

The Political Sources of Financial Risk: Lessons from a Consensus Democracy*

Michael M. Bechtel[†] Roland Füss[‡]

6th August 2007

Abstract

This study examines the relationship between democratic politics and financial risk. Low financial risk is crucial to any well-functioning economy, as it encourages investment, facilitates growth, and therefore enhances overall economic performance. However, little is known about the political sources driving fluctuations around the expected value of an investment, i.e. financial risk. We analyze whether and how pre-electoral, post-electoral, and institutional factors affect financial risk in Germany, a consensus democracy which offers a rich set of democratic processes potentially relevant to uncertainty on its financial markets. Our results show that expected and current government partisanship, divided government, grand coalition governments, as well as periods of coalition formation are important determinants of financial risk even after having controlled for a comprehensive set of alternative economic, and event-specific sources of uncertainty on the financial marketplace.

*The first author gratefully acknowledges financial support by the German National Merit Foundation.

[†]Department of Politics and Management; Box D86; University of Konstanz; 78457 Konstanz; Germany; michael.bechtel@uni-konstanz.de

[‡]Department of Empirical Research and Econometrics; University of Freiburg; Platz der Alten Synagoge/KG II; 79085 Freiburg im Breisgau; Germany.

1 Introduction

There has been an astonishing increase in the flow of international capital. Daily transactions made on global stock markets in 1996 amounted to 61 billion dollars. In 2006 average turnover was worth more than 278 billion dollars on a single day.¹ Along with this rapid increase in international capital flows, countries nowadays compete for capital investment on a global scale (Simmons 2001), as economic actors can move their investment among financial markets all over the world within just a few seconds. Against this background it does not come as a surprise that political scientists are increasingly interested in which and how political factors influence the performance of financial markets (Bernhard/Leblang 2006, Herron 2000, Roberts 1990). While most of these studies have looked into the effects of partisan politics on stock market returns, less effort has been devoted to analyzing what can reasonably be called a key factor for investment attractiveness: financial risk. This lack of scholarly attention is all the more significant since low financial risk, defined as the strength of return fluctuations around the expected value, is crucial to economic performance. It not only affects investment (Wadhvani 1986), but also consumption, exchange rates (Bachman 1992), growth (Kamara 1997), and wealth (Levine/Zervos 1998, Demirgüç-Kunt/Levine 1996).

Despite its importance for a country's economic performance, little is known about the political factors driving financial risk. However, as already Olson (1993) famously argued, political factors may be crucial in order to create an environment fostering growth, since "there are colossal gains from providing domestic tranquility" (567). By distinguishing between pre-electoral and post-electoral factors of financial uncertainty², while taking into account the moderating effect of political institutions such as divided government, we can in great detail examine the political sources of financial risk. In order to explore how politics affects uncertainty on financial markets, we extend the rational partisan model in that parties are not only assumed to vary in terms of their economic policies (Hibbs 1977, Alesina et al. 1997), but also with respect to the *predictability* of these policies, which means that different parties are associated with different levels of policy risk. Second, we argue that divided government plays an important role for

¹Source: World Federation of Exchanges.

²To be precise, uncertainty in the broader sense comprises risk and uncertainty. In this conception, uncertainty exists if it is not possible to attach (subjective or objective) probabilities to events. Risk is present if such probabilities can be given (Knight 1921, p. 20, ch. 7). However, in this study we use the terms uncertainty and risk interchangeably, i.e. both refer to the situation in which the occurrence of events can be associated with (quantitative) probabilities or probability distributions, respectively.

financial risk as well. This is because a key effect of divided government with regard to the predictability of future policy is that it greatly enlarges the set of proposals which potentially can be adopted (Alesina/Rosenthal 1995). In contrast, if a party enjoys unified government, it is much easier to predict future economic policies than under divided government, as the incumbent unilaterally determines policy. A number of other hypotheses on the impact of politics on financial risk can be derived from the literature. Up to now, most of them have not been put to an empirical test. Very few have been evaluated in isolation. We intend to simultaneously evaluate as much of these hypotheses as possible. By that we learn about the validity of the underlying theories and account for rival influences in order to attain unbiased estimates of how political factors influence uncertainty on the financial marketplace.

