter for markets, others show they do not. That studies of politics and markets in the financial and scholarly worlds sometimes produce contradictory findings should not be too surprising; many are large cross-national academic studies are limited to industrialized nations, while others study one election period in single nations. Even so, most academic studies of politics and markets have one thing in common: they treat left and right-leaning partisan policy preferences as understood, fixed and predictable. However, this assumption is problematic in emerging market nations, as shown in the bank research above, because in these countries parties have often shifted policies upon taking office. Along these lines, scholars have shown that the increasing globalization of trade, services and capital markets have limited the policies available to governments (Mosley, 2003; Simmons, 1999; Strange, 1996; Wibbels, 2006). In Latin America, both scholars and investors have noted that left-leaning parties have sometimes adopted neo-liberal economic reforms (Remmer, 1998, 2002; Stokes, 2001; Weyland, 1996).

The variety of conclusions drawn by financial market analysts and in scholarly research raises questions about how investors think about the policy credibility of candidates when making investment decisions, particularly in emerging market nations. If investors consider elections in some larger political context and develop beliefs about the likelihood that candidates will push for the policies they campaigned on, they should face election cycles in emerging market nations with different attitudes than they would those held in industrialized nations. Simply put, investors might evaluate not only the chances that left-leaning and right-leaning candidates have of winning elections but also the likelihood that they will stick to policy promises once they have assumed office. In the following section I develop several alternative arguments to get at this point.

5. Four Alternative Arguments about Election Campaigns, Polls and Markets

Based on the financial market and academic research above, there are four possible arguments for how investors might have reacted to shifts in the prospects of a left-leaning López Obrador or a market-friendly Calderón victory. The first argument, which I refer to as *A1: Market Unique*, assumes that investors treat all elections as unique political events. In this case, investors´ assessments of past events, like elections in Brazil or Venezuela, would not affect how they think about the elections or the policy promises made during the campaign. Accordingly, and in line with assessments made by Bear Stearns and arguments made by Mauser and Fitzsimmons (1991), Martínez and Santiso (2003) and Block, Schrage and Vaaler (2003), investors should consider López Obrador as a threat to the value of their assets, with any signs that the left-leaning López Obrador might win the election undermining investor confidence and leading to lower returns and increased market volatility. *A1: Market Unique* has the following testable expectations:

> *Expectation a:* Electoral uncertainty will lead to lower markets returns and increased market volatility.
> *Expectation b:* Increasing probabilities of a victory by the left-leaning López Obrador will lead to lower market returns and increased market volatility.
> *Expectation c:* Increasing probabilities of a victory by the market-friendly candidate Calderón will lead to high market returns and lower market volatility.

The second argument, *A2: Market Context*, considers whether investors treat elections in a larger political context. In line with arguments by Credit Suisse and by scholars studying how economic globalization has limited the economic policy choices of left-leaning leaders in the developing world (Mosley 2003, Simmons 1999, Strange 1996, Wibbels 2006), the fact that Brazil's left-leaning President Lula as well as several other new left-leaning presidents in the region had honored neo-liberal economic policies demonstrates that presidents in the region are likely to follow market-friendly policies once in office, even if electoral strategy directs them to declare otherwise during the campaign. In this context, investors would assess campaign rhetoric as non-credible and thus not see left-leaning contenders as a threat to the value of their assets, leaving them indifferent between candidates favoring diverse policy positions on the economic policy continuum. In terms of the three testable expectations, *A2: Market Context* predicts that electoral uncertainty and rises in the probability of a López Obrador or a Calderón victory will have no effect on market returns or volatility.

The third argument, called *A3: Market Preparation*, presents a variation of *A2: Market Context* but where past experience and recent regional policy trends have taught investors a different lesson. Investors do not take each electoral cycle as a unique political event and have learned to protect themselves from left-leaning leaders ahead of elections. Instead of comparing López Obrador to Lula, investors see him as Chávez and find his statist policy promises credible threats to investments. However, under this scenario investors need not react to shifts in the prospect of a López Obrador victory in real time, that is, during the campaign as those nervous about his victory it would have protected themselves prior to or, at the very least, early in the presidential race. *A3: Market Preparation* thus predicts that electoral uncertainty leading up the election and rises in the chances of a left-leaning López Obrador victory will have no affect market returns or volatility. However, rises in the probability of victory by the market-friendly Calderón will increase returns and reduce market volatility.

The fourth argument, *A4: Market Uncertainty*, outlines a situation where investors are concerned about uncertainty surrounding the election outcome rather than about who might win. This argument is in line with studies like those by Bernhard and Leblang (2002) and Jensen and Schmith (2005) who focus attention on how uncertainty inherent to election processes affects markets. In Mexico, a tight race scenario, post-election violence, or legal proceedings that delay election results would be of most concern to investors. Investment bank research supports this point. Credit Suisse wrote in early May 2006: "…we think that it is virtually impossible to make any prediction about the potential twists and turns in vote intentions …we think that price volatility will remain high in the coming weeks…" (Credit Suisse, 2006e). In February 2006, Bear Stearns wrote: "…given the prospect that Andrés Manuel López Obrador would win the presidential election —or contest its results— we saw political risk as high" (Bear Stearns 2006e). This argument thus predicts that electoral uncertainty will lower market returns and raise market volatility, while any rises in support for either López Obrador or Calderón will raise returns and reduce volatility.

Table 1 summarizes the arguments and their joint testable expectations. The four alternative arguments are designed with the purpose of distinguishing between the expected behavior of investors to pre-election polls under different investment contexts and under different expectations that candidates will adhere to their campaign rhetoric and push for their stated policy objectives should they win. Distinguishing between the alternative arguments requires the empirical evidence jointly to support one argument's three testable expectations.

