

Elections, Policy Preferences and International Financial Market Constraints*

Thomas Sattler
University College Dublin
thomas.sattler@ucd.ie

November 4, 2010

Abstract

Despite strong pressures from international financial markets, political parties continue to propose policies that differ considerably. This article examines to what extent actual government policies have converged notwithstanding the distinct policies that parties embrace in their party manifestos, and whether potential policy convergence can be traced back to financial openness. To answer these questions, the study analyzes stock market reactions to elections in industrialized democracies since the 1950s. If actual policies of government parties continue to diverge, stock prices should increase after a success of a nominally market-friendly party. Moreover, stocks should respond more strongly the more open the economy is to financial flows because capital has better exit options. If actual policies have converged, the impact of nominal policy positions on stocks vanishes in more open economies because actual policies are similar for all governments. The results imply that overall policies have weakly converged.

*Paper to be presented at the Conference of the International Political Economy Society (IPES), Harvard University, Boston, November 12, 2010.

1 Introduction

Despite the strong pressures from international financial markets on governments' abilities to choose freely among different economic and other policy options, political parties, at least nominally, continue to propose very distinct policy solutions. Parties, when running for office, claim that they will implement policies that differ significantly from those of their competitors. The proposition of distinct nominal policy positions still is an important component of democratic electoral competition, although observers often object that government parties pursue very similar actual policies once they assume office.

This study examines to what extent policies that parties implement once in power differ as much as they claim in their party manifestos. It also examines whether potential policy convergence can be traced back to pressures from international financial markets. To answer these questions, I assess the reaction of domestic stock markets to election outcomes in industrialized countries since the 1950s, and how this reaction has changed when economies have become more open to international financial flows. Stock market behavior reflects the aggregate expectations of well-informed actors about actual (as opposed to nominal) policies. It is therefore possible to infer to what extent expected policies of governments are consistent with their nominal differences. Stock markets should respond more strongly to elections if governments' actual policies continue to diverge in financially open economies. In contrast, stock markets reactions should decrease if governments' actual policies have converged.

By analyzing stock market responses to elections, it is possible to draw conclusions about convergence in a broad range of policy fields. Stock reactions reflect expected decisions by the incoming government in very different policy areas that have an effect on the profitability of firms. Profitability of firms does not only depend on economic policies, but also on policies in other fields where a 'race to the bottom' or convergence was predicted by critics of globalization. These policies include economic policies like fiscal policy (Basinger and Hallerberg, 2004; Swank and Steinmo, 2002) or monetary and exchange rate policies (Bearce, 2007; Broz and Frieden, 2001; Frieden, 1991), but also different types of regulatory policies like environmental regulation and consumer protection (Bernauer, 2003; Vogel, 1998). The

analysis therefore presents a broad picture that covers many of the most important policy tools that the elected government has at its disposal.

The results suggest that overall policies have weakly converged. Greater financial openness does not lead to stronger stock market responses to elections although the reallocation of capital is less costly in more open economies, which implies that policies by different governments have become more similar. At the same time, the stock responses do not disappear in financially open economies, which suggests that actual policies by governments cannot have fully converged. We can conclude from these results that elections and democratic competition have become somewhat less important for *returns* on financial investments in industrialized countries compared to the past. Nonetheless, elections have not become unimportant for investment *decisions* because it has become less costly to adjust portfolio investments after an election as financial openness has increased.

The results also complement recent research on politics and financial markets in a number of ways (e.g., Bernhard and Leblang, 2006). First, it adds a comparative perspective to the growing research on financial market responses to elections that, with very few exceptions, examines the financial effects of few and carefully selected cases (e.g., Bechtel, 2009; Herron, 2000; Leblang and Mukherjee, 2005). The basic results are consistent with previous research on the political economy of stock markets showing that stock prices increase when a more right-wing government is elected and that they drop when a more left-wing government wins the election. Unlike previous research, this study unveils a strong mediating effect of political constraints. While the effect of ideology on stock market behavior is large in countries with a low degree of political constraints, this effect fully disappears in countries with a high level of constraints. This is because policy volatility is small in high-constraint countries (Henisz, 2004), and financial investors anticipate this when interpreting election results. Finally, the analysis also shows that stock markets continue to respond to political processes for several weeks after an election until the government formation process is terminated.

2 Stocks and Politics

2.1 Background

In the most general terms, the behavior of stock markets represents the aggregate expectations of market participants about the future performance of firms. Since a stock price can be defined as the sum of discounted expected future dividends, an increase in a firm's stock price reflects the expectation that future dividends will raise, which in turn depends on the firm's future profitability. A negative return (i.e. a drop in the price for a stock) thus means that market participants infer from newly available information that the future profitability of a firm will decrease. Positive returns (i.e. increases in the price of a stock) reflect the expectation that the profitability of a firm will increase.

Besides the firm-specific characteristics influencing its competitiveness, e.g. technological innovations, the expected profitability of a firm to a considerable extent depends on government policies and political developments more generally. Governments have a wide variety of policy instruments available that they can use to affect economic and social outcomes. For instance, they can reduce tariffs, subsidize firms, increase the consumption of specific products or decrease the tax burden of firms. Alternatively, a government can impose a ban on military exports, increase corporate taxes or tighten regulations.

All these policies will affect the profitability of firms and hence should be reflected in a firm's stock price. Market participants have a private incentive to collect all available information about future government policies to be able to adequately judge the expected profitability of a firm. Stock market reactions then reflect the aggregate assessment of a large number of well-informed market participants about the expected actual policies by the future government. Accordingly, the recent political economy literature finds that stock prices tend to respond positively when the probability of a success of a market-friendly political party in an upcoming election increases (Bechtel, 2009; Fues and Bechtel, 2008; Campello, 2007; Herron, 2000; Mukherjee and Leblang, 2007; Leblang and Mukherjee, 2004,

2005; Santa-Clara and Valkanov, 2003; Snowberg, Wolfers and Zitzewitz, 2007*a,b*).¹

Since stocks respond strongly to policy decisions, their behavior after elections also allows us to make inferences if and how policymaking has changed with greater financial openness. A common fear is that financial pressure will force governments to engage in a ‘race to the bottom’ or at least to converge to a common policy in a particular policy field (Tanzi, 1996). Others contend that political parties have continued to implement distinct policies despite international pressures on governments and that these political differences may even be a precondition for openness (Boix, 1998; Garrett, 1998). The two different views have different implications for the impact of openness on policymaking and therefore on stock reactions as will be discussed in detail below. The examination of stock markets thus is one way to examine to what extent actual policies of governments have converged, and, if convergence exists, whether it can be traced back to financial openness.

An advantage in this context is that stock prices represent expectations about a broad range of policies that have played an important role in the globalization debate. While other financial markets, such as bond or foreign exchange markets, mostly reflect inflationary expectations following from the broad economic policies, stocks also incorporate information from other, more specific policy areas. They not only respond to the general economic policies, like monetary and exchange rate policies, that have been examined by previous research on policy convergence (Bearce, 2007; Frieden, 1991; Mosley, 2000), but also react to other policies for which a ‘race to the bottom’ has been predicted, e.g. tax policy (Basinger and Hallerberg, 2004; Swank and Steinmo, 2002; Swank, 2006) or regulatory policy (Vogel, 1998; Bernauer, 2003; Bernauer and Caduff, 2004). These policies play an essential role in electoral competition and seriously affect the profitability of firms.

¹With few exceptions, notably Bernhard and Leblang (2006, esp. chapters 3 and 4) and Campello (2007), the studies on stocks and politics are restricted to one or few election(s) in single or two countries. To my knowledge, none of them explicitly compares open-economy to closed-economy periods.

2.2 The Effect of Financial Openness

The effect of financial openness on policies and thus on stocks depends on two aspects. First, it depends on the government's economic cost of implementing less market-friendly policies, which, in turn, is affected by the costs of financial investors to reallocate their investments. Second, it depends on parties' political costs of converging towards the same policy position. The implications differ depending on the relative impact of openness on the two types of costs. In this section, I first discuss how financial openness affects the economic costs of less market-friendly policies and then elaborate how the implications change as we assign greater importance to the political costs of policy convergence that government parties may face.

Before the mid-1970s, cross-border capital flows were costly because capital controls were an essential part of the Bretton Woods System (Eichengreen, 1996, chapter 4). Capital controls can take different forms, but all of them increase the costs of reallocating capital internationally.² In the extreme case when international financial exchange is forbidden, capital can only be transferred illegally, which would be prohibitively costly.³ For the other end of the spectrum when no restrictions exist, the costs of reallocating capital are reduced to the fees for international financial services. The extent of financial regulations mediates the benefits of reallocating capital in response to expected unfavorable policies after an election.