Due to its consensual political system (Lijphart 1999) with right-leaning, left-leaning and grand coalition governments, periods of coalition formation, early elections, and periods of divided and unified government, the German political system reflects the richness of democratic politics. Therefore, it provides an ideal testing ground in order to evaluate the full range of electoral, policy, and institutional effects.³ We use stock return volatility as a measure of financial uncertainty, as it is the most widely accepted risk measure in empirical finance. Usually, financial risk is decomposed into two main elements: a non-diversifiable or systematic part and a diversifiable or unsystematic component. In this study we take advantage of the possibility to isolate systematic risk by looking at a broad stock market portfolio, in which idiosyncratic risk sources, such as management or credit risk, can reasonably be assumed to be diversified.⁴ Systematic risk however, can not be diversified, and therefore this component of financial risk is prone to influences from political and economic factors inherent to the market. Our estimation results suggest that financial risk decreases (increases) by about 1.5 (0.5) percentage points when a right-leaning (left-leaning) coalition government is installed. In addition, uncertainty on the financial marketplace decreases (increases) by about 1.8 percentage points if a right-leaning (left-leaning) coalition is becoming more likely to win the upcoming election. We also find that risk increases during times of coalition formation and in periods of

³See Kedar (2005, 2006) and Lohmann et al. (1997) for an analogous argument in the field of electoral studies.

⁴This also contributes to reducing the probability of the estimation results being influenced by unobserved or unobservable covariates.

grand coalition governments. In sum, there is strong evidence for democratic politics influencing financial risk.

The remainder of this paper is organized as follows. In the next section we first discuss pre-electoral sources of financial risk such as expectations about government partisanship and electoral uncertainty. Subsequently, section three elaborates on which and how post-electoral factors may influence financial risk. Section four presents our results along with several robustness checks. The final section summarizes our findings and proposes avenues for further research.

2 Pre-Electoral Sources of Financial Risk

Expected Government Partisanship

The impact of partisan politics on the economy has traditionally been of interest to scholars of political economy. Since the classic work by Douglas C. Hibbs (1977), one pertinent research question has been whether fluctuations of macroeconomic key variables such as inflation, unemployment and growth can be explained by government partisanship (Alesina et al. 1997). Drawing on the Downsian view of democracy (Downs 1957) economic policies are assumed to be a function of parties' ideologies. Different ideologies imply different economic policies benefiting some parts of the electorate at the expense of others. As Hibbs (1977) points out, "governments pursue macroeconomic policies broadly in accordance with the objective economic interests and subjective preferences of their class-defined core political constituencies" (1467). Thus, as parties are assumed to be ideologically motivated and to stick to their electoral platforms when holding office, they will manipulate economic key parameters like inflation and unemployment differently, in order to satisfy the demands of their (ideologically defined) voter base (Persson/Tabellini 1999).

The rational expectation-enlarged version of the partisan model posits that prior to an election individuals anticipate the effects of changes in government partisanship (Alesina et al. 1997), which implies that rational actors should be responsive to changes in the electoral probability of different parties holding office. As left administrations are associated with higher inflation, inflation risk should increase as the probability of a left-wing government increases.

Indeed, using daily nominal interest rates from the futures market, Fowler (2006) empirically demonstrates that in the U.S. inflation risk increases (decreases) as the electoral prospects of a Democratic (Republican) President increase. Higher inflation lowers the real rate of return and therefore, higher inflation risk increases the probability of lower or negative returns, meaning that higher inflation risk triggers higher financial risk. Thus, we should — *ceteris paribus* — expect higher financial risk if a left-leaning government is becoming more likely to win the upcoming election.