TABLE 1
JOINT EXPECTATIONS FOR THE FOUR ALTERNATIVE ARGUMENTS

	EXPECTATIONS					
ARGUMENT	*A. RISES IN ELECTORAL UNCERTAINTY*		*B. RISES IN LEFT-LEANING LÓPEZ OBRADOR'S SUPPORT*		*C. RISES IN MARKET-FRIENDLY CALDERÓN'S SUPPORT*	
	RETURNS	VOLATILITY	RETURNS	VOLATILITY	RETURNS	VOLATILITY
1. MARKET UNIQUE	LOWER	HIGHER	LOWER	HIGHER	HIGHER	LOWER
2. MARKET CONTEXT	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE
3. MARKET PROTECTION	NO CHANGE	NO CHANGE	NO CHANGE	NO CHANGE	HIGHER	LOWER
4. MARKET UNCERTAINTY	LOWER	HIGHER	HIGHER	LOWER	HIGHER	LOWER

6. The Variables and Data

The dependent variable of concern is market reaction. Although there are several asset classes that can respond to political events, I focus here on the Mexican stock market as a measure of how investors think about how politics will affect the future health of the economy and the value of their assets. Reliance on stock market prices to measure investor attitudes toward politics and candidates is not new (Herron, 2000; McGillivray, 2003). Following Jensen and Schmith (2005), I measure this variable as the daily difference in the log of the Morgan Stanley Capital Index for Mexico measured in US dollars. This index controls for domestic inflation trends and is comparable to a more general Emerging Market index used as a control for general market trends in similar assets across countries that compete for similar investors.[13]

A quick look at these indices during the election campaign shows that Mexican stock market underwent considerable variation in returns and periods of volatility during this period. Figure 2 shows the Morgan Stanley Capital Index

[13] Available at: www.msci.com. All data used in the analysis available upon request.

for the Mexican Stock Market and compares it to the Morgan Stanley Capital Index for Emerging Market Nations. Though following Emerging Market trends, as one would expect, the Mexican stock market increasingly underperformed compared to emerging market nations. The Mexican stock market also showed considerable volatility during this period. The biggest changes in performance and volatility appear to begin in early April and continue until Friday, June 30.

FIGURE 2

THE MORGAN STANLEY CAPITAL INDEX FOR MEXICO AND EMERGING MARKET NATIONS, JANUARY 2 – JUNE 30, 2006

There are two principal independent variables of concern: the level of electoral uncertainty and the change in popularity of the two leading candidates. I measure the percent share of support expected for López Obrador or Calderón using polling data. Mexico´s Instituto Federal Electoral (IFE) required all public opinion polls, including results, method of analysis, and client paying for the poll, conducted during the election campaign that were released to the public to be formally filed with that institution.[14] In the case that IFE´s list was incomplete, I compared all polls reported to that institution with those collected by the Asociación Mexicana de Agencias de Investigación de Mercado y Opinión Pública (AMAI) and the Consejo de Investigadores de Opinión (CIO).[15] These sources gave me a total of 76 polls released during the campaign by 16 different private firms or newspapers with their own polling departments. Pooling the data produced 54 separate polling observations.

Four issues complicate the use of public opinion data. Polls were not released on every day that markets were open. Sometimes, several days or even a week passed before new polling information was released to the public. Following Jensen and Schmith (2005), I assume that market actors use any polling evidence available to them, and thus rely on the same information for multiple days, until they can update this information when they have new polls. This means that I reproduced the latest polling results for each market day until new information was available. Also, sometimes more than one poll was released on a specific day, while some polls were released on weekends or holidays. Results for polls released on the same day were averaged. In the case that a poll was released on weekends or holidays, they were either used for the subsequent market days when no new polls existed, or in the case that on the following day that markets were open and new polls were also introduced, I assumed that actors took both these polls and any recent weekend or holiday polls together. This might seem strange but market actors frequently take in weekend information when they arrive at work on Monday, so I assume that they consider weekend and Monday information together.

Using the polling data above, I measure the level of "Electoral Uncertainty" using a method developed by Freeman, Hays and Stix (2000) and referred to as "Entropy" by the authors. This index is designed to transform the probability of victory by the top two contenders into a measure of the tightness of the race between them by removing all partisan reference to which candidate is ahead. The maximum level of uncertainty is when both candidates have 50% support, minimum uncertainty occurs when the margin is greatest at 100%. The index ranges from 1, maximum uncertainty, to 0, minimum uncertainty. The formula for electoral uncertainty (entropy) is:

[14] Available at: www.ife.org.mx.
[15] Available at: www.opionamexico.org.

$$\text{Electoral Uncertainty} = 1 - 4[(p - 0.5)^2]$$

Where *p* is the probability of victory by the left-leaning candidate López Obrador.

Freeman, Hays and Stix (2000) calculate the probability of victory using a method developed by Alesina and Roubini (1997), called the "Electoral Option" method, that transforms a candidate's vote share into an expected probability of winning more than 50% total votes. The formula for the probability of López Obrador winning more than 50% of total votes cast for him and Calderón (P_t^{AMLO}) at time *t* is:

$$P_t^{AMLO} = \Phi\ [(V_t^{AMLO} + \mu_3\ d - 50)\ /\ (\sigma_3 \sqrt{d})]$$

Where V_t^{AMLO} is López Obrador´s percent share of the vote for him and Calderón at time *t*, μ_5 is the sample mean change in this support for López Obrador at time t-2 through *t*, the three most recent days, *d* is the number of days before the election, σ_3 is the standard deviation of changes in support for López Obrador at time t-2 through *t*, and Φ is the cumulative standard normal distribution.[16] In Mexico, since there were several contenders by only two candidates showed any chance of winning the race, I calculate the share of support for López Obrador out of that going to both him and Calderón, and exclude the PRI´s Madrazo and all small party candidates from this equation. The Electoral Option method takes into account mean changes in support for the candidate, the variance in these changes and the time left until the election.