After the breakdown of the Bretton Woods System, capital controls were continuously reduced, and most industrialized countries were fully open to international capital flows by the early 1980s. With greater openness, the cost of reallocating capital decreased significantly facilitating transfers of funds abroad when an election outcome is unfavorable for firms' expected profitability. Although this de jure openness is crucial for international capital flows, the costs also depend on other, technical factors, such as the existence of a well-developed international financial infrastructure. The quick and easy reallocation of portfolio

²Capital controls can include quantitative restrictions on international financial exchange, administrative rules, e.g. the requirement to seek the approval by authorities, or taxes on international transactions.

³This extreme case does not apply to the countries analyzed in this study, but mostly is the case for countries where free political competition and elections and well-developed stock markets do not exist.

investments requires the internationalization of banking, e.g. by establishing branches in different countries, which provides channels to transfer money across borders. De facto financial openness thus may follow de jure openness with a delay.⁴

When the costs of international financial transactions decrease, the economic costs of governments of a market-unfriendly strategy increase. If governments implement policies that have adverse effects on the profitability of firms, these firms will sooner or later relocate to an economy with a more market-friendly political environment. Increasing cross-border portfolio investment flows speed up and intensify the negative consequences of economic policies on long-term investments and domestic economic activities. If investors expect that the new economic policies decrease the profitability of firms, they will reshuffle their portfolio and reduce investments in stocks that are adversely affected by the policy change. If the new government's policies negatively affect large parts of the economy, this will lead to a considerable net outflow of short-term capital reducing the overall capital stock in the country. Ultimately, a reduction in the capital stock of a country means that investments and therefore economic growth slow down.

A government thus may be very cautious to adopt potentially adverse economic policies in an open economy. Instead, most political parties, once in power, may find it preferable to converge on similar actual policies, for two reasons. First, voters may punish the government for poor economic performance when the negative effects of government policies on the economy materialize. Second, capital outflows have direct repercussions on the government's position because public revenues will decrease restricting the government's ability to implement its preferred policies in other domains.

Despite these financial market constraints and convergence of actual policies, it may still be reasonable for political parties to adopt nominally distinct economic policy positions.

⁴Empirical data show that a significant increase in actual cross-border portfolio financial flows occurred only about a decade or more after de jure restrictions were abolished. The Quinn-Toyoda measure of de jure capital openness (Quinn, 1997; Quinn and Toyoda, 2008) indicates that most industrialized countries were almost fully open by 1980, but portfolio investment flows increased only slowly during the 1980s and exploded during the 1990s (Lane and Milesi-Ferretti, 2006).

Given the complex economic relationships in open economies, the parties in power could benefit politically, at least in the short term, by claiming that favorable economic outcomes are related to their distinct policy program (Sattler, Freeman and Brandt, 2008; Sattler, Brandt and Freeman, 2010). Similarly, an opposition party may benefit from blaming the government parties and their programs for poor economic performance and offer a nominally different policy proposal.

This argumentation implies that, when the economic costs of non-convergence increase with greater financial openness, governments will pursue increasingly similar policies that directly and indirectly affect the profitability of major firms or large segments of the economy. If actual government policies have converged when countries became more open to international financial flows, domestic stocks should respond less to elections when international financial integration increases. Similarly, the effect of nominal ideology of the winning parties on stock markets should decrease as financial openness increases. This *strong convergence* logic is summarized in the following two hypotheses.

H1a: As financial integration increases, stock market responses to elections decrease.

H1b: The negative (positive) response of stock markets to the election of a left-wing (right-wing) country becomes smaller as financial integration increases.

Besides these economic considerations, the government also has to take into account the political costs that arise when it simply follows a market-friendly strategy and neglects the political demands by voters. Workers usually strongly resist cuts in social programs that insure them against poverty in case of unemployment (Rodrik, 1998). Organized labor also tends to oppose intentions to loosen labor regulations which would allow firms to offset employees more easily, at least those that are represented by powerful interest groups (Rueda, 2007). Similarly, employees in import-competing sectors tend to demand protection or compensation when competition from abroad increases (Hiscox, 2002; Rickard, 2007). All these policies affect firms' profitability because they require higher taxes on profits, limit the ability

to reduce excess production capacities or raise input prices for other sectors.

Political pressure from voters and interest groups thus constrains the ability of governments to fully comply with the interests of financial investors. Parties in power would lose important votes if they simply followed the interests of market participants and were unresponsive to demands from other groups. Since parties cannot afford to systematically ignore their political constituencies, they have to evaluate the economic costs of less market-friendly policies against the political costs of neglecting the interests of the societal groups that support them. This means that the greater economic costs of distinct policies in open economies may lead to more pro-market policies, but the policies of parties will not fully converge.

In such a *weak convergence* scenario, governments balance their political and economic costs, which leads minor or no changes in stock market responses to elections as financial openness increases. This is the case because, on average, expected government policies become more market-friendly, which leads to less reallocation of financial funds when a new government comes into office. At the same time, this reallocation becomes less costly, and it is optimal for market participants to reshuffle their portfolios even though expected policies change less than in closed economies. We thus should see only little effects of financial openness on the relationship between stocks and politics according to this weak convergence logic.

H2a: As financial integration increases, stock market responses to elections do not change.

H2b: The negative (positive) response of stock markets to the election of a left-wing (right-wing) party remains constant as financial integration increases.

Finally, some research implies that the political costs of converging towards the same policies increase with greater financial openness. When the social and economic risks of voters increase as economies become more open, the political pressure to compensate them for these risks becomes larger (Garrett, 1998). The guarantee that (some) political parties will ensure the continuation of key social programs is even considered a political precondition for economic openness. This is because voters would not agree with the reduction of economic

barriers if they were not sufficiently insured against the greater risks that are associated with these policies (Adserà and Boix, 2002).

The social consequences of globalization may also lead to a more heterogenous electorate potentially increasing the costs of political convergence for parties representing different constituencies. New social cleavages can affect political competition in different ways, but their effect on stock markets is similar. Mainstream parties can take more diverging positions to represent the interest of the different groups, or small niche parties will exploit the electoral potential of winners and losers of globalization (Kriesi et al., 2008). In any case, governments that rely heavily on the support from those who are affected most by globalization will not be able to ignore demands for greater social insurance and have to accommodate these pressures when once in office. In contrast, governments dominated by parties representing people who benefit from economic integration will prefer to resort to more market-friendly policies.

When both the economic and the political costs increase with greater financial openness, policies remain largely the same. Since investors have better exit options when the domestic financial market is well integrated into world financial markets, they can adjust their portfolios more easily in response to an unfavorable election outcome. If a pro-market party wins the election, foreign investors may consider investing in the domestic stock market because expected profitability of firms and thus expected returns on capital increase relative to foreign markets. This third, *non-convergence* logic implies that, stock markets should respond more to elections in financially open economies than in financially closed ones.

H3a: As financial integration increases, stock market responses to elections increase.

H3b: The negative (positive) response of stock markets to the election of a left-wing (right-wing) country becomes large as financial integration increases.

3 Empirical Design

3.1 Event Study

To examine whether and how stock markets react to election outcomes from a comparative perspective and over time, I use an event study methodology (Binder 1998; Campbell, Lo and MacKinley 1997, ch. 4). The event study compares the behavior of financial markets after an event to the expected behavior if that event had not happened. In other words, it assesses the differences in stock market behavior after an election relative to ‘normal’ stock behavior in non-election periods. This difference between expected and actual behavior is the abnormal return. The abnormal returns then can be cumulated over a pre-specified period to provide an estimate of the impact of elections on financial market behavior.

If the resulting cumulative abnormal returns (CAR) are large and statistically significant, we can conclude that the election has a considerable impact on financial investment decisions. For instance, if stock markets drop more than expected in response to an election, i.e. the CAR is negative, this suggests that market participants expect a shift in government policies that is unfavorable for firms in the market. If stocks increase more than expected, i.e. the CAR is positive, market participants expect that the policies by the new government will have positive effects on firms’ profitability.

