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Politics and Sector-Specific Stock Market Performance: A General Argument Applied to Mexico's 2006 Presidential Campaign

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Abstract: To date, studies of the effect of politics on markets have generated a variety of often conflicting conclusions. I argue that this conflict originates not from the need to refine current analyses but the need to move away from treating asset classes – bonds, stocks, and currency markets – as unitary objects of study. Not only do investors choose to invest in different asset classes, they can also choose from a variety of investment instruments within each class to diversify risk. It is just this diversification that implies that investors holding different instruments may react differently to politics and political news even within the same asset class. I test this argument statistically on Mexican stock market behavior during the 2006 presidential campaign. Analysis of stock market performance by economic sector reveals different investor responses to shifts in candidate support that not only differ by economic sector but also from aggregate stock market trends.

Keywords: stock markets, elections, public opinion, Mexico

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Mexico's July 2006 presidential campaign was of considerable interest to emerging market portfolio investors. Unlike in several other emerging market nations that also held elections that year, the Mexican race raised the possibility of a significant economic policy shift from the neo-liberal economic policies followed by the formerly hegemonic Partido Revolucionario Institucional (PRI) in the 1990s and more recently by outgoing President Vicente Fox Quesada of the Partido Acción Nacional (PAN). The incumbent PAN's right-leaning candidate Felipe Calderón Hinojosa faced a strong electoral challenge from the popular left-leaning former Mayor of Mexico City Andrés Manuel López Obrador of the Partido de la Revolución Demcrática (PRD). While Calderón promised to maintain a market-friendly economic policy stance, guaranteeing a macro-economic stability to attract foreign direct investment, spur job creation, and foster economic growth, López Obrador criticized the nation's neo-liberal economic policy strategy and advocated an increased role of the state in the economy and infrastructure investment to reduce poverty and trigger economic growth.

The importance of Mexican assets in emerging market portfolios amidst the possibility of a radical economic policy shift promised to affect expected portfolio returns. Given López Obrador's anti-neoliberal economic policy rhetoric, it is not surprising that many investors expressed negative views about the prospects of López Obrador victory. These positions are reflected in research from investment banks and independent firms serving financial markets. In February 2006, for example, Bear Stearns' Equity Strategy Research Team downgraded Mexico from market weight to underweight based on the prospect of a López Obrador victory (Bear Stearns 2006). Yet, evidence also suggests that some investors may have not been as worried about the investment risks of a left-leaning presidency. Credit Suisse expressed skepticism that López Obrador could change institutions and policy enough to threaten assets (Credit Suisse 2006). Mexico´s strong fundamentals, such as its improving debt portfolio, low

current account deficit, steady growth rates, and low inflation, moderated concerns associated with a López Obrador win (Credit Suisse 2006).

The contrasting market views about the risks associated with a left-leaning administration in Mexico are not that surprising for they also color scholarly research on the impact of politics on markets. While numerous scholars have found that the promise of leftward policy shifts raises risks and lowers returns (Block, et al. 2003, Leblang and Mukherjee forthcoming, Leblang and Mukherjee 2005, Mauser and Fitzsimmons 1991), others have found that the globalization of trade and financial markets restricts the range of policies available to all governments, regardless of their ideological preferences, leading to convergence toward neo-liberal economic policy regimes (Mosley 2003, Obstfeld and Taylor 2004, Simmons 1999, Strange 1996, Wibbels 2006). Policy convergence implies that left-leaning regimes present far fewer market risks than one might expect, something that should lighten investor worries about the professed economic policies of potential left-leaning administrations. However, a few scholars have also found that the promise of policy shifts in any direction, whether to the left or right, are troubling to investors, implying that convergence may not be the norm and that political and policy uncertainty of any kind are problematic for investors (Bernhard and Leblang 2002, Bernhard and Leblang 2006, Fowler 2006, Jensen and Schmith 2005).

These conflicting market and scholarly conclusions demonstrate that the debate about the investment risks associated with partisan politics and political turnover is far from settled. Moreover, they reveal that portfolio investors may not hold uniform, systematic, or even predictable views about the effects of politics on markets and it is upon this last observation that this study seeks to build. Rather than focusing primarily on whether investors are more concerned about leftward policy shifts or policy uncertainty, this study seeks to explain the underlying reasons why market analysts and scholars have found that investors frequently hold

divergent views about the partisan risks associated with investments. To this end, I build on scholarly research demonstrating that investor responses to politics may depend on the type of investments they hold and use this observation to argue that differences in investment type is what drives underlying market analysts´ and scholars´ conflicting conclusions about the effect of politics on markets.

A few scholars have noted that the risks and rewards associated with holding bonds, equities, or foreign exchange often differ even under the same political or policy regime (Maxfield 1997, Mosley 2003, Mosley and Singer forthcoming, Santiso 2003). I take this observation one step further to argue that treating bond, stock, and currency markets as unitary asset classes may mask important variation in investor concerns about politics within each type of investment class. Government and corporate bond holders can choose different maturities, currencies, and payment types. Corporate bond and stock holders can invest in companies located in different economic sectors. The instruments of foreign exchange investment are numerous. The wide range of investment instruments falling within any asset class implies that investors may face distinct market risks under the same political and policy regimes even within a single asset class. Of course, bond, equity, and currency markets in the industrialized world include a wide array of investment instruments that politics can affect. But even the relatively less developed markets of emerging market nations are now beginning to rival their industrialized counterparts in the depth and diversity of investment instruments, thereby raising the chances that politics might affect investment instruments differently within the same asset class in these nations as well.

To evaluate whether and how investors respond to politics by investment instrument, I focus on equity assets. Not only have equity markets been found to provide a good measure of investor attitudes toward politics and policy (Herron 2000, McGillivray 2003), equity investors

can choose to hold stocks in a variety of companies located in different economic sectors. Despite this, however, there has been a surprising lack of research on the effects of politics on equity markets (Mosley and Singer forthcoming). The lack of research remains true despite the importance of equity markets as a source of capital for domestic economic development and as a means of portfolio diversification for private investors and even governments (Lavelle 2004, Mosley and Singer forthcoming). In an effort to help contribute to this growing literature, I argue that equity investors with assets in economic sectors that benefit from rising domestic aggregate demand should respond positively to left-leaning parties promising economic growth through fiscal expansion and state involvement in the economy. In contrast, investors holding assets in sectors that depend on macro-economic stability will prefer right-leaning parties promising more fiscally austere, market-friendly, neo-liberal economic policies.

To test the effect of politics on stock prices by economic sector, I analyze equity investors' reactions to election polling trends during the 2006 Mexican presidential campaign. Given that the principal distinguishing feature of the top two contenders for the presidency that year was their divergent attitudes toward the neo-liberal economic model followed in Mexico since the 1990s, equity investors should have reacted differently to the prospects of a left-leaning López Obrador or right-leaning Calderón victory depending on which area of the economy their stock holdings laid. Investors in domestic-oriented enterprises dependent on domestic consumption should have responded favorably to the prospects of a López Obrador win as he promised increased state spending, infrastructure investment, and state involvement in the economy to trigger economic growth. Those concentrating on export-oriented industries and financial services should have preferred Calderón's promises to maintain market-friendly economic policies and macro-economic stability.