I also control for currency movements, stock market trends in other emerging market nations, and trends in the volume of trades made in the New York Stock Exchange (NYSE). The rate of exchange of the Mexican peso to the US dollar can affect the value of assets and thus stock market returns. I thus use include a measure of the daily percent change in the inter-bank peso-dollar exchange rate at closing to capture the affect of peso appreciation on the Mexican stock market.[17] When investors consider future returns on Mexican investments, they usually compare them to other emerging market nations. Also, volatility in emerging market nations tends to affect the Mexican stock market. I thus use the Morgan Stanley Capital Index for Emerging Market nations as a control for general trends in emerging market nations that might affect Mexico.[18] Volatility in the volume of daily trading in the New York Stock Exchange, which can result from US-specific and global economic factors and political events, can affect emerging market nations like Mexico whose market dependence on the US economy is very high. As a

[16] Models including four previous days produced similar results.
[17] Available at: www.banxico.org.mx.
[18] Available at: www.msci.com.

result, data was included on the NYSE trading volume to control for any effect of US market activity on Mexico.[19]

7. Method of Analysis, Statistical Results and Analysis of Results

One of the biggest problems associated with financial market data is that its observations suffer from serial correlation. Moreover, financial market data usually do not demonstrate consistent variance across time and suffer from time varying variability, meaning that such data suffer from problems of conditional heteroskedasticity. To account for this problem, I follow Bernhard and Leblang (2006) and use a form of time series analysis called the Generalized Autoregressive Conditional Heteroscedasticity (GARCH) method. The GARCH method estimates both the conditional mean at time t and conditional variance at time t as a function of the conditional mean at time t-1 and conditional variance at time t-1, respectively. If the models are appropriately specified, then the GARCH method should account for serial correlation and all problems associated with it. Conveniently, the GARCH method allows the inclusion of exogenous shocks, in our case polling information, that might affect the conditional mean and variance.

The general conditional mean and conditional variance models I use are:

$$\text{Mean: } \Delta \ln P = \lambda + \beta_1 E + \beta_2 C + \beta_i O_i + \varepsilon_t \text{ , where } \varepsilon_t = \sim N(0,\sigma^2)$$
$$\text{Variance: } \sigma_t^2 = \omega + \alpha\, \varepsilon_{t-1}^2 + \beta_3 \sigma^2_{t-1} + \beta_2 C + \beta_4 S + \beta_i O_i$$

Where λ and ω are constants, ε is the error term at time t whose variance is normally distributed around 0, ε_{t-1}^2 is the ARCH term, and σ^2_{t-1} is the GARCH term. P=the MSCI Mexican Stock Market Index, E=the daily difference in the log of the MSCI Emerging Market Stock Market Index, C=the daily difference in the inter-bank peso – dollar exchange rate at closing, S=the daily trading volume of the New York Stock Exchange, O=the other variables measuring electoral uncertainty, the percent share expected votes for López Obrador, or the percent share expected votes for Calderón, depending on the hypothesis being tested. The ARCH term should be interpreted as information about the effect of "volatility (or volatility shocks) from prior periods" on conditional variance and the GARCH term as the effect of variance at time t-1 on variance at time *t* (Bernhard and Leblang, 2006).

I use three models to distinguish between the arguments and evaluate their testable hypotheses.[20] The results of these models are presented in Table 2. Before proceeding to the analysis of how polls affected stock market trends, let us consider a baseline economic model (Model 1) that includes only

[19] Available at: www.nyse.com.
[20] I use Stata 8's ARCH (1,1)/GARCH (1,1) function for all estimates.

the control variables listed above. As expected, rising stock market returns in emerging market nations (*MSCI EM*) had a positive effect on Mexican stock market returns, with $p < 0.000$. Peso appreciation also had a positive effect on Mexican stock market returns, with *Peso Appreciation* showing $p<0.000$. Rising NYSE trading volumes also led to increased volatility in the Mexican market, with *NYSE Volume* returning a significant coefficient ($p<0.000$). Interestingly, peso appreciation had no effect on Mexican stock market volatility. The ARCH (1,1) and GARCH (1,1) terms were both significant, with variance at time *t* a clear function of variance at time t-1 (GARCH) but with volatility shocks at time t-1 reducing conditional variance (ARCH) by a small amount.

TABLE 2

ELECTION UNCERTAINTY, POLLING DATA AND THE MEXICAN STOCK MARKET, JANUARY 17 – JUNE 23, 2006

VARIABLE	MODEL 1			MODEL 2			MODEL 3			MODEL 4		
	COEF.	STD. ERR.	P>|Z|	COEF.	STD. ERR.	P>|Z|	COEF.	STD. ERR.	P>|Z|	COEF.	STD. ERR.	P>|Z|
MEAN MODEL												
MSCI EM	0.743	0.097	0.000	0.654	0.100	0.000	0.763	0.107	0.000	0.737	0.081	0.000
PESO APPRECIATION	106.078	24.968	0.000	129.876	26.021	0.000	106.048	27.997	0.000	106.361	24.940	0.000
ELECTORAL UNCERTAINTY				-0.655	0.352	0.063						
AMLO (PRD)							-0.020	0.046	0.657			
FCH (PAN)										0.019	0.032	0.558
CONSTANT	0.065	0.103	0.528	0.196	0.136	0.150	0.714	1.771	0.687	-0.531	1.089	0.626
VARIANCE MODEL												
NYSE VOLUME	1.20E-06	1.80E-07	0.000	7.83E-07	3.43E-07	0.023	7.06E-07	3.02E-07	0.019	2.07E-06	1.29E-07	0.000
PESO APPRECIATION	-95.799	86.649	0.269	39.078	22.669	0.085	34.629	19.664	0.078	-83.098	57.169	0.146
ELECTORAL UNCERTAINTY				0.415	0.403	0.303						
AMLO (PRD)							-0.152	0.029	0.000			
FCH (PAN)										-0.195	0.047	0.000
CONSTANT	-6.553	0.439	0.000	-2.143	1.173	0.068	3.831	0.106	0.000	-2.712	1.571	0.084
ARCH/GARCH TERMS AND DIAGNOSTICS												
ARCH	-0.137	0.049	0.005	-0.086	0.112	0.446	-0.001	0.112	0.996	-0.172	0.080	0.032
GARCH	1.056	0.046	0.000	-0.136	0.242	0.575	-0.160	0.094	0.089	1.067	0.053	0.000
PORTMANTEAU (Q) TEST RESIDUALS (LAG 1) Q-STATISTIC AND P-VALUE		0.548	0.459		0.348	0.555		0.645	0.421		0.461	0.496
PORTMANTEAU (Q) TEST RESIDUALS^2 (LAG 1) Q-STATISTIC AND P-VALUE		0.243	0.662		0.407	0.524		0.234	0.628		0.299	0.584
KURTOSIS P-VALUE			0.056			0.060			0.048			0.048
JOINT TEST FOR SKEWNESS/KURTOSIS ADJ. CHI-SQUARED AND P-VALUE		4.82	0.090		5.02	0.081		5.72	0.057		5.41	0.067
OBSERVATIONS	114			111			113			113		