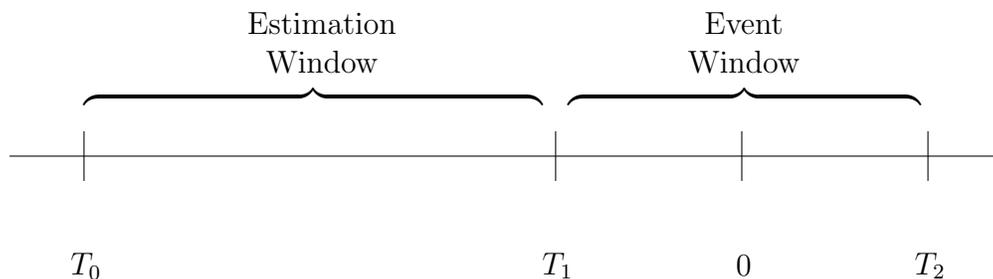
Figure 1 shows the logic of an events study graphically. To compute expected returns, I use a statistical model that estimates the relationship between the returns of a domestic stock index and a leading foreign market index:

$$r_{i,t} = a_i + b_i r_{m,t-1} + e_{i,t} \tag{1}$$

The model is estimated for the estimation window, $T_0 \leq t \leq T_1$. To avoid that the electoral campaign confounds the results from the estimation window, the window ends 50 trading days before the election day, i.e. $T_1 = -50$ assuming that the election takes place at date 0. The length of the estimation period is exactly 100 days, i.e. $T_0 = -150$. The market

index should be one that predicts movements in the domestic market well. I use the Dow Jones as market index for all countries. Other market indices were also considered, e.g. the DAX or the FTSE, but explanatory power of domestic financial market behavior was not systematically greater using these other indices. The market index is lagged by one day because U.S. stock markets close later than markets in the countries analyzed. Empirical tests show that the specification with the lag is preferable to the one without lag.⁵

Figure 1: Time Line



To compute abnormal returns during the event window, which is the period surrounding an event, we can calculate the deviation of actual returns from the predicted returns using the estimates of (1). Specifically, suppose $\hat{e}_{i,t}^*$ is the abnormal return for period t with $T_1 < t \leq T_2$, then

$$\hat{e}_{i,t}^* = r_{i,t} - \hat{a}_i - \hat{b}_i r_{m,t-1} \quad (2)$$

Abnormal returns can be accumulated over a pre-specified period from τ_1 to τ_2 within the event window, $T_1 < \tau_1 \leq \tau_2 \leq T_2$, to examine the impact of an election on stocks:

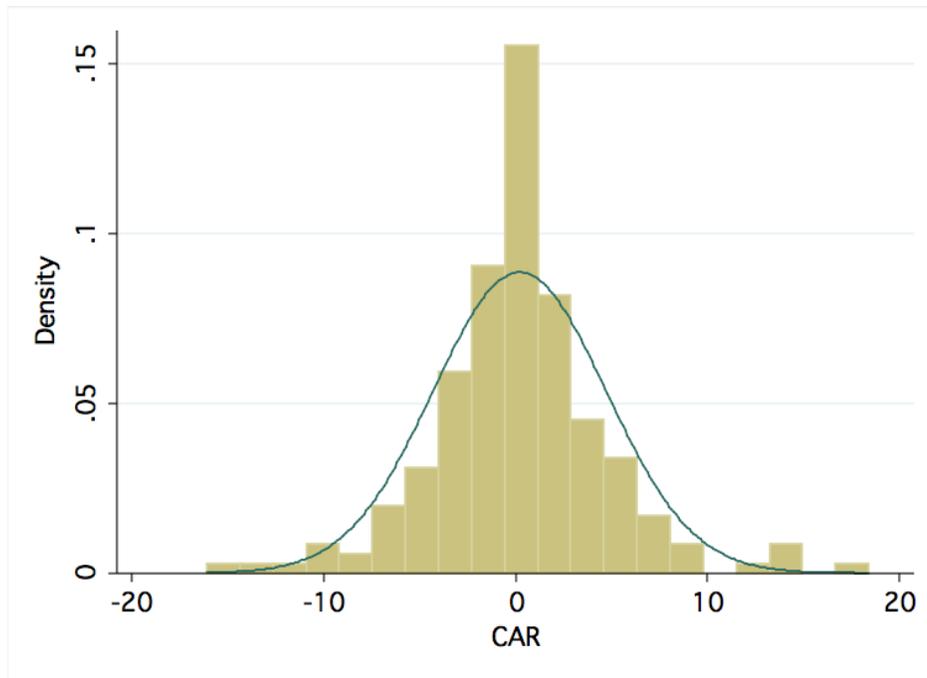
$$\widehat{\text{CAR}}_i = \sum_{t=\tau_1}^{\tau_2} \hat{e}_{i,t}^* \quad (3)$$

Since I am interested in the response of stock markets to the outcome of an election, abnormal

⁵The simpler constant-mean-returns model that sets $b_i = 0$ is also used. Consistent with Campbell, Lo and MacKinley (1997), the results are very similar. Alternatively, one could use a more complicated, economic model, but the gains of such more complex models are small in practice (Campbell, Lo and MacKinley, 1997, 156/157).

returns are cumulated for five subsequent trading days (or, a trading week) starting on the election day, i.e. $\tau_0 = 0$ and $\tau_1 = 4$. The start on the election day (as opposed to one day after the election) is motivated by the possibility that some information about the election result is already available on the day of the election. For further empirical analyses, CARs for longer windows, up to 60 trading days after the election, are also computed. These extended event windows show how persistent the effect of elections on stocks is and how sensitive the results are to the definition of the event window (Snowberg, Wolfers and Zitzewitz, 2008)

Figure 2: Distribution of CARs



This procedure is repeated for each election in industrialized countries for which daily stock market data are available. This yields the dependent variable, which is the estimated CAR, the measure of stock market reactions after each election. As Figure 2 shows, the distribution of the 5-day CARs from the market model is very close to a normal distribution, with the exception of a disproportionate number of CARs around zero. The probability of a CAR around zero is large for three reasons. First, some elections are well predictable in which case stock markets respond little after an election (Snowberg, Wolfers and Zitzewitz,

2008). As a solution, it is possible to weight the CARs by the amount of surplus votes that a majority government wins. This procedure in fact reduces the weight of CARs around 0. But there is no equally obvious way to account for predictability of elections that yield a minority government, which means that this procedure only works for a subsample of the dataset. I therefore use the unweighted CARs for the main analyses keeping in mind that they yield conservative estimates of the relationship between elections and stocks.

Second, it may not be fully clear which parties will form the new government immediately after an election in a parliamentary democracy (Bernhard and Leblang, 2006, esp. chapters 3 and 6). If the distribution of CARs is adjusted for government formation time, the weight of CARs around zero is further reduced. I will therefore assess the impact of government formation processes when analyzing the extended event windows (up to 60 trading days or roughly 3 months). As expected, the effect of elections on stocks increases for longer events windows that capture the government formation process. It should be noted that excessively long government formation processes are rare in my dataset. The average government formation time as measured by the number of days from the election to the inauguration day is only 34 with a standard deviation of 31. Median formation time is only 25 days.⁶ Third, stock market participants may not be interested in elections in political systems with high political constraints because policy will not change when a new government assumes office. I will explicitly model the role of political constraints in my empirical analyses.⁷

3.2 Countries and Data

The analysis covers elections in all parliamentary and semi-presidential industrialized democracies for which the relevant data are available. The analysis starts in the 1950s, but daily stock index series start later for many countries. As a basic rule, the broadest available

⁶Moreover, government formation time at the 90th percentile is 67 days. Considering that the government composition is known well before the inauguration day, this is not a particularly long period of time.

⁷Government formation and political constraints may be related, but they are conceptually different aspects. I therefore treat the two separately.

stock index that goes as far back in time as possible is used. In some countries, stock indices that exist for early years are not continued until the end of the analysis. In this case, other indices that do not exist for early years must be used for the later years. Generally, there is a fairly large period when the different indices overlap. I do multiple tests to see whether the different indices represent the same stock market developments. First, I examine the daily returns of the different indices. Regressing returns of one index on returns of the other always yields a very strong statistical relationship between the different indices. Second, I compare the estimated abnormal returns and CARs for the overlapping periods. The CARs from the different indices generally are extremely similar, often almost exactly identical.

Data on election dates are from the Comparative Manifesto Project (Budge et al., 2001; Klingemann et al., 2006). To compute abnormal returns after an election, a domestic stock index must be available for at least 150 trading days before the election. This is the case for 205 elections. Six elections in the dataset took place in the 1950s, and 71 out of the 205 elections are from the 1950s, 1960s or 1970s, all decades when domestic financial markets were fairly closed compared to today. Government ideology is measured using the left-right index from the comparative manifesto project. The index contains detailed information about nominal policy positions, and also takes into account the weights of individual parties involved in the government. The index thus captures as much information about government characteristics as possible, which is important for an analysis of financial markets.