The study proceeds as follows: First, I outline the current state of the scholarly debate about the effect of politics on markets to demonstrate that most scholars treat asset classes as unitary, thereby overlooking the range of investment instruments within each class that might also respond to politics in different ways. In the second section, I describe the 2006 Mexican election and the principal candidates´ divergent policy promises to show how this race provides an ideal testing ground for analyzing whether investors react to politics according to the nature of their investments. I present the argument's principal testable hypotheses as applied to the Mexican case in the third section. The fourth section discusses the variables and data used to evaluate the hypotheses in the fifth section. I then conclude.

The Argument about Politics and the Variety of Equity Investor Concerns

Investors have an assortment of investment instruments across a variety of asset classes at their disposal in the global market. Given the range of investment instruments, it should thus not be surprising to expect that partisan politics will affect the risks and rewards associated with different types of investments in different ways. Despite this, only a few scholars have studied how investors "have different preferences and concerns regarding asset allocation and public policies" in a systematic way (Mosley and Singer forthcoming). One of the earliest scholars to study the diversity of investor preferences toward politics and policy and how this is affected by the type of investment held was conducted by Maxfield (1997). In her study of the international and domestic forces explaining why middle-income developing countries adopt independent monetary institutions, Maxfield (1997) examines how investors in different asset classes, including foreign direct investment, international bank loans, foreign bonds, and foreign equity shares, respond to changes to the level of central bank independence. She finds that investor responsiveness "varies with four characteristics: asset-specificity, risk structure,

access to local information, and number of investors" (Maxfield 1997, p36). In his study of emerging market investment trends, Santiso (2003) notes that bond holders generally disapprove of expansionary fiscal policies as they raise interest rates while stock holders and foreign direct investors generally prefer government policies that promote high growth (Santiso 2003, p.43).

In demonstrating how investors' preferences toward partisan politics, political institutions, and policy vary according to the type of investment held, most scholars treat investments in each asset class as uniform. Although Santiso (2003, p.43) also notes that even within the same asset classes "actors can diverge in their moneymaking strategies and the temporal horizons of their investments," McGillivray (2003) is perhaps the only scholar to date to distinguish in a systematic way the diverse effect of politics on investment risks within a single asset class. In her study of stock price trends in industrialized nations, she shows how electoral institutions and changing governing coalitions affect investor expectations about which industries will be favored or disadvantaged under state industrial and trade policies. Moving beyond inter-industry differences in stock market trends, however, it is important to note two things. First, as mentioned, investors in the same asset class can differ dramatically in the temporal horizons of their investments, with some favoring short-term strategies and others longer-term investments. Second, and related to the point above, there are a variety of investment instruments available within each asset class. Sovereign bond holders can chose bonds with different maturities, currencies, and payment types, each having different risks and rewards associated with government economic policy and thus political scenarios. Investors holding company bonds can also choose from a range of maturities and payment types, in addition to companies located in different economic sectors. The instruments for holding and trading foreign exchange are numerous, each associated with different risks and rewards

affected by both domestic and global economic and political events. And, of course, equity investors in distinct economic sectors can be affected differently by a range of governmental economic and monetary policies, not just by trade and industrial policies alone. This list does not include the variety of more sophisticated investment instruments like futures, options, and derivatives, further extending the investment possibilities available to, and thus the political risks affecting, investors.

Following studies like Hibbs (1987), Alesina and Rosenthal (1995), Garrett (1998), Franzese (2002), and Fowler (2006), I assume that policies supporting macro-economic stability and low inflation – policies known to be preferred by right-leaning parties who represent middle and upper class constituents - will have different economic and thus investment implications than policies supporting redistribution and employment promised by left-leaning parties to working class constituents. I also assume that partisan politics and the governmental policies they produce affect diverse sectors of the economy differently (Maxfield 1997, Mosley and Singer forthcoming, Santiso 2003). I build on these two observations and join them with those made above about the variety of investment instruments available to investors to argue that even assets within the same class will be affected by partisan politics and policy in different ways, thereby generating different investment risks and investor concerns. Investors choosing instruments that benefit from rising domestic aggregate demand should respond positively to left-leaning parties and governments promising economic growth through expansionary economic policies and state involvement in the economy. Investors holding assets that depend on macro-economic stability will prefer right-leaning parties, neo-liberal economic policies, and minimal state interference in markets.

Reasons for Testing the Argument on Stock Market Behavior in Mexico

To test the impact of partisan politics on different investment instruments, I evaluate stock market trends among two different economic sectors. Given that politics and policy affect economic sectors differently, analysis of stocks in different economic sectors should yield a variety of investor reactions and concerns under governmental policy regimes. That is, investors holding stocks in companies located in economic sectors that benefit from expansionary economic policies should react positively to left-leaning parties and administrations. In contrast, companies located in sectors that depend on macro-economic stability, low inflation, and minimal state involvement in the economy should favor right-leaning partisan rule. I thus mirror the research on industrialized nations by McGillivray (2003) but also broaden the focus from trade and industrial policy to an assessment of the attitudes of investors toward politics and politicians promising neo-liberal and anti-neo-liberal economic development strategies more generally. In so doing, I adapt my argument to the realities of partisan politics and policy debates affecting emerging market nations where many policy choices long settled in industrialized countries are still up for political discussion and thus radical change with new administrations. I thus expect investors in emerging market nations to be highly responsive to politics and expected policy changes, swiftly shifting investments not only among asset classes but within them as well in an effort to minimize political and policy risk and maximize returns.

More specifically, I analyze the equity market effects of shifts in support for candidates competing in Mexico´s July 2, 2006 presidential election. The Mexican presidential race was chosen to test the argument for two reasons. First, the election pitted two main contenders supporting diverse economic policy positions on the left-right continuum. Second, the length of the race, the regular availability of polling data throughout it, and the variation in trends in candidate support during the campaign meant that investors were faced with a variety of

expectations about who would win and had plenty of time and incentive to adjust their stock positions accordingly. The Mexican election thus reflects the full range of variance on the independent variables - partisan policy preferences and shifting expectations about which policy would emerge - thereby enabling hypothesis testing about their effects on markets.

In terms of the diversity of policy preferences, on the left Andrés Manuel López Obrador represented the Partido de la Revolución Democrática (PRD) and was joined in coalition by the Partido del Trabajo (PT) and the Partido Convergencia (Convergencia). 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 2005). 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 well ahead of the election campaign in the television program "Diálogos por México" broadcast on *Televisa* and in his book (López Obrador 2005, López Obrador 2005). López Obrador rejected structural reforms preferred by investors and was known for complaining about the central bank´s (Banco de México) independence and its traditionally tight monetary policies and high reserve levels that he said could be used to help foster economic growth.