Note: Dependent Variable=Daily Difference in the Log MSCI Mexico Stock Market Index in US Dollars; MSCI EM=Daily Difference in the Log MSCI Emerging Market Stock Market Index in US dollars; AMLO=Andrés Manuel López Obrador; FCH=Felipe Calderón Hinojosa; RMP=Roberto Madrazo Pintado.

Moving to the effect of politics on markets, Model 2 shows the effect of electoral uncertainty (*Electoral Uncertainty*) on the Mexican stock market, with rises having a negative effect on stock market returns but no affect on volatility. The variable measuring the level of electoral uncertainty was significant at the $p < 0.063$ level in the Mean Model but was not significant in the Variance Model. Activity in emerging market stock markets (*MSCI EM*) and changes in the value of the peso against the US dollar (*Peso Appreciation*) affected both returns and volatility in the Mexican stock market. Daily trading volume in the New York Stock Exchange (*NYSE Volume*) also had a positive and significant effect at $p < 0.023$ on volatility. Further examination of Models 1 and 2 shows that the peso appreciation variable suffers from problems of omitted variable bias when electoral uncertainty is excluded. This does not change the interpretation of the effect of the candidates´ support on the stock market but it does prevent interpretation of the peso appreciation variable for the variance models. The ARCH (1,1) and GARCH (1,1) terms were not significant, indicating that once accounting for electoral uncertainty, volatility shocks (ARCH) and variance (GARCH) from prior periods do not affect the conditional variance.

Table 2´s Model 3 presents results for the effect of changes in electoral support for the left-leaning PRD candidate Andrés Manuel López Obrador on market returns and volatility. Rises in support for this candidate [*AMLO (PRD)]* had no significant effect on stock market returns, though stock market trends in the emerging market world and trends in the peso–dollar exchange rate did, showing *p* values of 0.000. In contrast, the stock market volatility model, the Variance Model, showed different results. Rises in the left-leaning López Obrador's popularity reduced volatility in the Mexican stock market. The variable *AMLO (PRD)* was significant at the $p < 0.000$ level. Again, daily trading volume in the NYSE had a positive and significant effect on volatility. The ARCH term was insignificant but the GARCH term was negative and significant, indicating that once accounting for the affect of rises in support for López Obrador on the conditional mean and variance, prior variance had a slight negative impact on current variance but volatility shocks did not. Shifts in support for López Obrador explain most movement in the conditional variance.

Model 4 shows that rises in support for the market-friendly Felipe Calderón Hinojosa [*FCH (PAN)]* reduced stock market volatility but did not affect mean returns. The variable *FCH (PAN)* was not significant in the Mean Model but was negative and significant at the $p < 0.000$ level in the Variance Model. Emerging market stock market returns and peso appreciation had positive and significant effects at the $p < 0.001$ level on mean stock market returns, while NYSE trading volume had a positive and significant effect on market volatility. Interestingly, the effect of peso appreciation disappears under rises in support for Calderón in the Variance Model. Even after including information on changes in Calderón's support, prior volatility shocks (ARCH) continued to have a slight negative effect on conditional variance, while variance at time t-1 was positively associated with variance at time *t* (GARCH).