Two different indicators of financial openness are used. The Quinn-Toyoda indicator and its extensions (Quinn, 1997, 541-547; Quinn and Toyoda, 2008, 1409-1411) captures the degree of de jure capital account openness, i.e. the degree to which the government formally restricts cross-border capital flows. The second indicator is the log of actual portfolio investment flows as a percentage of GDP (Lane and Milesi-Ferretti, 2006) because the pressure on governments not necessarily arises from de jure, but from de facto economic integration.⁸ These data only exist from 1970 onwards, but actual flows were very small in the 1970s,

⁸For robustness checks, I also use total financial flows, which is the sum of aggregate financial assets and liabilities and also includes foreign direct investments.

increased only slowly during the 1980s and exploded during the 1990s, which means that there is considerable variation in actual flows for an analysis starting only in 1970.⁹

A number of variables are used to measure the degree of political constraints that a government faces, specifically minority and multi-party governments, central bank independence and a more comprehensive constraints index that captures a variety of checks in a political system. Data on minority and multi-party governments is from Woldendorp, Keman and Budge (2000). Data on central bank independence are from Cukierman, Webb and Neyapti (1992) and the update by Crowe and Meade (2008). For a more comprehensive measure of political constraints, I use the indicator by Henisz (2002). This index is designed to capture the ability of policymakers to implement their most preferred policy. It takes into account veto points, the structure of the legislature, preference heterogeneity within the legislature and the role of government branches to assess the feasibility of policy change.

Table 1 presents the summary statistics. For the ideology measure, higher numbers indicate more left-wing governments and is recoded to vary between 0 and 100 for this dataset. For the openness and political constraints variables, higher values indicate greater openness or constraints, respectively. To simplify the interpretation of the interaction terms, the most important intervening variable are recoded such that they vary between 0 and 10.

Table 1: Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
\widehat{CAR}	205	0.212	4.50	-16.10	18.42
Ideology	205	46.40	16.42	0	100
De Jure Openness	205	7.48	2.26	0	10
Log(Flows)	176	2.18	1.30	0	6.00
Constraints Index	205	5.53	1.72	0	10
Minority	205	.243	.430	0	1
Multi-Party	205	.731	.444	0	1
CBI	205	0.411	0.189	0.09	0.85

⁹The original, not log-transformed indicators yield the same results. When the results differ, they depend on a few outliers, generally small countries with exceptionally large levels of financial flows, such as Ireland.

4 Empirical Specifications and Expectations

The analysis how ideology and financial openness affect stock market responses proceeds in two steps. In the first step, I will examine the effect of financial openness on the size of stock market responses (hypotheses 1a, 2a and 3a). In the second step, I will analyze how financial openness interacts with the effect of ideology and how they jointly affect the direction of stock market behavior after elections (hypotheses 1b, 2b and 3b).

For the first set of hypotheses, only the size of the stock market response matters because the hypotheses state that with growing financial integration the size of the (negative or positive) CAR varies. The dependent variable thus is the absolute value of the CAR after an election, $|\widehat{\text{CAR}}_i|$. Besides the openness indicators, the specifications include the control variables capturing how much the government is constrained to implement its most preferred policy. Suppose there are k constraining variables, then the specification takes the form

$$|\widehat{\text{CAR}}_i| = \alpha_0 + \alpha_1 \text{Openness}_i + \sum_{j=1}^k \alpha_{j+1} \text{Constraint}_{i,j} + \epsilon_i \quad (4)$$

The variables are coded such that the coefficients on the constraints variables, α_2 through α_{k+1} , should be negative. The coefficient on the financial openness variable, α_1 , varies depending on the theoretical argument. The strong convergence logic suggests that this coefficient is negative, while the non-convergence logic suggests that it is positive. According to the weak convergence logic, it should be zero.

As the absolute CAR is bounded at zero, an application of the standard linear model has some drawbacks, especially because it may predict negative values, which are theoretically impossible. A truncated regression model is not appropriate in this context as it is built on the assumption that the observations are drawn from a distribution with values below zero, which just cannot be observed empirically. This is not the case here because the size of stock market reactions, as represented by the absolute CAR, cannot take negative values. To solve this issue, I also use an exponential model which accounts for the fact that the dependent

variable cannot be negative

$$|\widehat{\text{CAR}}_i| = \exp(\alpha_0 + \dots + \epsilon_i) \quad (5)$$

In practice, the linear model yields reasonable results for this analysis. The estimation results do not predict negative CARs for the observable range of the independent variables. The substantive results from the linear and the exponential models are the same.

The second set of hypotheses suggests that both the size and the direction of the CARs depend on the incoming government's ideology and financial openness, while the effect of ideology is mediated by financial openness. For instance, according to the convergence logic, the market response to a left-wing government should be less negative in an open economy than in a closed economy, which can be modeled using an interaction term between the two variables. However, any relevant control variable representing major political constraints on the government's ability to adjust policy must also be interacted with ideology, which substantially complicates the model. This is because greater constraints lead to less positive CARs for a right-wing government and less negative CARs for a left-wing government. Suppose again that we have k constraining variables, then the second specification is

$$\begin{aligned} \widehat{\text{CAR}}_i &= \beta_0 + \beta_1 \text{Ideology}_i + \beta_2 \text{Openness}_i + \beta_3 \text{Ideology}_i * \text{Openness}_i \\ &\quad + \sum_{j=1}^k (\beta_{j+3} \text{Constraint}_{i,j} + \beta_{j+k+3} \text{Ideology}_i * \text{Constraint}_{i,j}) \\ &\quad + v_i \end{aligned} \quad (6)$$

Including all potentially relevant constraints variables would yield a fairly complex model. It is unlikely that there will be sufficient observations for each combination of values to draw meaningful inferences from the estimation results with this many interaction terms. To keep the model as simple as possible, those constraints variable(s) will be used which turn out to be the most relevant in the first part of the analysis using equation (4). Naturally, the variable(s) that best explain the size of the stock market response should be the one(s) having the strongest intervening impact on the relationship between ideology and stock markets.

In equation (6), the constant, β_0 , should be positive because it shows how stock markets respond to the election of a right-wing government ($\text{Ideology}_i = 0$) with no financial openness and no political constraints ($\text{Openness}_i = 0$; $\text{Constraint}_{i,j} = 0$ for $j = 1, \dots, k$). The coefficient on ideology, β_1 , should be negative because stocks drop more / increase less the more left-wing the government is. The coefficients on the constraints variables, β_{j+3} for $j = 1, \dots, k$, indicate how growing constraints diminish the positive market response to a conservative government and should be negative. Finally, the coefficients on the interactions between ideology and constraints, β_{j+k+3} for $j = 1, \dots, k$, show how the impact of a more left-wing government changes as constraints increase. Since the negative effect of left-wing governments decreases as constraints increase, these coefficients should be positive.

Table 2: Expected Values of Coefficients Across Empirical Models

		Expected Coefficient
Model 1	Baseline	$\alpha_0 > 0$; $\alpha_{j+1} < 0$
	Non-Convergence	$\alpha_1 > 0$
	Weak Convergence	$\alpha_1 = 0$
	Strong Convergence	$\alpha_1 < 0$
Model 2	Baseline	$\beta_0 > 0$; $\beta_1 < 0$; $\beta_{j+3} < 0$; $\beta_{j+k+3} > 0$
	Non-Convergence	$\beta_2 > 0$; $\beta_3 < 0$
	Weak Convergence	$\beta_2 = 0$; $\beta_3 = 0$
	Strong Convergence	$\beta_2 < 0$; $\beta_3 > 0$

Subscript j refers to constraints variable j in the respective model. k is the maximum number of constraints included in the specification.

The theoretical discussion has diverging implications for the impact of openness. The non-convergence logic suggests that openness should magnify the effect of ideology on stock market responses. This implies that stocks respond more positively to right-wing governments, but at the same time react more negatively to left-wing governments as openness increases, i.e. $\beta_2 > 0$ and $\beta_3 < 0$. The opposite is the case for the strong convergence logic saying that the impact of ideology diminishes as openness increases, i.e. $\beta_2 < 0$ and $\beta_3 > 0$. The weak convergence logic suggests that no intervening effect of openness exists, i.e. $\beta_2 = 0$ and $\beta_3 = 0$. Table 2 summarizes the implications of the theoretical discussion for

the empirical specifications in (4) and (6).

5 Results

5.1 The Size of Stock Reactions

This first section examines how financial openness and political constraints affect the magnitude of the response of stock markets to elections. The results in Table 3 refer to equation (4). I examine the impact of the variables separately and then discuss the full models.

The first two columns show how increasing financial openness affects the size of stock market reactions to elections. The results imply that the size of these reactions decreases as de jure financial openness increases, but the coefficient is not statistically significant at conventional levels. This basic result holds for all other specifications. The coefficient is always negative, but not robustly statistically significant. Replacing de jure openness with actual portfolio investment flows, we also see a negative effect of greater financial flows on the size of stock market reactions, but again the coefficient is not statistically significant.¹⁰ The results are the same for specifications controlling for political constraints as the last two columns show.