Hypothesis 1 (Anticipated Partisan Policy Effect) *Financial risk increases (decreases) as the probability of a left (right)-leaning government increases.*

Expected Closeness of the Electoral Outcome

Several authors have argued that electoral uncertainty, conceptualized as the expected closeness of the election outcome is an important determinant of risk (Pantazis et al. 2000, Herron 2000, Leblang/Mukherjee 2005, Bernhard/Leblang 2006). Increased closeness of the electoral race means that there is higher uncertainty about which government will be installed after the election. As different parties implement different economic policies, higher uncertainty about the electoral outcome increases the probability of an investment deviating from its average value. Such logic leads to the following:

Hypothesis 2 (Expected Closeness) *Political risk increases (decreases) as the expected closeness of the electoral outcome increases (decreases).*

3 Post-Electoral Sources of Risk

Coalition Formation

In political systems, which use proportional representation, an additional source of political risk stems from the need to form multi-party governments (Lijphart 1999). After an election, coalescing parties negotiate over the policies they want to implement and the allocation of ministries (Laver/Shepsle 1996). The policies of a multi-party government therefore represent a bargain between the coalescing parties (Martin/Stevenson 2001, Bandyopadhyay/Chatterjee 2006). In

periods of negotiations between potential coalition parties, the final bargaining outcome is difficult to predict. Therefore, Bernhard/Leblang (2006) argue that during periods of coalition formation there is increased uncertainty about the (economic) policies coalition partners will agree on. Thus, even if an election has been held, the subsequent period of coalition formation makes the predictability of future policies difficult. In reality, periods of coalition formation often last several weeks. For example, after the 2002 German Federal election it took parties three weeks to negotiate a coalition agreement. During these negotiations there was increased uncertainty about the outcome in terms of government policy as well as the allocation of ministries. Consequently, there is a great deal of variance in expectations about which economic conditions will prevail in the future. Therefore, we expect:

Hypothesis 3 (Coalition Formation) *Financial risk increases during times of coalition formation.*

The Predictability of Partisan Policy

Up to now, scholars have largely ignored the question whether certain parties are more successful in creating an environment of persistently low financial risk. An exception is the study of Santa-Clara/Valkanov (2003), who find that higher realized returns occur under democratic administrations. They argue that this finding might be due to a ‘Democratic risk premium’, which occurs because economic policies of Democratic administrations often strongly deviate from what the market anticipates.⁵ There are several reasons for why financial risk might differ across right- and left-leaning governments. First, preferences of left and right voters differ considerably on economic issues. These preferences are reflected in parties’ economic policies (Ezrow 2007, Budge et al. 2001). Voters of right-leaning parties are much more concerned about implementing market-friendly policies which create a stable political environment fostering capital investment. This could be viewed as the reasoning underlying Fowler’s (2006, 92) argument, that parties may differ with regard to the predictability of their economic policies. More precisely, right-leaning parties should be more strongly concerned about reducing policy risk than left-leaning parties by sticking to their economic policy platforms as this secures a stable environment beneficial for capital investment of firms and high-income individuals.

⁵According to orthodox financial theory, higher risk leads to a new market equilibrium in which investors are compensated for taking higher risk by a higher return.

Second, right-leaning parties often maintain permanent relationships with industrial associations and firms ('parties of business'). McMenamin/Schoenman (2007) argue that "marriage", which occurs if firms maintain exclusive relationships with a certain party, is the most attractive type of party-firm relations. Firms can greatly profit from rent-seeking by having a party supporting or opposing legislation that matters to their economic performance. Tax, trade, labor or environmental policies are especially important in this respect. Firms can also benefit from a party intervening in bureaucratic decisions which affect its profits. A key aspect of such long-term party-business relationships is that they facilitate the buildup of trust, which decreases the cost of sharing information and by that promotes the coordination of expectations about future economic policy. Therefore, since right-leaning parties maintain significant long-term relations with firms and industry associations, it is much easier for economic actors to predict changes in economic policy under right- than under left-leaning governments.