On the right, Felipe Calderón Hinojosa represented the Partido Acción Nacional (PAN). 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 President 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 by Calderón to distinguish himself from López Obrador who the PAN portrayed as someone who would undermine the government’s achievements on this front. Calderón expressed his support for economic reforms in printed materials and in meetings with private investors. In a document sent to leading television broadcaster *Televisa*, Calderon outlined his support for fiscal, energy, labor, social security reform (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 and Calderón were widely viewed by most pollsters, market analysts, and investors as the most likely winners.[1] Mexico’s 2006 presidential campaign process lasted just over five months, beginning on January 17, with the formal campaigns concluding on June 28, and the elections held on July 2. Between January 17 and the June 23 ban on their public dissemination, there were a total of 76 polls released by 16 different private firms or media outlets to the public. Figure 1 shows a subsample of polling data released to the public during the campaign. The race experienced three distinct trends in candidate support, something that should have affected investors´ expectations about who would win and thus led to shifts in their concerns about their investments. The left-leaning López Obrador (PRD) began the race leading the right-leaning Calderón (PAN). This trend continued into mid-March when Calderón experienced a surge in support. From mid-May, the election became more competitive. Indeed, during the week of June 23, most polls showed that the race was too close to call, with the difference between the two candidates within statistical margins of error.[2] On

July 6, IFE announced that Calderón had won. The final count showed that Calderón won with just 35.9% support to López Obrador´s 35.3% votes.

--Insert Figure 1 about Here--

The Expected Effects of Politics on Sector-Specific Equity Assets in Mexico

Mexico's stock market, known as the Bolsa Mexicana de Valores or BMV, divides the companies listed in it into seven categories, including construction (mostly large general and housing construction companies and construction materials producers), commerce (mostly domestic-oriented commercial enterprises), communications/transportation (mostly telecommunications and media), services (mostly financial services), extractive industry (mostly export-oriented mining industries), and transformation (industries involved in both domestic-oriented and export activities).[3]

Given the range of companies and the stated differences in the main presidential contender's economic policy positions, investors in the BMV should have had different but predictable responses to changes in the candidates´ electoral expectations, depending on the economic sector of their investments. I expect that those investors with assets in areas that benefit from increased state intervention in the economy and expansionary fiscal policies, like construction industries, should have responded favorably to the prospects of left-leaning policies and administrations, and thus rises in the possibility of a López Obrador victory. Those benefiting from macro-economic stability, like financial services, should have favored Calderón. Due to space limitations, I do not include analyses of all sectors here. Instead, I focus on two sectors with the most obvious interests in one candidate over another. Specifically, I hypothesize that:

H1: Construction sector investors will respond favorably to gains in support for López Obrador, leading to rising stock market returns and lower volatility.

H2: Financial services sector investors will respond favorably to gains in support for Calderón, leading to rising stock market returns and lower volatility.

The Variables and Data Used to Test the Argument and Hypotheses

The principal dependent variables of concern are market reaction in the Mexican stock Market or BMV and among its different economic sectors. To measure the dependent variables, I calculate the daily difference in the log of the BMV's Price and Quotation Index (called the Índice de Precios y Cotizaciones or IPC) for all economic sectors together and then for the two main economic sectors considered here.[4] Mexico's IPC is "an indicator of the stock market evolution, calculated as a function of the price variations of a selection of stocks, known as the sample, balanced, weighted and representative of the stocks traded at the BMV."[5] Bivariate regression of the daily difference in the log of Mexico's aggregate IPC and the daily difference in the log of the Morgan Stanley Capital Index for Mexico (MSCI Mexico)[6] measured in US dollars returns of coefficient of 0.85 and $p < 0.033$, so changes in these two indices are closely related even though the MSCI Mexico controls for domestic inflation trends. This relationship is depicted in Figure 2. Figure 2 also reveals that the Mexican stock market underwent considerable variation in returns and periods of volatility during the presidential campaign. Though following emerging market trends, the Mexican stock market underperformed compared to emerging market nations.

--Insert Figure 2 about Here--

There are four principal independent variables of concern: the chances of a López Obrador victory, the level of electoral uncertainty, and the change in level of popularity of the

two leading candidates. All political variables are all founded on the percent share of expected support for the candidates and required that I collect polling data on the expected support for López Obrador and Calderón during the entire campaign. 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 campaign that were released to the public to be formally filed with that institution.[7] 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).[8] 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.

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 address this complication, I follow Jensen and Schmith (2005) and assume that market actors use all polling data available to them and thus rely on the same information for multiple days until they can update this information with new polls. This means that I reproduced the latest polling results for each market day until new information was available. 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. Polls released on weekends or holidays were either used for the subsequent market days when no new polls existed or averaged with polls released on subsequent market days. Market actors usually consume weekend and Monday information together when they arrive at work. Pooling the data produced 54 separate observations during the five month campaign.

Using the polling data above, I derive the four measures of political trends analyzed here. The first two capture the percent share support expected for López Obrador and Calderón each

campaign day, as described above. Although relative candidate support provides a key indicator of daily changes in who is expected to win, it is possible that investors also consider the volatility in each candidate's support and the time until the elections when considering polling data. I thus calculate a variable that translates the top two contender's daily polling support into the perceived chances of a López Obrador victory. Freeman, Hays, and Stix (2000) calculate a candidate's probability of victory using Alesina and Roubini's (Alesina, et al. 1997) "Electoral Option" method that transforms a candidate's vote share into an expected probability of winning more than 50% votes. The formula for the probability of López Obrador winning more than 50% of votes cast for him and Calderón (P_{tAMLO}) at time t is

$$P_{tAMLO} = \Phi\ [(V_{tAMLO} + \mu_4\ d - 50) / (\sigma_4\ \sqrt{d})]$$

where V_{tAMLO} is López Obrador´s percent share of the vote for him and Calderon at time t, μ_4 is the sample mean change in this support for López Obrador at time t-3 through t, the four most recent days, d is the number of days before the election, σ_4 is the standard deviation of changes in support for López Obrador at time t-3 through t, and Φ is the cumulative standard normal distribution.[9] 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. In Mexico, since there were several contenders but only two candidates showed any chance of winning the race, I calculate the share of support for López Obrador out of that going to him and Calderón, and exclude the PRI´s Madrazo and all small party candidates from this equation.

Prior research has also highlighted how electoral uncertainty affects investment behavior. For this reason, I include a variable that measures electoral uncertainty using Freeman, Hays, and Stix's (2000) "Entropy" index. This index transforms the probability of victory by the top two contenders into a measure of the tightness of the race by removing all reference to which candidate is ahead. The maximum level of uncertainty is when both candidates have 50%

support and minimum uncertainty is when the margin is 100%. The index ranges from 1, maximum uncertainty, to 0, minimum uncertainty. The formula is

$$\text{Electoral Uncertainty} = 1 - 4[(p - 0.5)_2]$$

where p is the probability of victory of López Obrador, as described above.