The substantive effects of the de jure openness and actual flows indicators are very similar and small. On average, stocks change by 4.20% (3.88%) after an election for zero de jure openness (actual financial flows). The coefficient on the de jure (actual flows) indicator suggests that the stock market reactions drop by 1.47 (1.69) percentage points when openness increases from its minimum to its maximum. Overall, additional analyses yield the same conclusions. We get the same result when the exponential model is used or when portfolio flows are replaced with total investment flows. The results show a consistent negative effect, but this effect is rather small in substantive terms and not statistically significant. These first results favor the weak convergence hypothesis suggesting that government policies have converged somewhat, but far less strongly than predicted by the strong convergence thesis.

¹⁰The number of observations is smaller because this series is only available from 1970. See section 3.2

Table 3: Effects of Openness and Political Constraints on Stock Markets

	Openness	Flows	Minority	Multi	CBI	Index	Full(1)	Full(2)
De Jure Openness	-0.147 (0.141)						-0.145 (0.153)	
Log(Flows)		-0.282 (0.241)						-0.139 (0.284)
Minority			-0.289 (0.444)				-0.399 (0.504)	-0.776 (0.430)
Multi				0.343 (0.431)			0.904 (0.454)	1.217 (0.467)
CBI					-0.131 (1.216)		0.021 (1.477)	-0.631 (1.831)
Index						-0.328 (0.109)	-0.377 (0.117)	-0.479 (0.151)
Constant	4.196 (1.212)	3.878 (0.752)	3.169 (0.284)	2.847 (0.316)	3.152 (0.531)	4.911 (0.761)	5.695 (1.209)	5.831 (0.732)
F	1.09	1.37	0.42	0.63	0.01	9.08	3.35	4.90
$Prob > F$	0.309	0.255	0.522	0.435	0.915	0.007	0.022	0.004
R^2	0.01	0.01	0.00	0.00	0.00	0.03	0.05	0.07
N	205	176	205	205	205	205	205	176

Standard errors in parantheses. Errors cluster on countries

The analysis in this section also explores which political constraints are most relevant from a financial market perspective. The estimation results for the two government characteristics variables, minority and multi-party government, suggest that market participants do not rely on this information to draw conclusions about the size of expected policy change. None of the two coefficients is statistically significant. One interpretation is that these dummy variables are too crude as measures of political constraints. Financial market participants are likely to use more nuanced information than these two indicators provide. More surprising is the weak performance of central bank independence. The isolation of the bank from political pressure generally leads to lower inflationary expectations and therefore to lower real returns on stocks. An explanation for this result is that stock markets (as opposed to bond markets) care more about expected fiscal, redistributive and industrial policies of governments that more directly affect firms' profitability than monetary policy which only indirectly affects the performance of firms.

Finally, the estimated impact of the more general political constraints index confirms that market participants use more detailed information about the institutional and political checks that governments face. This index is the most comprehensive one and subsumes the simpler, previous measures of political constraints and includes additional aspects, e.g. the distribution of power in a second parliamentary chamber. The coefficient on this indicator is statistically significant for this and all other specifications and shows that greater constraints lead to substantially lower absolute stock market movements after an election. Specifically, in a low-constraints country, stocks on average change by 4.9%. For a high-constraints country, this effect decreases by 3.3 percentage points to 1.6%.

5.2 The Direction of Stock Reactions

This section examines in which direction stocks move after the election of a left- or right-wing government. The results in Table 4 are based on equation (6) or components thereof. The results in Table 3 suggest that for this section, only the general constraints index should be used. The other indicators and the resulting additional interaction terms would substan-

tially complicate the analysis without much analytical gain. Equation (6) then reduces to a specification with only one constraints variable, i.e. $k = 1$.

The first column reports the impact of the incoming government's ideology on stock markets. The estimate for the constant shows that if fully right-wing government wins the election, i.e. when ideology takes the value 0, then stock markets increase by 1.9%. As expected, the CAR decreases as the government becomes more left-wing, and this effect is statistically significant. When we move from a fully right-wing to a fully left-wing government, the CAR drops by 3.7 percentage points. In other words, when a fully left-wing government comes into office, then stock markets decrease by 1.8%.

The almost exact symmetry between left- and right-wing effects, i.e. the result that stock prices drop by exactly the same amount after a left-wing success as they increase after a right-wing success, is astonishing, even more so as it is not expected. Pantzalis, Stangeland and Turtle (2000) show that stock markets on average increase after an election because the resolution of the electoral uncertainty itself leads to a positive reaction. Taking into account the content of the election outcome, we would expect that stocks rise more after a right-wing success than they drop after an equivalent left-wing success.

As discussed above, the impact of ideology should vary with the political constraints that a government faces. The specification in the second column includes the political constraints variable and the interaction between constraints and ideology. The coefficients on all variables and the constant show the expected signs. In a country with zero political constraints, the expected CAR accumulates to 5% when a fully right-wing government comes into office. This is more than two and a half times as much as the expected CAR for the same ideology change when the intervening effect of constraints is ignored. When a fully left-wing government is elected in a low constraints country, stock markets decrease by 3%. The asymmetric effect of left- and right-wing success now also confirms the findings by Pantzalis, Stangeland and Turtle (2000) discussed in the previous paragraph.

To simplify the interpretation of the intervening effect of political constraints, Figure 3 shows the marginal effect of an increase in the ideology variable on CARs as political

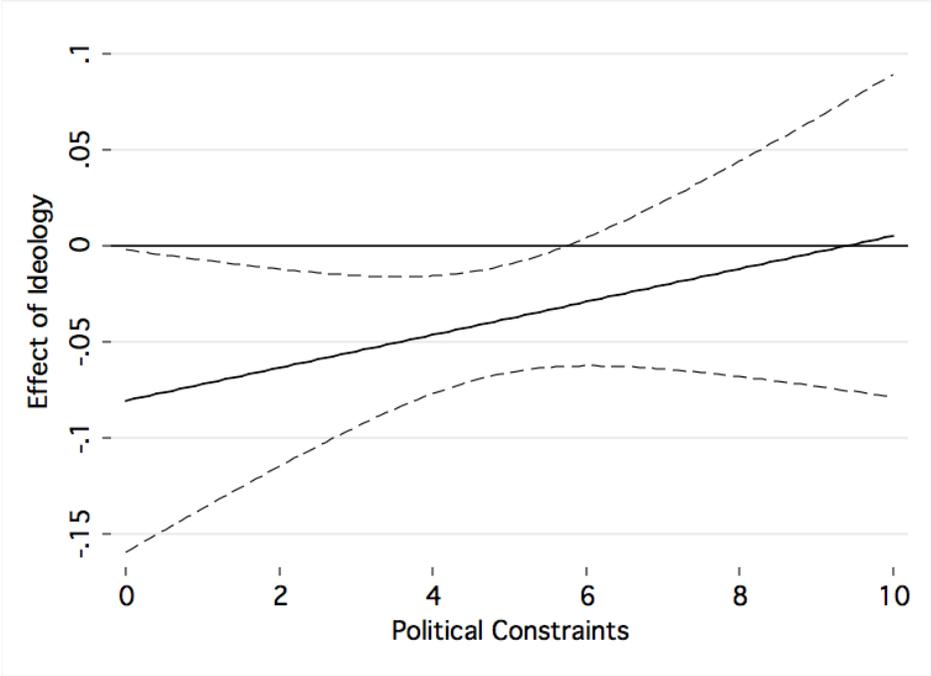
Table 4: Effects of Ideology on Stock Markets

	Simple	Constraints	De Jure	Flows	Full(1)	Full(2)
Ideology	-0.037 (0.016)	-0.080 (0.040)	-0.031 (0.031)	-0.056 (0.027)	-0.094 (0.051)	-0.134 (0.052)
Constraints		-0.595 (0.360)			-0.656 (0.377)	-0.907 (0.547)
Ideology*Constraints		0.009 (0.008)			0.010 (0.008)	0.016 (0.009)
De Jure Openness			-0.204 (0.323)		-0.270 (0.314)	
Ideology*De Jure Openness			-0.001 (0.006)		0.001 (0.006)	
Log(Flows)				-0.690 (0.694)		-0.521 (0.607)
Ideology*Log(Flows)				0.003 (0.013)		0.001 (0.012)
Constant	1.920 (0.861)	5.022 (1.880)	3.485 (1.654)	4.033 (1.613)	7.358 (2.566)	8.473 (3.215)
F	5.40	3.97	9.47	3.85	11.82	5.90
$Prob > F$	0.030	0.022	0.000	0.024	0.000	0.001
R^2	0.02	0.03	0.03	0.05	0.04	0.06
N	205	205	205	176	205	176

Standard errors in parantheses. Errors cluster on countries

constraints increase. The graph thus shows how the market response changes when a more left-wing government is elected, for different degrees of political constraints. It confirms that stock markets drop in response to the election of a left-wing government. But when political constraints increase, the impact of government ideology decreases and becomes statistically insignificant at a value of ca. 5.5 on the political constraints scale. This level of constraints largely corresponds to Germany in the 1990s when the opposition parties dominated the second chamber of parliament, the ‘Bundesrat’, and the government was unable to implement major reforms without the consent of the opposition. When constraints increase further, the impact of ideology disappears. Such high levels of constraints more or less correspond to political systems like Belgium or Switzerland.