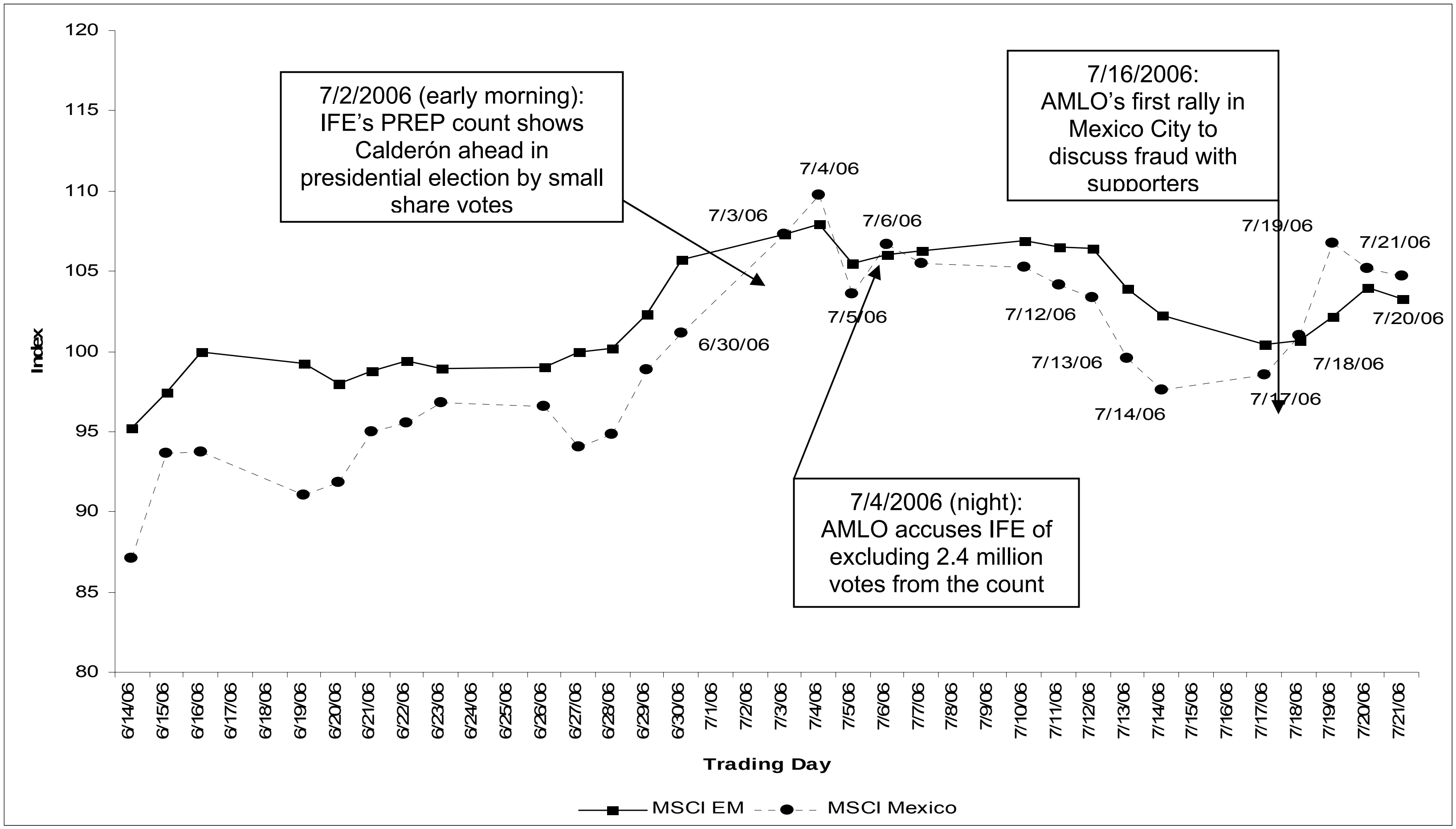
The results from Models 2 through 4 above provide preliminary support for the conclusion that investors appeared more concerned during the 2006 Mexican presidential race with a tight race scenario than with a López Obrador victory, as outlined in *A4: Market Uncertainty*. However, these political variables did not affect market returns and volatility equally. Rather, rises in electoral uncertainty resulted in lower returns, while rises in support for the left-leaning López Obrador and the market-friendly Calderón lowered market volatility. The negative effect of electoral uncertainty limited to market returns reveals two aspects of investor attitudes during the campaign. First, that electoral uncertainty only affected returns underscores investors' lack of concern about the effect of a López Obrador victory on Mexico's post-election investment climate. Had they been concerned with a López Obrador victory, this index would not have obtained significant results in either model. Second, the negative effect of electoral uncertainty on market returns combined with its lack of effect on volatility points to a group of investors focused not on day-to-day shifts in support between the candidates but on the consequences of a tight-race scenario on the post-election investment climate.

The effect of rising support for the top two contenders on reducing market volatility but not market returns is consistent with observations about the relationship between electoral uncertainty and market behavior. Rises in support for both the left-leaning López Obrador and the market-friendly Calderón had no effect on returns, attesting to investors' benign attitude about the implications of a López Obrador victory for their assets. Had investor's feared a left-leaning leader, changes in support for López Obrador would have negatively affected market returns. Instead, growth in support for either candidate was limited to short-term positive reactions by investors concerned about the effect post-election political uncertainty associated with a tight race, as demonstrated by its downward pressure on market volatility. Moreover, it rises in support for López Obrador or Calderón are unlikely to have had a systematic effect on electoral uncertainty as their expected electoral support is only correlated at -56%. As shown in Figure 1, though their electoral fortunes were sometimes negatively related, they sometimes benefited simultaneously from declining support for PRI candidate Roberto Madrazo, leading at times to little or no change in the level of electoral uncertainty. In a context where investors are principally concerned with the impact of a tight race scenario, as demonstrated by the electoral uncertainty model, shifts in expected support for López Obrador or Calderón would not have had a meaningful affect on the closeness of the race or the expected post-race political environment and thus asset returns.

Stock market activity in the week after the elections supports the statistical findings in Table 2 and *A4: Market Uncertainty*. The market sell-off that occurred on July 5, 2006, as shown in Figure 3, in response to claims by López Obrador that 2.4 million ballots had been irregularly excluded from IFE's preliminary (PREP) count concluded on Monday July 3 raised uncertainty around whether Calderón's narrow victory would stand. As shown in Figure 3, the Mexican stock market outperformed emerging markets the day after the elections, July 3, 2006, continuing until July 4, 2006. However, the claims of fraud made by López Obrador led to a dramatic sell-off on July 5. Although the conclusion of the final count on July 6 showing Calderón still ahead led investors to buy back in temporarily, López Obrador's call for a rally of his supporters in Mexico City's center on Sunday, July 16 raised market concerns again, leading to considerable volatility and losses in asset prices in the days ahead of the event.