Currency movements, stock market trends in other emerging market nations, trends in the volume of trades made in the BMV, and interest rates also affect Mexican stock values and volatility. The rate of exchange of the Mexican peso to the US dollar can affect the value of assets, so I 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.[10] I also include a measure of changes to Mexico's inter-bank interest rate as this rate picks up movements in Mexican interest rates.[11] Volatility in the volume of daily trading in the BMV, which can be triggered by Mexico-specific or global economic factors and political events, can affect Mexican asset returns and volatility. Data was thus included on the BMV daily trading volume.[12] When investors consider future returns on Mexican investments, they compare them to other emerging market nations, so I include the Morgan Stanley Capital Index for Emerging Market nations (MSCI EM) to control for general emerging market trends.[13]

Method of Analysis and Statistical Results

I use a form of time series analysis called the Generalized Autoregressive Conditional Heteroscedasticity (GARCH) method to conduct the statistical analysis. Financial market data suffer from serial correlation, usually do not demonstrate consistent variance across time, and suffer from time varying variability (conditional heteroskedasticity). 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.

Conveniently, GARCH allows the inclusion of exogenous shocks like polling information that might affect the conditional mean and variance. As long as the models are appropriately specified, GARCH should account for serial correlation and all problems associated with it. The general conditional mean and conditional variance models I use are

$$\text{Mean: } \Delta \ln P = \lambda + \beta_1 E + \beta_2 C + \beta_3 D + \beta_i O_i + \varepsilon_t \text{ , where } \varepsilon_t = \sim N(0,\sigma_2)$$

$$\text{Variance: } \sigma_{t2} = \omega + \alpha\, \varepsilon_{t-12} + \beta_4\, \sigma_{2\,t-1} + \beta_2 C + \beta_4 S + \beta_i O_i$$

where λ and ω are constants, ε_t is the error term at time t whose variance is normally distributed around 0, ε_{t-12} is the ARCH term, and $\sigma_{2\,t-1}$ is the GARCH term, P = the IPC for all Mexican stocks or stocks in specific economic sectors, E = the daily difference in the log of the MSCI EM, C = the percent daily difference in the inter-bank peso – dollar exchange rate at closing, D = the daily difference in the log of the Mexican inter-bank bank interest rate, S = the daily trading volume of the BMV, O = the other variables measuring electoral uncertainty. I also include an AR(1) term in the mean equation to account for serial correlation (not shown in the model above). 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).

Before analyzing the effect of election polling trends on sector-specific stocks, let us first examine how all investors in the BMV reacted to changes in electoral support. Model 1 in Table 1 presents a baseline economic model. Results for changes in mean stock market returns are found in the *Mean Equation* section of the model. Changes in stock market returns in the MSCI EM were positively associated with returns in Mexico's IPC, with the coefficient for the variable *MSCI EM* nearly significant at $p < 0.113$. A one unit increase in the daily difference in the natural log of the MSCI EM led to a 0.0013 increase in the daily difference in the natural log of the IPC. In other words, the Mexican IPC reflects 0.13% of the daily change in the

natural log of the Emerging Market MSCI. Mexican interest rates, called *Interest Rate*, and peso appreciation, called *Peso Appreciation*, had no effect on stock market returns. Peso appreciation and interest rate changes are only correlated at -2.9%, so the lack of effect of these variables on IPC returns is not the result of multicolinearity. Results for market volatility are shown in the *Variance Equation* portion of Model 1. In contrast to the *Mean Equation*, peso appreciation had a positive and significant effect on stock market volatility, with $p < 0.004$. The substantive interpretation of the *Variance Equation* results are not as important as recalling that, even after controlling for the effect of volatility at time t-1 and for the effect of volatility shocks at time t-1, peso appreciation had a positive and significant effect on volatility. The daily trading volume in the Mexican stock market, called *IPC Volume*, is negatively associated with volatility, with $p < 0.000$.

--Insert Table 1 about Here--

The AR(1) term in Model 1 was positive and significant at the $p < 0.069$ level. The ARCH (1,1) term was negative and significant at the $p < 0.000$ level showing that volatility shocks at time t-1 reduced conditional variance. The GARCH (1,1) term was negative and significant, so variance in returns at time t was a negative function of variance at time t-1. Ljung-Box tests for the residuals and residuals squared do not allow us to reject the null hypothesis of no serial correlation in the residuals, as evidenced by their high p-values, demonstrating that the baseline economic model does not suffer from misspecification. Residual plots for this model and for all models analyzed in this article show the residuals to be very nearly normally distributed. Residuals also survived tests for skewness though often not stricter tests for kurtosis (fat tails). I assumed a normal distribution for the residuals in all models under study here. Alternative specifications of the residuals, for example using a

Student T distribution which is common in GARCH models to account for major problems of kurtosis, did not produce significant results for Student T distribution coefficients.

Models 2 through 4 in Table 1 analyze the effects of polling information on the Mexican stock market. Model 2 shows the effect of electoral uncertainty, called *Entropy*, on mean returns and volatility for all stocks in the BMV. *Entropy* had no effect on stock market returns in the mean model, but it did have a positive and significant ($p < 0.031$) coefficient. Though rising uncertainty over who would win the presidential race had no effect on overall market returns, it did lead to rising volatility as investors adopted different expectations about future stock price trends. Model 3 shows the stock market effect of rises in the probability of victory of López Obrador, measured by the *Electoral Option* variable. Increases in the chances of a left-leaning presidency had no effect on stock market returns or volatility, with this variable´s mean and variance model coefficients insignificant. In contrast, rises in support for López Obrador, the variable *AMLO (PRD)* in Model 4, while controlling for shifts in Calderón's support (*FCH (PAN)*), had a negative and significant ($p < 0.000$) effect on stock market volatility but did not affect returns.

As in Model 1, trends in emerging market stocks (*MSCI EM*) continued to have a positive and significant effect on Mexican stock market returns in Models 2 through 4 in Table 1. Peso appreciation and interest rates maintained their insignificant effects on mean returns. Peso appreciation retained its positive and significant effect on stock market volatility in Models 2 through 4, while trading volume produced mixed results across the models. The AR(1) terms in Models 2 through 4 were positive and significant, while the ARCH (1,1) terms were negative and significant at the $p < 0.000$ to $p < 0.003$ level, demonstrating that volatility shocks at time t-1 reduced conditional variance by a small amount. The GARCH (1,1) terms

produced mixed results, with this term significant only in Model 2. Model 2 performed similar to Model 1 in tests for robustness, attesting to its adequate specification. Although Ljung-Box tests on the residuals in Models 3 and 4 survived robustness tests, attesting to these models' adequate *Mean Equation* specifications, tests of the squared residuals and thus the specification tests of the *Variance Equation* were mixed. Model 4 nearly survived robustness tests, with $p < 0.098$ but Model 3 did not ($p < 0.043$). Alternative specifications of Model 3 did not change the overall lack of observed effect of the *Electoral Option* variable on mean returns and volatility, so I conclude that, despite mixed robustness test results for this model, the lack of effect of the *Electoral Option* variable in Model 3 reflects true investor preferences.