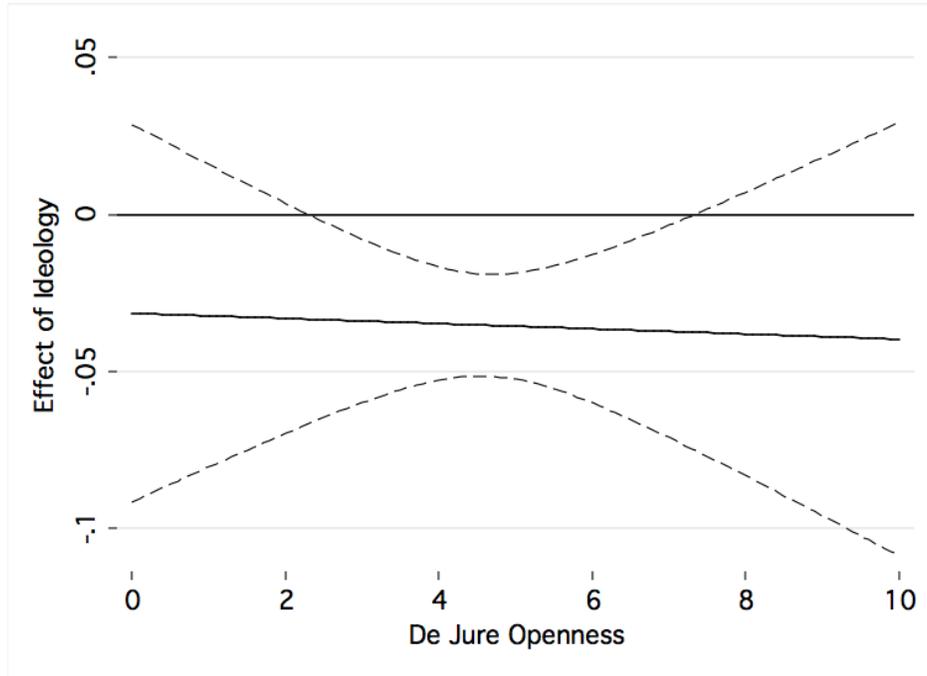
Figure 3: Effect of a One-Unit Increase in Ideology as Political and Financial Constraints Increase



The effect of government ideology in low and medium constraints countries is sizeable in substantive terms. If, for instance, government ideology increases from one standard deviation below to one standard deviation above the mean, i.e. an increase by ca. 32

units on the ideology scale, the CAR decreases by more than 2.5%. For a comparison, when Mitterrand won against Giscard d'Estaing in the 1981 French election, the government ideology variable increases by more than 45 units, which means that the predicted decrease in the CAR would be 3.6% in this example.

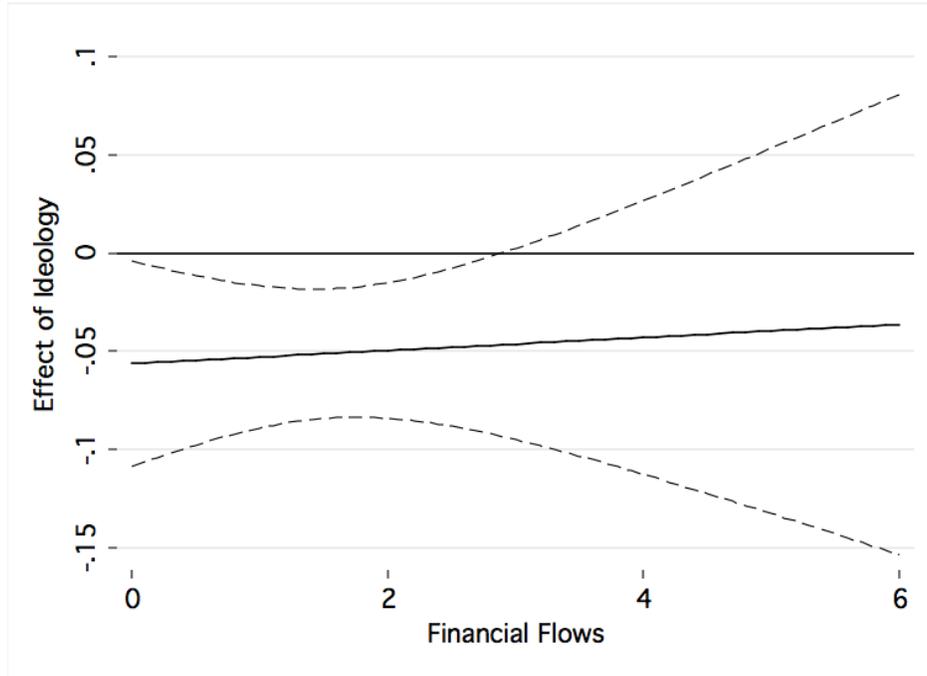
Figure 4: Effect of a One-Unit Increase in Ideology as De Jure Openness Increases



The results from the financial openness specifications in columns three through six of Table 4 confirm the findings from the previous section. Figure 4 plots the marginal effect of ideology as de jure openness increases. The marginal effect does not change much as de jure openness increases. It seems to decline slightly, which reflects the negative coefficient on the interaction between ideology and de jure openness in the third column in Table 4, but this effect is negligible. For the complex specification in the fifth column that includes both interactions, the coefficient on the ideology / de jure openness interaction is positive, which means that the marginal effect is increasing by the same amount as it is decreasing in Figure 4.

The corresponding marginal effects for the actual portfolio flows are plotted in Figure 5.

Figure 5: Effect of a One-Unit Increase in Ideology as Financial Flows Increase



They suggest that stocks react considerably when a more left-wing party wins the election for low levels of financial flows, but this effect becomes statistically insignificant for high levels of financial flows. However, the widening of the confidence intervals essentially occurs because estimation uncertainty is larger at the endpoints of the distribution. The decrease in marginal effects as represented by the solid line is substantively irrelevant. Again, I interpret these results as evidence in favor of a weak convergence hypothesis.

To examine the intervening impact of financial openness further, the sample was split in two parts: a pre-1980 and a post-1980 subsample. This procedure reflects the idea that international financial integration has increased massively since the 1980s, but was comparatively small before. This sample split represents a rough approximation to changes in financial integration with the advantage that the model complexity can be reduced again. It allows me to estimate the simpler political constraints model for the two subperiods without using double interactions as in the combined model of Table 4. The results suggest that the effect of politics on financial markets decreased from the pre- to the post-1980 period,

but again this effect is not statistically significant. The marginal effects imply that the joint impact of ideology and constraints is larger for the pre-1980 period and smaller for the post-1980 period than for the whole period. However, using a Chow test, I cannot reject the null hypothesis that the coefficients are stable over time at conventional significance levels. Moreover, a rolling regression using a sequence of shorter subsamples does not show that the effect is as strong and as systematic as the split in pre- and post-1980 periods suggests.

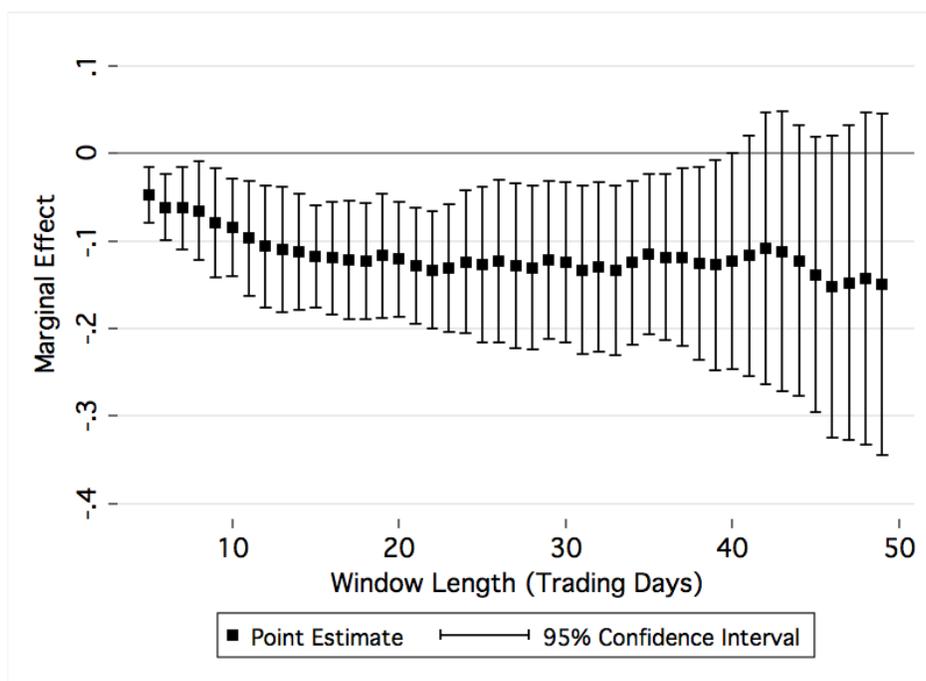
5.3 Additional Analyses

To examine how short-lived persistent the effect of elections on stocks is, and how sensitive the results are to the specification of the event window, I reestimate the models using CARs computed for event windows of different lengths, up to 60 trading days after an election. Figure 6 plots the marginal effects of ideology scale for different event windows. The effects are computed using estimation results based on the specification in the second column of Table 4. The political constraints variable is set at one standard deviation below the mean, which corresponds to a value of 3.81.¹¹