FIGURE 3

THE MORGAN STANLEY CAPITAL INDEX FOR MEXICO AND EMERGING MARKET NATIONS, JUNE 14 – JULY 21, 2006



The findings in Table 2 also point to an investment community that considers elections in a larger political context. If investors did not place the Mexican presidential race in a larger political context, they would have responded negatively to any rises in support for López Obrador, as outlined in *A1: Market Unique*. If investors had considered the election in larger political context but taken all political rhetoric seriously and protected themselves from a López Obrador victory ahead of the race, then shifts in support for López Obrador or changes in electoral uncertainty would have had no effect on their investment strategies, as discussed in *A3: Market Protection*. Only rises in support for Calderón, their preferred candidate, would have led them to buy back in and firm up positions. If, on the other hand, investors took López Obrador´s rhetoric as an electoral strategy for winning votes rather than as a statement of his policy priorities, as outlined in *A2: Market Context*, they would have not responded to election polling trends for any of the candidates or to electoral uncertainty, as they would not have feared or preferred a victory by either candidate. Instead, the results show that investors reacted negatively to electoral uncertainty but positively to rises in support for López Obrador and Calderón, supporting the argument that they saw the race in some larger political context but that this context was tied very directly to a different version of the Mexican political story.

To check the robustness of the results, I examined the residuals for all models for white noise and normality. If the GARCH model has accounted for the inherent serial correlation in the time series financial data, then residuals should exhibit no serial correlation. Table 2 show results for two Portmanteau (Ljung–Box) tests for white noise in the residuals and squared residuals. All tests cannot reject the null hypothesis that the model is adequately specified, as demonstrated by their high *p* values, so we accept that the models are adequately specified. Residual plots show them to be normally distributed, while stricter tests for skewness and kurtosis (fat tails) show that they are very nearly so for all models.

I also include a model, Model 1 in Table 3, that analyzes the percent share expected votes for López Obrador [*AMLO (PRD)*] and Calderón [*FHC (PAN)*] simultaneously. This model returns results similar to those reported in Table 2, attesting to the relative independence of trends in their support. Though not significant in the Mean Model, both variables were negative and significant in the Variance Model, in line with the findings in Table 2. Increases in Calderón´s support had a much stronger negative effect on market volatility than rises in support for López Obrador, something suggesting that, though investors were not worried about a López Obrador victory, they were happier with signs favoring Calderón. I also conducted an analysis of how support for Roberto Madrazo Pintado (PRI) affected the stock market. If it is true that the only candidates that should affect investment decisions are those who have a chance of winning, then changes in Madrazo's support should have had no effect on markets as he polled below López Obrador and Calderón during nearly the entire campaign. As shown in Model 2 in Table 3, the variable *RMP (PRI)* had no effect on mean returns or volatility. In both models, the ARCH and GARCH terms were significant. Once including information on support for these candidates, prior volatility shocks had a slight negative effect on conditional variance, while variance at time t was a function of variance at time t-1.

TABLE 3

ELECTORAL OPTIONS, POLLING DATA AND THE MEXICAN STOCK MARKET, JANUARY 17 – JUNE 23, 2006

VARIABLE	MODEL 1			MODEL 2			MODEL 3			MODEL 4		
	COEF.	STD. ERR.	P>|z|	COEF.	STD. ERR.	P>|z|	COEF.	STD. ERR.	P>|z|	COEF.	STD. ERR.	P>|z|
MEAN MODEL												
MSCI EM	0.746	0.077	0.000	0.744	0.088	0.000	0.728	0.100	0.000	0.755	0.102	0.000
PESO APPRECIATION	107.195	22.420	0.000	102.017	24.967	0.000	115.203	28.511	0.000	118.671	28.469	0.000
AMLO (PRD)	0.031	0.033	0.348									
FCH (PAN)	0.038	0.036	0.285									
RMP (PRI)				-0.014	0.028	0.612						
AMLO/ (AMLO+FCH)							0.022	0.039	0.565			
ELECTORAL OPTION										-0.388	0.252	0.123
CONSTANT	-2.383	2.104	0.257	0.488	0.742	0.511	-1.161	2.064	0.574	0.239	0.193	0.215
VARIANCE MODEL												
NYSE VOLUME	1.9E-06	4.9E-07	0.000	1.66E-06	3.58E-07	0.000	7.9E-07	3.9E-07	0.044	1.03E-06	4.25E-07	0.016
PESO APPRECIATION	-92.437	71.143	0.194	-87.692	58.516	0.134	45.598	24.675	0.065	52.603	30.699	0.087
AMLO (PRD)	-0.075	0.043	0.082									
FCH (PAN)	-0.268	0.118	0.023									
RMP (PRI)				0.056	0.040	0.156						
AMLO/ (AMLO+FCH)							-0.050	0.057	0.376			
ELECTORAL OPTION										0.003	0.352	0.993
CONSTANT	2.645	1.615	0.102	-9.788	0.514	0.000	0.422	3.739	0.910	-3.045	1.352	0.024
ARCH/GARCH TERMS AND DIAGNOSTICS												
ARCH	-0.139	0.072	0.054	-0.136	0.066	0.039	0.008	0.123	0.947	0.083	0.170	0.623
GARCH	1.048	0.062	0.000	1.064	0.052	0.000	-0.120	0.295	0.685	-0.077	0.279	0.784
PORTMANTEAU (Q) TEST RESIDUALS (LAG 1) Q-STATISTIC AND P-VALUE		0.488	0.485		0.547	0.459		0.472	0.492		0.892	0.345
PORTMANTEAU (Q) TEST RESIDUALS^2 (LAG 1) Q-STATISTIC AND P-VALUE		0.512	0.474		0.376	0.539		0.144	0.704		1.057	0.304
KURTOSIS P-VALUE			0.064			0.054			0.071			0.040
JOINT TEST FOR SKEWNESS/KURTOSIS ADJ. CHI-SQUARED AND P-VALUE		4.67	0.097		5.06	0.078		4.28	0.118		5.46	0.065
OBSERVATIONS	113			113			113			111		

Note: Dependent Variable=Daily Difference in the Log MSCI Mexico Stock Market Index in US Dollars; MSCI EM=Daily Difference in the Log MSCI Emerging Market Stock Market Index in US Dollars; AMLO=Andrés Manuel López Obrador; FCH=Felipe Calderón Hinojosa; RMP=Roberto Madrazo Pintado

Although the results appear to provide support for *A4: Market Uncertainty*, criticism could be levied against the analysis thus far because it does not directly test for the effect of changes in the expected probability of victory by the left-leaning López Obrador on the stock market. For this reason, I also conducted two additional tests that analyze how changes in López Obrador´s chances of victory affected stock market returns and volatility. Model 3 in Table 3 analyzes the effect of López Obrador´s support as a percent share of support for him and Calderón [*AMLO/(AMLO*FHC)*]. Rises in López Obrador´s support in relation to that of Calderón had no effect on the stock market. Model 4 in Table 3 shows results for another analysis using Alesina and Roubini´s (1997) Electoral Option method that translates shifts in the relative levels of support between the top two contenders into probability of victory. Again, rises in the chance of a López Obrador victory did not affect stock market returns or volatility.