Left- and right-wing governments may also differ in how effective they are in implementing economic policies and their competence in avoiding unexpected policy consequences. Designing policies which do not have negative side effects is difficult in an increasingly complex world. The risk of economic policy having unexpected side effects can be strongly reduced if a party receives information about the likely impact of its policies. Firms have such knowledge, but it is private information (Bräuninger/Bernhagen 2005, Austen-Smith 1994). Long-term cooperation between right-leaning parties and business interests increases trust between the actors and this makes it easier to successfully and more efficiently engage in information transmission. Therefore, right-leaning parties might be better informed about the consequences of tax, labor, or trade policies. Based on such information right-leaning parties can more clearly assess the likely effects of their policies. This enables them to precisely design their policies. Thus, they may – in contrast to left-leaning parties – enjoy an advantage when it comes to avoiding unexpected policy effects. This higher competence reduces uncertainty about economic policy outcomes. Based on these arguments we can formulate the following:

Hypothesis 4 (Partisan Policy Risk) *Right (left)-leaning governments are associated with lower (higher) financial risk.*

One of the key aspects of research in political economy concerns the impact of government partisanship on inflation. In fact, one of the most important implications of partisan models

of government is that there should be pronounced differences in inflation across left- and right-leaning governments. For example, Alesina et al. (1997) find that left administrations are indeed associated with higher inflation than right governments. According to conventional wisdom in economics, inflation is also important for financial risk. Therefore, when estimating the net effect of government partisanship we have to account for this potential relationship by including an interactive term between government partisanship and inflation.

Divided Government and Policy Uncertainty

Political scientists largely agree that institutions are important for decision-processes and policy outcomes. A key feature of many democracies is the presence of partisan conflict between the executive and the legislative branches, i.e. divided government. The impact of divided government on law-production has been explored extensively (Howell et al. 2000, Coleman 1999, Edwards et al. 1997, Mayhew 1991). Researchers have also begun to identify the economic effects of divided government. The evidence suggests that partisan conflict of the executive and the legislative branches influences trade (Karol 2000, O'Halloran 1994, Lohmann/O'Halloran 1994) and budgetary policies (Alt/Lowry 1994, McCubbins 1991). Poterba (1994), for example, finds that budget deficit reduction in the U.S. states is lower under divided than under unified government and Roubini/Sachs (1989) conclude that unified governments "respond more (and more quickly) to income shocks" (823).

What can be said about the likely impact of divided government on the predictability of economic policies and financial risk? In his balancing model Fiorina (1992) argues that divided government leads political actors to compromise on moderate policies (Alesina/Rosenthal 1995). A key effect of divided government with regard to the predictability of future policy is that it greatly enlarges the set of proposals which potentially can be adopted. Under unified government one party alone determines and enacts a bill. However, in periods of divided government, policy is the result of a bargaining process with the final agreement being somewhere between the actors ideal points. Obviously, the precision with which economic actors can make predictions about future policy is much lower in this case. This suggests that partisan conflict between the executive and the legislative branches is also consequential for financial risk. Under divided government it is more difficult to make predictions about the policy actors will eventually agree

on. In contrast, if a party controls both branches, uncertainty about which policies will be enacted is lower. This leads to the following conjecture:

Hypothesis 5 (Divided Government) *Divided Government increases financial risk.*

Yet, another important conjecture arises when thinking about the effect of divided government on financial risk. If government partisanship indeed plays a role for the predictability of economic policies, its impact on financial risk could be moderated by the presence of unified government. If an incumbent government does not face an opposition majority, this should decrease its effect on financial risk, since now its policies will not be watered down to some unknown extent. Thus, in case a party is the incumbent and enjoys unified government, this will reduce uncertainty about its future economic policies and therefore, financial risk will be lower. When estimating the influence of government partisanship it is therefore important to account for whether government is unified or divided, as divided government might moderate partisan policy effects.⁶