The figure shows that the financial effects of elections are highly persistent and that the results are not an artefact of a particular event window definition. The marginal effect is consistently negative and the 95% confidence interval does not include zero for windows up to 40 days. The magnitude of the effect is even increasing and more than doubles during the first 15 trading days (3 weeks) and remains roughly constant after that. This is plausible considering that it may take a few weeks until it is fully clear which parties will form the new government. Stocks continue to respond to political processes until the government formation process is finished (Bernhard and Leblang, 2006). Comparing the time frame during which stocks continue to respond to electoral politics with the average and median government formation time in the dataset confirms this. The average time between the election and the

¹¹The effect for the 5-day window in Figure 6 corresponds to the marginal effect in Figure 3 where the constraints variable on the x -axis takes the value 3.81. This effect is -0.048. The constraints variable is set below the mean because the aim here is to show that the strong effect of ideology for low constraints levels is robust against changes in the event window and also persists for more than just a few days.

Figure 6: Marginal Effects for Different Event Window Lengths



inauguration day is 34 days (4.8 weeks), while stocks continue to react to elections for about 3 weeks after the election. The median formation time is only 25 days (3.6 weeks), which is even closer to the 3-week horizon during which stocks continue to react.¹²

It is also possible that stock market patterns unrelated to elections produce the results shown above. To address this question, I use a ‘placebo’ analysis which repeats the empirical analysis for randomly chosen non-election days. If my findings are in fact caused by elections and their outcomes, stock movements should not be systematically associated with political preferences and institutions when they were not ‘treated’ with an election. To examine this conjecture, I draw 1’000 random samples of non-election days of the same size as my election

¹²The duration of the government formation process is measured as the number of days from the election day until the inauguration day. However, the information which parties will form the government is available before the inauguration day implying that stocks should not respond during the full government formation period as it is defined here. The discrepancy between the mean and the median also indicates that in exceptional instances, the formation process took much longer, e.g. in Austria in 1999. These long government formation periods are unusual. Government formation duration at the 90th percentile is only 67 days.

dataset, which means that each sample covers 205 observations. Each sample is drawn from the set of days on which no election took place in the 22 countries that I analyze.¹³

Table 5: Comparison of Results from Main and Placebo Analyses

	Simple	Constraints	De Jure	Flows
Main	-0.037	-0.048	-0.035	-0.053
Placebo	0.001	0.001	0.001	0.001
	[-0.015; 0.017]	[-0.024; 0.026]	[-0.015; 0.018]	[-0.017; 0.020]

Table shows the marginal effects of ideology. Results in the first row are from the main analysis in Table 4. Second row shows the median marginal effect computed from 1'000 random samples of non-election days for the placebo analysis. The numbers in brackets are the 5 and 95 percentiles.

For the placebo analysis, I reestimate equation (6) and compute the marginal effect of ideology for pre-specified levels of political constraints and financial openness using each of the 1'000 samples. The second row in Table 5 presents the estimated median marginal effect from the 1'000 random samples for the different specifications in Table 4. The numbers in brackets are the 5 and 95 percentiles. The marginal effect for the simple model in the first column is equivalent to the coefficient on ideology. The marginal effect for the constraints model is computed for political constraints set at one standard deviation below the mean. It therefore corresponds to the marginal effects presented for the analysis of different event window lengths in Figure 6. The financial openness variables are set at the same values. For comparison, the first row shows the equivalent effects from the main analysis in Table 4.

The results clearly show that stock market behavior during non-election periods is fundamentally different from stock behavior after elections. The median marginal effects from the placebo regressions are almost exactly zero for all specifications indicating that stocks are not expected to respond to political preferences during non-election periods. The variation

¹³The underlying set of days covers all days not within an election period and for which CARs can be computed. To compute the CARs, a stock index must be available for a sufficiently long period of time before and after the potential date. I exclude 100 days before and 50 days after an actual election to ensure that elections do not confound the results of the estimation or event windows. Using this procedure, the random samples can be drawn from 188'527 possible days in the 22 countries.

in these effects is small with standard deviations between 0.011 and 0.015. Moreover, the effects at the 5 percentile do not even come close to those from the main analysis. They are not even or just half of the effects from the main analysis for all specifications. Even the maximum marginal effects from the placebo analysis (not in the table) are always smaller in magnitude than those from the main analysis. The placebo analysis thus strongly suggests that stocks behave systematically different after elections than during non-election periods.

Besides the variety of tests described in the text, including different specifications, subsamples, empirical measures and event windows, the results are robust to other changes. The results do not change if CARs are computed using a constant-returns instead of a market model (see section 3.1). I also used different indicators of government ideology from the Comparative Manifesto Project, specifically governments' economic policy and welfare state preferences. As expected, the impact of the economic preferences indicator is stronger than the general left-right index used in the text, while the impact of the welfare state index is weaker, but these two more specific indicators are less reliable than the general ideology measure.¹⁴ I therefore rely on the general indicator in the main analysis.

When interpreting these results, it should be considered that the empirical strategy *underestimates* the effect of elections on stock markets. Stock markets should mostly respond if they have not or not fully anticipated the election outcome. While only few elections are perfectly predictable, market participants have clearer expectations about the outcome of one elections than of another. Stocks will respond less strongly to the election if the outcome corresponds to market participants' expectations because the impact of expected policy on firms' profitability is already included in prices on the election day. This implies that the implications that we drew from the results are based on conservative estimates rather than estimates that exaggerate the relationship between politics and finance.

Finally, a popular objection against an analysis like this one is that financial markets are not able to rationally anticipate future government policies or the results reflect market

¹⁴The issue-specific Comparative Manifesto indices rely on only few categories, some of which are not covered by many party programs. These missings then possibly lead to inadequate measures of party positions on particular policy dimensions.

behavior somehow related to elections, but unrelated to future government policies. Absent a broadly accepted, rival model of stock market behavior that could explain the results of this study, it is difficult to assess this general critique. It is possible, however, to evaluate a few, more concrete alternative explanations. If market participants believe that other traders ‘buy’ after a right-wing success and ‘sell’ after a left-wing victory, for whatever reason, it would be reasonable to do the same and make a profit when stock markets increase or avoid a loss when stock markets decrease. A more behavioral explanation would be that happy people tend to buy things and stock market participants, being more conservative on average, buy stocks when when their preferred party wins the election.¹⁵

These and related explanations are inconsistent with the empirical results above. They can explain why stocks drop or increase after the election of a left-wing or right-wing government. But following these mechanisms, there is no reason why this effect should disappear when political constraints increase, as the results show. The strong and robust impact of political constraints on stock market behavior after elections indicates that the stock market response is in fact related to expectations about future policies because these constraints reduce the ability of a new government to alter existing policies. Stock market behavior should not be related to political constraints if it was not about expected government policies.

6 Conclusion

This study examines how financial markets respond to electoral outcomes and how these responses have changed as industrialized countries have become more open to financial flows. The results provide evidence in favor of a weak convergence thesis, which implies that governments continue to implement distinct economic and related policies, but these policies are more similar across governments than in the past. Elections therefore have become less important for returns on financial investments in industrialized countries, although they have not become unimportant for investment decisions. Elections continue to play an important

¹⁵This mechanism in essence reflects the idea that stock markets react to all kind of news that should be unrelated to stock markets, e.g. the victory of a national sports team.

role for investment decisions despite some policy convergence because investors can more easily reallocate their investments internationally when policies are expected to change.

The analysis also extends research on the political economy of financial markets in a number of ways. First, it adds a historical dimension that is necessary to fully understand how globalization has affected the role of politics and financial markets since the Second World War. Second, it provides a comprehensive comparative analysis that is rare in this field of research. The results show that the institutional structure of a country has a strong and mediating effect on the relationship between politics and stocks. Stock markets move strongly and persistently after an election, but this effect fully disappears in countries with high political constraints. Checks and balances limit political risk for investors as they seriously constrain governments' discretion to alter policies. Therefore, financial investors pay less attention to elections in countries with high constraints or low political risk. The constraining effect of institutions is major, especially comparing it to the modest constraints that follow from international financial integration.