Concluding Remarks about Election and Markets in Mexico and Beyond

This article examined how investors thought about the investment implications of the 2006 Mexican presidential campaign. Despite the strong differences in the policy preferences of the two main contenders over the nation's neo-liberal economic policy approach, investors did not respond to campaign policy promises along partisan lines. Statistical analysis of public opinion polls and the Mexican stock market showed that rising support for the left-leaning Andrés Manuel López Obrador (PRD) and the market-friendly Felipe Calderón Hinojosa (PAN) both led to reductions in stock market volatility and did not affect market returns. However, investors responded negatively to electoral uncertainty. That electoral uncertainty lowered asset returns but did not affect the level of market volatility indicates that investors were more worried about the risks to the post-election investment climate associated with not having clear winner than about policy swings from a left-leaning president. A close election race raises the possibility that the results would be at best contested and at worst overturned, with both scenarios implying that the outcome would be delayed. Delays in the conclusion of political events, especially where outcomes are uncertain, aggravate market risks for investors.

This study also points to an investment community that considers elections in some larger political context, rather than in isolation. Had investors protected themselves ahead of the race from the prospects of a left-leaning victory, rises in support for López Obrador and in his probability of victory would have had no effect on market volatility and returns. Had investors feared the shift to a left-leaning president but not protected themselves ahead of the race from the prospects of a López Obrador victory, they would have responded negatively to any improvements in this candidate's chances of victory. Of course, students of the effect of politics on markets could charge that investors might have been naïve in how they approached the race. Yet, their concern over the implications of a tight race, their relatively more positive response to improvements in Calderón's chances of victory compared to the other contenders, and their negative response to López Obrador's post-election charges of fraud demonstrate that they did not take the campaign process, election results, and post-election context lightly.

Though it appears that investors considered the Mexican election process in some larger political and economic context, it is still unclear as to why the Mexico case differs so markedly from other nations. The findings here contrast with many studies of politics and markets conducted on industrialized nations but, more important, that contrast with casual observation about investor response to election processes in emerging market nations in recent years. In

Latin America, in particular, rises in support for left-leaning candidates promising major policy changes have led to lower asset returns and/or higher market volatility. For example, investors reacted negatively to the prospects of a left-leaning victory by Brazil's Luiz Inacio "Lula" da Silva in 2002, though not in 2006, as well as to the prospects of victory by Peru's statist and nationalist Ollanta Humala in 2006 and by Ecuador's Rafael Correa in 2007. Future research will need to explain why the implications of left-leaning victories for investors in Brazil in 2002, Peru in 2006 and Ecuador in 2007 differed so markedly from Mexico in 2006.

References

Alesina, Alberto and Howard Rosenthal. 1995. *Partisan Politics, Divided Government, and the Economy*. Cambridge: Cambridge University Press.

Alesina, Alberto and Nouriel Roubini, with Gerald Cohen. 1997. *Political Cycles and the Macroeconomy*. Cambridge, Massachusetts: The MIT Press.

Bear Stearns. 2005a. "Mexico: Oil Windfall, Hurricane Reconstruction and Elections Keep Infrastructure Spending High into ´06 - Add IDEAL to Focus List".

___________. 2005b. "Mexico: Fiscal Policy Under a PRD Administration - Furthering the Case for the Construction Theme in Mexico". August 1, 2005.

___________. 2005c. "Mexico: PRD Leans Toward 'Social Statism' as Policy Model - Maintain Cauton on Political Outlook". June 29, 2005.

___________. 2005d. "Mexico: The PRD´s Economic Plan, and Implications for Investors - New Insights from Recent Meetings with AMLO´s Advisers". November 18, 2005.

___________. 2006a. "Mexico: Articularing and Clarifying the PRI´s Economic Platform - Some Impllications for Investors". January 23, 2006.

___________. 2006b. "Mexico: Madrazo Loses Steam, Calderon Gains a Bit, But Obrador Remains in Front-Implications for Investors". March 31, 2006.

___________. 2006c. "Mexico: Measures to Increase Competition Enter the Policy Debate-with Negative Implications for the Market and Various Stocks". June 1, 2006.

___________. 2006d. "Mexico: Money, Politics, and "Deepwater" Oil and Gas - Implications for Investors". April 19, 2006.

___________. 2006e. "Mexico: Overall Valuations Are High, While Risks Rise - Downgrading to Underweight from Market Weight; Take Profits in Media". February 7, 2006.

Bernhard, William, and David Leblang. 2002. "Democratic Processes, Political Risk, and Foreign Exchange Markets". *American Journal of Political Science* 46 (2): 316-33.

___________. 2006. *Pricing Politics: Democratic Processes and Financial Markets*. Cambridge: Cambridge University Press.

Block, Steven A., Burkhard N. Schrage and Paul M. Vaaler. 2003. "Democratcy´s Spread: Elections and Sovereign Debt in Developing Countries". June 2003.

Calderón Hinojosa, Felipe. 2005. "Diálogos por México". November 2005.

Credit Suisse. 2006a. "It´s just two days before Mexico´s key elections." June 29, 2006.