The findings reported in Table 1 point to the presence of an investment community mostly concerned with political uncertainty and its effects on their ability to distinguish between alternative investment strategies. Had investor's largely feared (favored) a left-leaning leader, changes in the probability of a López Obrador victory would have negatively (positively) affected market returns, implying that a Calderón presidency was preferred (rejected). That investors formed a more consensual view about where asset prices would land with rising López Obrador support, even if such shifts had little bearing on whether López Obrador would ultimately win, could be taken to support the results for the effect of electoral uncertainty on volatility. Any rises in this candidate's support, controlling for that of Calderón, could have been taken by investors as a signal that the margin between the top two contenders was growing, given that López Obrador was either ahead of or tied with Calderón for much of the race. The lack of effect of shifts in Calderón's support on mean returns or volatility could be taken to imply that investors maintained, rather than built up or abandoned, their Mexican investment strategies during the race regardless of changes in this candidate's support.

Yet, the findings in Table 1 are also consistent with another story. Stock market indicators aggregate equity investments across economic sectors. For this reason, measures of aggregate stock market returns may not show any overall change when some company stock prices rise and others fall. Such behavior would produce the null statistical findings for the effect of politics on stock returns across the *Mean Equation* models found in Table 1. Moreover, aggregate stock market returns can improve, worsen, or remain unchanged while experiencing high volatility, low volatility, and no volatility. Market volatility measures capture variance in aggregate market performance and thus indicate the degree of investor consensus about the direction of expected future returns, whether positive, neutral, or negative. Increased certainty about the direction of expected future market performance lowers asset price volatility while increased uncertainty raises it. The volatility equation results shown here could be consistent with a situation where politics lead some investors to forecast little change in future market returns (regardless of the direction of that change) but others to foresee larger future changes (again, regardless of the direction of that change). As argued in this article, the nature of the balance of equity assets across the BMV's various economic sectors could thus be the cause of the generally weak effect of politics on market volatility observed in Table 1, even to the point of generating null statistical findings. It is thus important to separate investors by the economic sector where their assets lie to study the effect of politics on markets.

Tables 2 and 3 present the analysis of the BMV by the two economic sectors under study here. Table 2 shows results for the effect of various market and political variables on stock prices in Mexico's construction sector. As described in Hypothesis 1, given that López Obrador promised to raise infrastructure investment, rises in his support should have had a positive effect on construction sector stock returns and a negative effect on volatility as investors in this sector largely agreed on the positive benefits of a López Obrador presidency

for their investments. I also expect that electoral uncertainty will lower returns and raise market volatility as investors find it harder to plan their investment strategies in this sector, with some choosing to give up holdings. The baseline economic model shown in Model 1 reveals that the MSCI EM had a positive and significant effect on construction sector stock returns, with this coefficient showing $p < 0.013$. In contrast to the overall BMV model in Table 1, rises in the Mexican inter-bank interest rate (*Interest Rate*) were positively associated with stock market returns, with this variable nearly significant ($p < 0.115$) in the *Mean Equation*. In the *Variance Equation*, *Peso Appreciation* maintained its positive and significant effect while daily trading volume showed no effect on construction sector stock volatility. The AR(1) term was positive and significant, while both ARCH (1,1) and GARCH (1,1) terms were not. Ljung-Box tests show that the model is adequately specified.

--Insert Table 2 about Here--

Moving to the political variables in Table 2, rises in the probability of a López Obrador victory, *Electoral Option* in Model 3, had no effect on construction sector stock market returns but did have a positive effect on the volatility. This variable was positive and significant ($p < 0.000$) in the *Variance Equation*. The level of electoral uncertainty (*Entropy*) in Model 2 and the percent share expected support for López Obrador (*AMLO (PRD)*) and Calderón (*FCH (PAN)*) in Model 4 produced insignificant coefficients. The AR(1) terms in all political models were positive and significant. The ARCH (1,1) and GARCH (1,1) terms were not significant, showing that volatility shocks at time t-1 had no effect on conditional variance and that variance at time t-1 was not associated with variance at time t. Ljung-Box tests for all political models show that we cannot reject the null hypothesis of no serial correlation in the residuals, signaling that the models are adequately specified.

The positive and significant effect that rising chances of a López Obrador victory had on stock market volatility combined with this variable's lack of effect on construction sector stock returns means that investors in the sector expected that returns to their investments would at the very least remain stable but that returns for some company stocks would far exceed those of others under López Obrador. Companies listed in Mexico's construction sector can be divided into two groups: those producing construction materials like cement and involved in major construction projects – and thus who stand to benefit from any public works construction promised by López Obrador - and those companies involved in Mexico's housing sector - which benefited from the federal housing and subsidized loan programs sponsored by outgoing President Fox and who expected to continue to prosper from a continuation of these policies of under Calderón. Rises in the chances of a López Obrador victory led investors to reevaluate portfolio holdings, with many possibly seeking to shift assets from housing companies to materials producers and large construction companies, leading to greater volatility in overall construction sector stock market trends but no change in overall returns. Selling positions in some firms to beef up positions in others raises volatility as those seeking to unload positions accept lower prices while those buying into other companies accept higher prices.

The positive *Electoral Option* results also imply that rises in the chances of a Calderón administration lowered volatility but did not affect returns, signaling that rises in this candidate's electoral prospects likely led many investors to hold onto stocks in some firms (probably materials producers) while shoring up positions in other firms (probably housing) in the same sector. Holding positions in some firms while beefing up positions in others, depending on the balance of firms in the sector overall and the starting point of their stock prices, can lead to a reduction in volatility as prices for some companies remain stable and prices for others rise to the level enjoyed by those with stable prices. This interpretation is

corroborated by the null findings for the effect of electoral uncertainty which reveal that investors preferred to maintain holdings in the sector and that most construction sector investors believed that their positions would not be hurt by either administration, just that they could improve their returns by shoring up positions or shifting assets among companies once it became clearer who would win. Had all construction stock market investors favored López Obrador, then returns would have risen while volatility declined, as outlined in Hypothesis 1. Hypothesis 1 is thus only partially confirmed in that some investors seemed to prefer López Obrador, others Calderón, but with most not expecting to suffer under either administration.

Table 3 presents results for the analysis of the effect of polling data on Mexico's services sector. Companies listed in this sector are mostly confined to Mexico´s financial institutions. The initial baseline economic model, shown in Model 1, as well as the other models presented in this table do not include AR(1) terms as they were insignificant. It also includes daily changes in Mexican inter-bank interest rates in both the *Mean* and *Variance Equations* as interest rate changes are expected to affect both returns and volatility in the financial sector. As in most of the other models presented above, trends in other emerging market nations (*MSCI EM*) had a positive and significant effect on stock market returns in Mexico's financial services sector ($p < 0.056$). The variables *Peso Appreciation* and *Interest Rate* had negative and significant ($p < 0.013$ and $p < 0.000$, respectively) effect on financial services stock market volatility but no effect on returns. The ARCH (1,1) terms was not significant but the GARCH (1,1) term was negative and significant. Volatility shocks at time t-1 had no effect on conditional variance, while variance at time t-1 was negatively associated with variance at time t. Ljung-Box tests show that the models are adequately specified.