This analysis approaches the globalization debate from a highly aggregate level because the scope of this study does not allow for distinctions between different sectors and firms. Future research should examine the implications of this debate for stock markets in greater detail. Analyses of stocks on the sectoral level can reveal to what extent import-competing sectors benefited from a particular election outcome, possibly at the expense of export-oriented firms. Political parties may also favor different strategies to cope with globalization, which have different implications for redistribution among economic sectors. Such distributional effects should be visible in stock responses to elections on the sector or firm level.

References

- Adserà, Alicia and Charles Boix. 2002. "Trade, Democracy and the Size of the Public Sector: The Political Underpinnings of Openness." *International Organization* 56(2):229–262.
- Basinger, Scott and Mark Hallerberg. 2004. "Remodeling the Competition for Capital: How Domestic Politics Erases the Race to the Bottom." *American Political Science Review* 98(2):261–276.
- Bearce, David. 2007. *Monetary Divergence: Domestic Policy Autonomy in the Post-Bretton Woods Era*. University of Michigan Press.
- Bechtel, Michael. 2009. "The Political Sources of Systematic Investment Risk: Lessons from a Consensus Democracy." *Journal of Politics* 71(2):667–677.
- Bernauer, Thomas. 2003. *Genes, Trade and Regulation: The Seeds of Conflict in Food Biotechnology*. Princeton University Press.
- Bernauer, Thomas and Ladina Caduff. 2004. "In Whose Interest? Pressure Group Politics, Economic Competition and Environmental Regulation." *Journal of Public Policy* 24(1):99–126.
- Bernhard, William T. and David Leblang. 2006. *Democratic Processes and Financial Markets: Pricing Politics*. Cambridge University Press.
- Binder, John J. 1998. "The Event Study Methodology Since 1969." *Review of Quantitative Finance and Accounting* 11(2):111–137.
- Boix, Carles. 1998. *Political Parties, Growth, and Equality: Conservative and Social Democratic Strategies in the World Economy*. Cambridge University Press.
- Broz, J. Lawrence and Jeffrey A. Frieden. 2001. "The Political Economy of International Monetary Relations." *Annual Review of Political Science* 4:317–343.

- Budge, Ian, Hans-Dieter Klingemann, Andrea Volkens, Judith Bara and Eric Tanenbaum. 2001. *Mapping Policy Preferences: Estimates for Parties, Electors and Governments 1945-1998*. Oxford University Press.
- Campbell, John Y., Andrew W. Lo and A. Craig MacKinley. 1997. *The Econometrics of Financial Markets*. Princeton University Press.
- Campello, Daniela. 2007. "Do Markets Vote? A Systematic Analysis of Portfolio Investors' Response to National Elections." Manuscript.
- Crowe, Christopher and Ellen E. Meade. 2008. "Central Bank Independence and Transparency: Evolution and Effectiveness." *IMF Working Paper* 1999.
- Cukierman, Alex, Steven B. Webb and Bilin Neyapti. 1992. "Measuring Central Bank Independence and its Effect on Policy Outcomes." *The World Bank Economic Review* 6(3):353–398.
- Eichengreen, Barry. 1996. *Globalizing Capital: A History of the International Monetary System*. Princeton University Press.
- Frieden, Jeffrey A. 1991. "Invested Interests: The Politics of National Economic Policies in a World of Global Finance." *International Organization* 45(4):425–451.
- Fuess, Roland and Michael Bechtel. 2008. "Partisan Politics and Stock Market Performance: The Effect of Expected Government partisanship on Stock Returns in the 2002 German Federal Election." *Public Choice* 135(3-4):131–150.
- Garrett, Geoffrey. 1998. *Partisan Politics in the Global Economy*. Cambridge University Press.
- Henisz, Witold J. 2002. "The Institutional Environment for Infrastructure Investment." *Industrial and Corporate Change* 11(2):355–389.

- Henisz, Witold J. 2004. "Political Institutions and Policy Volatility." *Economics and Politics* 16(1):1–27.
- Herron, Michael C. 2000. "Estimating the Economic Impact of Political Party Competition in the 1992 British Election." *American Journal of Political Science* 44(2):320–331.
- Hiscox, Michael. 2002. *International Trade and Political Conflict: Commerce, Coalitions, and Mobility*. Princeton University Press.
- Klingemann, Hans-Dieter, Andrea Volkens, Judith Bara, Ian Budge and Michael D. McDonald. 2006. *Mapping Political Preferences II: Estimates for Parties, Electors and Governments in Central and Eastern Europe, European Union and OECD 1990-2003*. Oxford University Press.
- Kriesi, Hanspeter, Edgar Grande, Romain Lachat, Martin Dolezal, Simon Bornschieer and Timotheos Frey. 2008. *West European Politics in the Age of Globalization*. Cambridge University Press.
- Lane, Philip R. and Gian Maria Milesi-Ferretti. 2006. "The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970-2004." *IMF Working Paper* WP/06/69.
- Leblang, David and Bumba Mukherjee. 2004. "Presidential Elections and the Stock Markets: Comparing Markov-Switching and Fractionally Integrated GARCH Models of Stock Volatility." *Political Analysis* 12(3):296–322.
- 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):780–802.
- Mosley, Layna. 2000. "Room to Move: International Financial Markets and National Welfare States." *International Organization* 54(4):737–773.

- Mukherjee, Bumba and David Leblang. 2007. "Partisan Politics, Interest Rates and the Stock Market: Evidence from American and British Returns in the Twentieth Century." *Economics and Politics* 19(2):135–167.
- Pantzalis, Christos, David A. Stangeland and Harry J. Turtle. 2000. "Political Elections and the Resolution of Uncertainty: The International Evidence." *Journal of Banking and Finance* 24:1575–1604.
- Quinn, Dennis. 1997. "The Correlates of Change in International Financial Regulation." *American Journal of Political Science* 91(3):531–551.
- Quinn, Dennis P. and A. Maria Toyoda. 2008. "Does Capital Account Liberalization Lead to Growth?" *Review of Financial Studies* 21(3):1403–1449.
- Rickard, Stephanie J. 2007. "Compensating the Losers: Evidence of Policy Responses to Globalization from Congressional Votes." Paper Presented at the Meeting of the International Political Economy Society, Stanford University, November 9-10.
- Rodrik, Dani. 1998. "Why Do More Open Economies Have Bigger Governments?" *Journal of Political Economy* 106(5):997–1032.
- Rueda, David. 2007. *Social Democracy Inside Out: Partisanship and Labor Market Policy in Industrialized Democracy*. Oxford University Press.
- Santa-Clara, Pedro and Rossen Valkanov. 2003. "The Presidential Puzzle: Political Cycles and the Stock Market." *Journal of Finance* 58(5):1841–1872.
- Sattler, Thomas, John R. Freeman and Patrick T. Brandt. 2008. "Political Accountability and the Room to Maneuver: A Search for a Causal Chain." *Comparative Political Studies* 41(9):1212–1238.
- Sattler, Thomas, Patrick T. Brandt and John R. Freeman. 2010. "Democratic Accountability in Open Economies." *Quarterly Journal of Political Science* 5(1):71–97.

- Snowberg, Erik, Justin Wolfers and Eric Zitzewitz. 2007*a*. “Partisan Impacts on the Economy: Evidence from Prediction Markets and Close Elections.” *Quarterly Journal of Economics* 122(2):807–829.
- Snowberg, Erik, Justin Wolfers and Eric Zitzewitz. 2007*b*. “Party Influence in Congress and the Economy.” *Quarterly Journal of Political Science* 2:277–286.
- Snowberg, Erik, Justin Wolfers and Eric Zitzewitz. 2008. “How Prediction Markets Can Save Event Studies.” Manuscript, California Institute of Technology, <http://www.hss.caltech.edu/~snowberg/papers/Snowberg0event>
- Swank, Duane. 2006. “Tax Policy in an Era of Internationalization: Explaining the Spread of Neoliberalism.” *International Organization* 60(4):847–882.
- Swank, Duane and Sven Steinmo. 2002. “The New Political Economy of Taxation in Advanced Capitalist Democracies.” *American Journal of Political Science* 46(3):642–655.
- Tanzi, Victor. 1996. “Globalization, Tax Competition, and the Future of Tax Systems.” *IMF Working Paper* WP/96/141.
- Vogel, David. 1998. *Trading Up: Consumer and Environmental Regulation in a Global Economy*. Harvard University Press.
- Woldendorp, Jaap, Hans Keman and Ian Budge. 2000. *Party Government in 48 Democracies, 1945-1998*. Kluwer Academic Publishers.