Credit Suisse. 2006b. "Mexico: Post-debate, the race is equally tight". June 7, 2006.

___________. 2006c. "Results from our Survey on Mexico´s Elections". June 22, 2006.

___________. 2006d. "State of Mexico elections: Do they matter?" March 8, 2006.

___________. 2006e. "A tight race, with two months before elections". May 2, 2006.

___________. 2006f. "Trying to make sense of the sell-off in rates". April 5, 2006.

___________. 2006g. "Visit to Mexico City: Focus on inflation, the overnight rate, and elections". February 7, 2006.

Fowler, James H. 2006. "Elections and Markets: The Effect of Partisanship, Policy Risk, and Electoral Margins on the Economy." *The Journal of Politics* 68 (1): 89-103.

Franzese, Robert. 2002. "Electoral and Partisan Cycles in Economic Policies and Outcomes". *Annual Review of Political Science* 5: 369-421.

Freeman, John R., Jude C. Hays, and Helmut Stix. 2000. "Democracy and Markets: The Case of Exchange Rates". *American Journal of Political Science* 44 (3): 449-68.

Herron, Michael C. 2000. "Estimating the Economic Impact of Political Party Competition in the 1992 British Election". *American Journal of Political Science* 44 (2): 326-37.

Hibbs, Douglas A. 1987. *The Political Economy of Industrial Democracies*. Cambridge, Mass.: Harvard University Press.

J.P. Morgan. 2006. "Special Report: Previewing Mexico´s July 2 Presidential Election". May 26, 2006.

Jensen, Nathan M., and Scott Schmith. 2005. "Market Responses to Politics: The Rise of Lula and the Decline of the Brazilian Stock Market". *Comparative Political Studies* 38 (10): 1245-70.

Leblang, David. 2002. "The Political Economy of Speculative Attacks in the Developing World". *International Studies Quarterly* 46 (69-91).

Leblang, David and Bumba Mukherjee. 2005. "Government Partisanship, Elections and the Stock Market: Examining American and British Stock Returns, 1930-2000". *American Journal of Political Science* 49 (4): 781-803.

___________. forthcoming. "Elections, Partisan Politics and Stock Market Performance: Theory and Evidence from a Century of American and British Returns". *Economics and Politics*.

López Obrador, Andrés Manuel. 2005a. "Diálogos por México". November 2005.

___________. 2005b. *Un proyecto alternativo de la Nación*. Distrito Federal, México: Grijalbo Mondadori, S.A.

Madrazo Pintado, Roberto. 2005a. *Bases para un gobierno firme y con rumbo*. Distrito Federal, México: Roberto Madrazo Pintado.

___________. 2005b. "Diálogos por México". November 2005.

Martínez, Juan and Javier Santiso. 2003. "Financial Markets and Politics: The Confidence Game in Latin American Emerging Economies". *International Political Science Review* 24 (3): 363-95.

Mauser, Gary A. and Craig Fitzsimmons. 1991. "The Short-Term Effect of Election Polls on Foreign Exchange Rates: The 1988 Canadian Federal Election". *Public Opinion Quarterly* 55 (2): 232-40.

McGillivray, Fiona. 2003. "Redistributive Politics and Stock Price Dispersion". *British Journal of Political Science* 33: 367-95.

Medley Global Advisors. 2006a. "Mexico: AMLO Lead in Polls Increasing". March 2, 2006.

___________. 2006b. "Mexico: Calderón Loses His Edge". May 26, 2006.

___________. 2006c. "Mexico: Calderón Receives Post-Debate Advantage". April 27, 2006.

___________. 2006d. "Mexico: Election Hinges on the Swing (Voters)". June 12, 2006.

___________. 2006e. "Mexico: Fox in the PANhouse". May 10, 2006.

___________. 2006f. "Mexico: IFE Can Call a Tight Election and Avoid Political Tensions". February 21, 2006.

___________. 2006g. "Mexico: López Obrador to Support Current Debt Strategy". March 10, 2006.

___________. 2006h. "Mexico: López Obrador´s Economic Policy Priorities". April 3, 2006.

___________. 2006i. "Mexico: López Obrador´s Lead Narrows". April 7, 2006.

___________. 2006j. "Mexico: Presidential Race a Statistical Tie". April 25, 2006.

___________. 2006k. "Mexico: Slight Edge to López Obrador". June 22, 2006.

Mosley, Layna. 2003. *Global Capital and National Governments*. New York: Cambridge University Press.

Remmer, Karen. 1998. "The Politics of Neoliberal Economic Reform in South America, 1980-94". *Studies in Comparative International Development* 33.

___________. 2002. "The Politics of Economic Policy and Performance in Latin America". *Public Policy* 22 (1): 29-59.

Simmons, Beth A. 1999. "The Internationalization of Capital". In *Continuity and Change in Contemporary Capitalism*, ed. Herbert Kitschelt, Peter Lange, Gary Marks and John Stephens. Cambridge: Cambridge University Press. pp. 36-69.

Stokes, Susan. 2001. *Mandates and Democracy*. Cambridge: Cambridge University Press.

Strange, Susan. 1996. *The Retreat of the State: The Diffusion of Power in the World Economy*. New York: Cambridge University Press.

Weyland, Kurt. 1996. "Risk Taking in Latin American Economic Restructuring: Lessons from Prospect Theory". *International Studies Quarterly* 40.

Wibbels, Erik. 2006. "Dependency Revisited: International Markets, Business Cycles, and Social Spending in the Developing World". *International Organization* 60 (2): 433-68.

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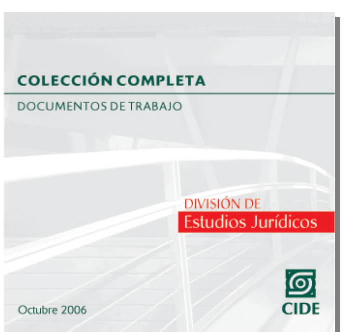

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