Grand Coalition Governments

In political systems which use proportional representation parties may often be able to form coalition governments which are relatively homogeneous with regard to their ideological positions. Consequently, these coalition governments can still be located along the conventional left-right dimension as either left- or right-leaning. However, sometimes the election result forces parties to form ideologically heterogeneous governments spanning left- as well as right-leaning parties. Obviously, by definition such grand coalition governments are plagued by strong interest heterogeneity, which cause ongoing negotiations about government policy. Furthermore, new upcoming issues are very likely to initiate conflict about how these should be addressed in terms of policy. Because of the great distance between parties' ideal policies, the set of possible

⁶One possible objection could be that divided government may not affect the legislation of economic policy. As we intend to test the hypotheses on German data, this view could stem from a reading of the German basic law, which suggests that the second chamber (Bundesrat) only has veto powers when the states (Länder) have responsibility under the basic law. But as is well-known by scholars of German politics (Scharpf 1988, Bräuninger/König 1999), in reality most federal legislation on economic issues requires the consent of the second chamber. In a detailed analysis of the impact of bicameralism on law production in Germany, König (2001) shows that legislation on economically important issues such as employment benefits, social insurance, industrial policy, labor participation/co-determination, worker protection, working hours, early retirement and vocational training all required the consent of both chambers. Therefore, if the opposition controls the second chamber, it enjoys extensive legislative veto power over economically important legislation.

bargaining outcomes is extremely large. Moreover, such policy deals might not be renegotiation proof, since any coalition party may call into question the negotiated policies in order to remain visible to their electoral supporters. Therefore, grand coalition governments are much less stable than ideologically homogenous governments (Martin/Stevenson 2001). Thus, grand coalition governments should be associated with higher uncertainty about which economic policies will be implemented, when this will happen, and how new upcoming issues are answered in terms of policy. We therefore hypothesize that:

Hypothesis 6 (Grand Coalition Policy) *Grand coalition governments are associated with higher financial risk.*

Domestic Political Events

There is a variety of additional sources of uncertainty in modern democracies, as the predictability of economic policies can be greatly influenced by single political events. Domestic political events such as riots or strikes can induce important swings in the political preferences of voters, which — according to the theory of dynamic representation (Ezrow 2007) — may lead parties to change their economic policies. Moreover, unexpected policy failure or personal impropriety may lead to the replacement of political candidates or the resignation of ministers (Dewan/Myatt 2007). However, while these events can change expectations about future economic policies, they are often realizations of processes whose final outcome is difficult to predict. For example, after a call for the resignation of a minister involved in a scandal has been made, it is unclear whether the head of government eventually chooses to fire or to protect his/her minister. In political systems with strong judicial review additional uncertainty can arise until the court has decided on whether to uphold or overrule a statute. According to Fama's (1970) efficient market hypothesis especially unexpected events change expectations in important ways. Such surprising political events are quite common. In Germany, for example, Chancellor Schröder surprised the public when he announced his intention to ask for a motion of confidence immediately after the Social Democratic Party had lost a state election in 2005. Therefore, in the empirical estimation we will pay attention to accounting for a variety of potentially important domestic political events. Figure 1 summarizes the main political factors which are supposed to influence systematic risk.

4 Empirical Estimation

Dependent Variable: Financial Risk

Stock return volatility is one of the most important measures of financial risk nowadays. In finance it is used as the key variable in asset allocation, portfolio optimization, and risk management. Unfortunately, volatility is not directly observable. The standard way of estimating historical volatility is to use the sample variance of the continuous rate of return. Let r_t denote the continuously compounded return r at time t , i.e. $r_t \equiv \ln P_t - \ln P_{t-1}$. The sample standard deviation of the return is given by $\sigma(r_t) = \sqrt{\frac{1}{T-1} \sum_{\tau=t-T}^t (r_\tau - \bar{r}_t)^2}$ where \bar{r}_t is the mean return from $t-T$ to t and usually the estimation window T is set to 20. Consequently, we estimate the volatility of the German major stock index (DAX) by calculating the 20-day rolling standard deviations of daily continuously compounded return series from 1991 to 2005.⁷