--Insert Table 5 about Here--

Moving to the political variables, Table 3's Model 2 shows results for the effect of electoral uncertainty on financial services stocks. *Entropy* had a positive and significant ($p < 0.000$) effect on stock market volatility but no effect on market returns. Rises in the probability of a López Obrador victory (*Electoral Option*) had no effect on returns or volatility, as shown in Model 2, but daily changes in support for the top two candidates both affected stock market volatility as expected in Hypothesis 4. This hypothesis predicts that voters will respond favorably to rises in support for Calderón, implying that they will respond unfavorably to shifts in support to López Obrador. As shown in Model 4, rises in daily support for Calderón reduced stock market volatility while rises in support for López Obrador raised it. The coefficients were significant at the $p < 0.016$ and 0.005 levels, respectively. This model excluded the *Interest Rate* variable in the *Variance Equation* as models with it did not converge. Ljung-Box tests for Models 2 through 4 show that we cannot reject the null hypothesis of no serial correlation in the residuals, so the models are adequately specified. The ARCH (1,1) terms in Models 2 and 3 were negative and achieved statistical significance but in Model 4 this term did not. All GARCH (1,1) terms in the political models were positive and significant.

The financial sector results partially confirm Hypothesis 2. Rises in Calderón´s support reduced market volatility, while rises in López Obrador´s support raised it. However, rises in either candidate's support, not to mention the *Electoral Option* variable, had no effect on market returns. This implies that investors in financial services were split between a relatively larger group of investors favoring Calderón and fearing López Obrador, and a smaller group also preferring Calderón but seeing little risk from López Obrador. Had all investors behaved like the larger group, then rises in support for Calderón would have positively affected returns, rises in support for López Obrador would have negatively affected returns, and the *Electoral Option* variable would have negatively affected returns. This conclusion is also supported by

the *Entropy* variable's positive and significant effect on volatility but not on returns. In some studies of the effect of politics on markets, electoral uncertainty was enough to raise investor concern, even if investors did not fear the ultimate direction of governmental policy. However, in the case of Mexico's financial services sector, the positive effect of uncertainty on volatility (but not on returns) demonstrates that investor concern over electoral uncertainty grew from variation in the level of financial sector investor concern over the country's ultimate policy direction. Some saw uncertainty over whether López Obrador would carry the election as presenting little risk to holdings, while others evaluated uncertainty's and thus López Obrador's risk to investments more negatively. Had investors shared similar views about the candidates and thus about the effect of a tight race on their investments, then returns would have fallen with rises in uncertainty.

The statistical analysis reveals that the stock market effects of expansionary economic policies promised by López Obrador did not conform entirely to the expectations outlined in Hypothesis 1, even if the results did show that some companies in some sectors did expect to benefit from a left-leaning administration. I expected investors in construction to experience rising returns and lower volatility as support for this candidate or his chances of winning rose. Instead, the results reveal that only investors in some construction sector firms seemed to have expected to benefit from a left-leaning president. Moreover, those seeking to benefit from López Obrador did not necessarily expect to suffer under Calderón. That not all investors in the companies located in these sectors expected to benefit from López Obrador attests to the wide range of economic activities in which firms in any economic sector engage and thus to the variation in market benefits associated with left-leading rule. That not all investors expected to suffer under Calderón attests to the strong purchasing power of most Mexican citizens expected even under a neo-liberal, and thus relatively more fiscally austere, president.

In terms of Hypothesis 2 about the expected benefits of rises in Calderón's support for financial services, the statistical analysis also produced mixed results. The results revealed that some investors were concerned about electoral uncertainty and the effects of a tight race on their assets but that not all investors evaluated electoral uncertainty in the same way. Even so, the results did show that investors evaluated and responded immediately to daily changes in candidate support mostly according to theoretical expectation. Although changes in candidate support had no effect on returns, rises in Calderón´s support reduced market volatility while rises in López Obrador´s support raised it. These results combined with those for electoral uncertainty attest to the variety of responses by investors in this sector to political news. Only some investors felt at risk under a López Obrador presidency, though most favored Calderón.

Concluding Remarks about the Effect of Politics across Investment Instruments

The original proposition of this article was to unpack the reasons underlying market analysts' and scholar's divergent findings about the effect of politics on markets. Some market and scholarly researchers have found that investors perceive higher market risks under left-leaning rule, while others have shown that changes in policy trajectories, regardless of direction, and thus political uncertainty raises the risks to investment. Rather than conducting yet another analysis of investor responses to political information, I designed this study to shift the point of analytic focus to show that aggregating assets across classes might mask important variation in the market risks of politics on different kinds of investments within each class. Investors have a variety of investment instruments at their disposal within each asset class, each implying different market risks and rewards under changing political scenarios.

To build this case, I analyzed investor behavior in the Mexican stock market by economic sector during Mexico's 2006 presidential campaign. Statistical analysis showed that

polling information, and thus partisan politics and policy promises, do not affect equity holdings across economic sectors equally. Investors across Mexico's different economic sectors varied in their level of acceptance of left-leaning candidates, acceptance of right-leaning contenders, fears about electoral uncertainty, and sometimes appeared to have no political preferences at all. Not only do the findings demonstrate the important variation in the effect of politics across economic sectors, they also show that aggregate analysis of the stock market on the whole can mask this important variation. This raises the possibility that the balance of assets within asset classes, rather than any uniform investor preferences, may be driving most scholars' results thus far, regardless of whether they study stock markets, bond markets, or currency trades. Rather than supporting the need for more studies of aggregate asset classes, the findings here suggest the importance of detailed analysis of asset classes disaggregated by type of investment instrument in order to capture the effect of politics on markets.

The results also demonstrate that variation in investor responses to politics and political information may vary not only by economic sector but also by firm. This means that even disaggregating asset classes by type of investment instruments may not go far enough to capture the variety of investor concerns and responses to politics and political news. Indeed, that investors have found numerous ways to diversify risk, even within the same asset classes, points to the variety of investment interests and thus the degree of susceptibility of investments to political risks. In the case of stock markets, this means more detailed analysis of firm-level, in addition to sectoral level, stocks. Advocating firm-level analysis should not be surprising to scholars of the effect of politics on markets. The number of firm-level fixed-income and equity analysts in the financial world attests to the importance of firm-level, rather than sectoral-level, analysis for understanding the effect of politics on markets and thus investor concerns and behavior. If all firms in any given sector could be expected to benefit similarly from changing

political and economic contexts, then financial analysts would focus on the sector rather than conduct highly detailed firm-specific analysis. In the case of government or corporate bonds, this means disaggregate of bonds only by maturity rates but also by currency denominations and other more sophisticated instruments used by investors to diversify risk. Though research on the effect of politics and markets is still in its infant stage, particularly scholarship on emerging market nations, sub-asset levels of analysis should provide ample room for future research, yielding fruitful and interesting results.

Notes

[1] Running third for most of the race, Roberto Madrazo Pintado represented the more centrist Partido Revolucionario Institucional (PRI) in coalition by the Partido Verde Ecologísta de México (PVEM). Two other newly formed small parties ran candidates. The center-right Partido Nacional Alianza (PANAL) ran Roberto Campa Cirfrían, while Patricia Mercado represented the left-leaning Partido Alternativa Sociodemócrata y Campesina (Alternativa).

[2] The race was so tight that no pollsters conducting exit polls on July 2 released predictions who they thought would win. IFE was also unable to announce the results on July 2.

[3] I exclude the extractive (mining) sector as this sector depends on global trends in industrialized nations. Another group of stocks, labeled "Various" by the BMV includes a range of companies but these are omitted from the study.

[4] IPC data from http://www.banxico.org.mx and sector information from www.bmv.com.mx.

[5] From www.bmv.com.mx.

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

[7] Available at http://www.ife.org.mx.

[8] Available at http://www.opionamexico.org.

[9] Models including four previous days produced similar results.

[10] Available at http://www.banxico.org.mx.

[11] Available at http://www.banxico.org.mx.

[12] Available at http://www.banxico.org.mx.

[13] Available at http://www.msci.com.

Table 1: Polling Data and All Economic Sector Stocks in Mexico, 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	0.0013	0.0008	0.113	0.0026	0.0008	0.001	0.0016	0.0010	0.120	0.0009	0.0004	0.038
Peso Appreciation	-0.1437	0.1125	0.201	0.0113	0.1765	0.949	0.0293	0.3056	0.924	-0.0311	0.2575	0.904
Interest Rate	0.1549	0.1530	0.311	0.1033	0.1381	0.454	0.1482	0.1552	0.340	0.1513	0.1662	0.363
Entropy				0.0041	0.0067	0.540						
Electoral Option							-0.0017	0.0038	0.653			
AMLO (PRD)										-0.00002	0.0007	0.981
FCH (PAN)										0.00017	0.0007	0.822
AR(1)	0.2490	0.0440	0.000	0.3686	0.0804	0.000	0.2815	0.0963	0.003	0.2937	0.0880	0.001
Constant	-0.0005	0.0006	0.423	-0.0016	0.0024	0.506	0.0006	0.0033	0.846	-0.0056	0.0467	0.905
Variance Model												
Peso Appreciation	46.821	16.217	0.004	51.972	27.513	0.059	60.171	35.435	0.089	50.331	14.563	0.001
IPC Volume	-4.34e-06	8.46e-07	0.000	1.34e-06	6.42e-07	0.037	1.65e-06	1.46e-06	0.261	-1.79e-06	1.11e-06	0.105
Entropy				0.8340	0.3860	0.031						
Electoral Option							0.2461	0.2761	0.373			
AMLO (PRD)										-0.0277	0.0039	0.000
FCH (PAN)										0.0045	0.0031	0.152
Constant	-7.9870	0.1666	0.000	-9.0099	0.1006	0.000	-8.8579	0.1231	0.000	-7.3782	0.1817	0.000
ARCH	-0.1703	0.0263	0.000	-0.1684	0.4217	0.000	-0.1512	0.0368	0.000	-0.1845	0.0309	0.000
GARCH	0.2072	0.1036	0.045	0.2803	0.1225	0.022	0.1354	0.2247	0.547	0.1344	0.1428	0.347
Diagnostics												
LB Q (1), Q, p-val			0.693			0.545			0.914			0.935
LB Q_2 (1) Q, p-val			0.521			0.417			0.043			0.098
Log Likelihood			324.118			321.560			319.889			330.793
Observations			113			111			111			113

Note: Dependent Variable = Daily Difference in the Log of the Mexican Index of Prices and Quotations (IPC) for all sectors; MSCI EM = Daily Difference in the Log MSCI EM in US Dollars; AMLO = Andrés Manuel López Obrador; FCH = Felipe Calderón Hinojosa.

Table 2: Polling Data and Construction Sector Stocks in Mexico, 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	0.0026	0.0010	0.013	0.0028	0.0011	0.011	0.0010	0.0013	0.439	0.0022	0.0011	0.054
Peso Appreciation	0.0608	0.3252	0.852	0.0303	0.3677	0.934	0.2187	0.3138	0.486	0.0969	0.3486	0.781
Interest Rate	0.2110	0.1338	0.115	0.1457	0.1342	0.277	0.1454	0.1168	0.213	0.1456	0.1274	0.253
Entropy				0.0047	0.0070	0.496						
Electoral Option							0.0021	0.0036	0.559			
AMLO (PRD)										-0.0011	0.0010	0.493
FCH (PAN)										-0.0010	0.0011	0.493
AR(1)	0.4080	0.1006	0.000	0.3507	0.1091	0.001	0.4392	0.0906	0.000	0.4153	0.1049	0.000
Constant	-0.00008	0.0029	0.979	-0.0014	0.0029	0.626	-0.0011	0.0033	0.735	0.0653	0.0558	0.242
Variance Model												
Peso Appreciation	73.6281	37.769	0.051	83.277	56.061	0.137	43.7684	2.8930	0.000	75.001	46.526	0.107
IPC Volume	3.94e-07	7.06e-07	0.577	2.10e-06	4.57e-06	0.646	2.70e-07	8.76e-07	0.758	2.19e-06	3.79e-06	0.565
Entropy												
Electoral Option							0.4761	0.1154	0.000			
AMLO (PRD)										-0.0870	0.0853	0.308
FCH (PAN)										-0.0363	0.0836	0.664
Constant	-8.3361	0.3423	0.000	-8.8567	1.1745	0.000	-8.2853	0.2378	0.000	-4.1882	5.3289	0.432
ARCH	-0.1798	0.1271	0.157	-0.1031	0.1299	0.428	-0.0600	0.0782	0.443	-0.0961	0.1141	0.400
GARCH	0.2563	0.3389	0.449	0.3213	0.4942	0.516	-0.2686	0.2102	0.201	0.1746	0.4212	0.678
Diagnostics												
LB Q (1), Q, p-val			0.381			0.487			0.269			0.612
LB Q_2 (1) Q, p-val			0.674			0.844			0.886			0.762
Log Likelihood			309.308			301.703			302.490			307.755
Observations			113			111			111			113

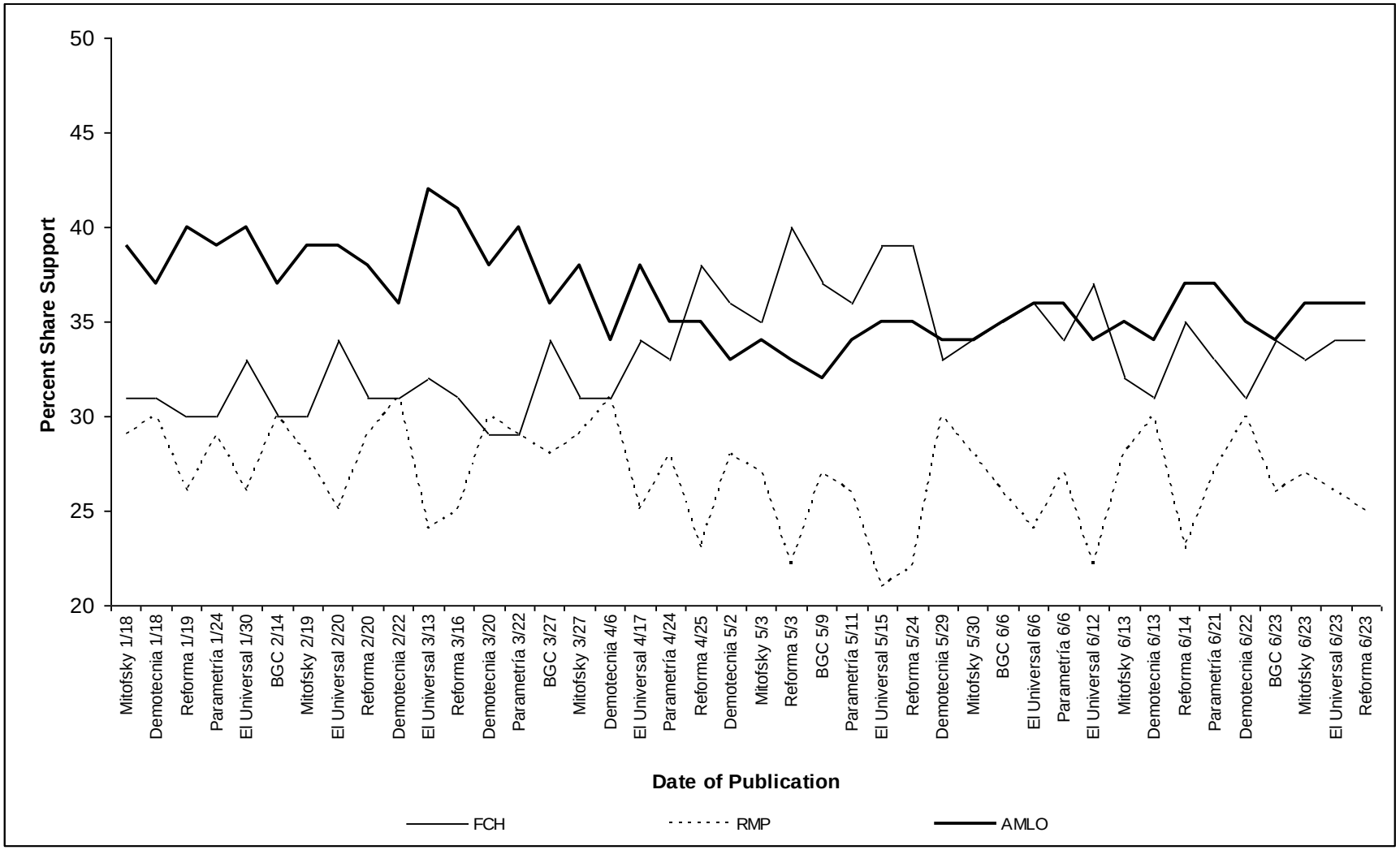
Note: Dependent Variable = Daily Difference in the Log of the Mexican Index of Prices and Quotations (IPC) for the construction sector; MSCI EM = Daily Difference in the Log MSCI EM in US Dollars; AMLO = Andrés Manuel López Obrador; FCH = Felipe Calderón Hinojosa.

Table 3: Polling Data and Services Sector Stocks in Mexico, 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	0.0016	0.0009	0.056	0.0035	0.0007	0.000	0.0033	0.0010	0.001	0.0021	0.0006	0.001
Peso Appreciation	0.0715	0.3575	0.842	-0.1333	0.2777	0.631	-0.3954	0.3482	0.256	-0.1118	0.2931	0.703
Interest Rate	0.2223	0.1489	0.135	0.4670	0.1768	0.008	0.3163	0.1829	0.084	0.2432	0.1294	0.060
Entropy				-0.0011	0.0033	0.745						
Electoral Option							0.0047	0.0034	0.163			
AMLO (PRD)										-0.0003	0.0007	0.651
FCH (PAN)										0.0003	0.0007	0.659
Constant	-0.0005	0.0014	0.739	-0.0003	0.0013	0.846	-0.0039	0.0026	0.135	0.0030	0.0458	0.949
Variance Model												
Peso Appreciation	-12.686	5.0797	0.013	-52.401	25.165	0.037	-82.406	51.720	0.111	-14.983	21.674	0.489
Interest Rate	-12.714	0.2696	0.000	-57.985	10.684	0.000	-49.832	26.760	0.063			
IPC Volume	-1.39e06	1.15e-06	0.225	0.00001	2.06e-06	0.000	0.00001	8.68e-06	0.187	8.01e-07	9.29e-07	0.419
Entropy				0.8622	0.4697	0.066						
Electoral Option							-1.298	0.86663	0.134			
AMLO (PRD)										0.0495	0.0177	0.005
FCH (PAN)										-0.0543	0.0226	0.016
Constant	-7.9291	0.0020	0.000	-11.490	0.45560	0.000	-12.078	1.0023	0.000	-8.4076	0.9157	0.000
ARCH	0.0989	0.1220	0.418	-0.2149	0.740	0.004	-0.1699	0.0877	0.053	-0.1237	0.0571	0.030
GARCH	-0.5242	0.1998	0.009	0.7907	0.0762	0.000	1.037	0.0741	0.000	-0.0868	0.1840	0.637
Diagnostics												
LB Q (1), Q, p-val			0.703			0.716						0.613
LB Q_2 (1) Q, p-val			0.456			0.719						0.397
Log Likelihood			324.672			322.966			320.878			324.456
Observations			113			111			111			113

Note: Dependent Variable = Daily Difference in the Log of the Mexican Index of Prices and Quotations (IPC) for the services sector; MSCI EM = Daily Difference in the Log MSCI EM in US Dollars; AMLO = Andrés Manuel López Obrador; FCH = Felipe Calderón Hinojosa.

Figure 1: Polling Trends from Selected Pollsters Publishing in Mexico's Major Newspapers or Media Outlets for Mexico's Top Three 2006 Presidential Contenders, January 17-June 23



Note: FHC = 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*.

Figure 2: Mexico's Stock Market Index of Prices and Quotations (IPC) Compared to the Morgan Stanley Capital Index for Mexico (MSCI Mexico) and Emerging Market Nations (MSCI EM), January 2 – June 30, 2006

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