Political and Economic Control Variables

We now introduce the variables used in the empirical estimation. In order to assess whether financial risk is influenced by anticipated government partisanship (Anticipated Partisan Policy Effect), we construct electoral probabilities according to Alesina et al.'s (1997) electoral option model. This provides us with an estimate of the probability of a right- ($Pr(\text{right})$) and left-leaning government ($Pr(\text{left})$) on a certain day.⁸ The advantage of this operationalization lies in that it accounts for both the time left until the next election and the variance in polling results. This is necessary, because the extent to which investors care about future election results increases as the election is coming closer. In contrast, on the day after an election no investor is interested in which government will be installed several years later. Electoral probabilities reflect this argument by weighting polling results with the time left until the next election.⁹ To evaluate

⁷Unit root tests reject the null of non-stationarity of the DAX volatility (and return) series. Also, our dependent variable is not fractionally integrated. By definition, a variable is called fractionally integrated if it is neither integrated nor stationary. Since the volatility (and also the return) series is $I(0)$, fractional integration is not an issue here.

⁸Polling data from Forsa, a renowned polling institute, are used because these are best suited for constructing electoral probabilities. The fact that this data starts in September 1991 determines the starting date of our sample.

⁹Another possibility would be to use political stock market data. However, for Germany such data is only available for several weeks prior to the 2005 election.

the *electoral closeness* hypothesis we derive a standard electoral uncertainty measure based on the electoral probabilities (Bernhard/Leblang 2006, Leblang/Mukherjee 2005). The idea is to define a mapping which reflects that uncertainty is lowest if the probability of a victory is either very high or very low, and that as the difference in electoral probabilities is becoming smaller, expectations of government partisanship are increasingly uncertain.¹⁰ Finally, we collected data on the coalition formation periods following German federal elections from 1991 to 2005. The corresponding indicator variable *coalition formation* equals 1 during times of coalition formation and is 0 otherwise.

In order to estimate the relevance of policy factors for financial risk, we collected data on government partisanship and distinguished between right-leaning, left-leaning, and grand coalition government. There was no ambiguity in categorizing left and right governments. *Left-leaning governments* always consisted of the Social Democratic Party (SDP) and the Greens, which both were located clearly left on the economic left-right dimension (Debus 2007, Budge et al. 2001).¹¹ *Right governments* were always formed by the Christian Democratic Union (CDU) and the Liberals (FDP), which both were located to the right of the SDP and the Greens. *Grand coalition* governments consisted of a coalition between the SDP and the CDU. *Second chamber (party)* indicates whether right-leaning (CDU and FDP) or left-leaning (SPD, Greens) parties control the majority in the Bundesrat, the upper house of the German legislature. Consequently, the interaction term between *second chamber* and government partisanship distinguishes between periods of unified and divided government.

A comprehensive set of additional variables allows us to account for effects of domestic political events on financial risk. Several variables have been created to pick up influences from unexpected events and decision processes associated with the early federal election in 2005. Early federal elections can only take place after the Chancellor loses a vote on a motion of confidence and the German President subsequently decides to dissolve the parliament. *Call vote of confidence 2005* indicates when Chancellor Schröder announced his intention to bring about early elections by forcing his majority in parliament to abstain from the vote on the

¹⁰This means that the variable electoral closeness is an inverse u-shaped function which equals 1 if the election outcome is very uncertain and gradually declines to 0 with expectations being more certain.

¹¹In contrast to what its name might suggest, the Green party is not a one-issue party, but rather can be considered as clearly left on the classic economic left-right dimension (Debus 2007, Budge et al. 2001). This lends scientific support to Chancellor Helmut Kohl's famous statement about what he took to be the Green party's true nature: "The Green party is like a watermelon, green on the outside and red on the inside".

motion of confidence. *Announcement/vote confid 2005* equals 1 until the vote on the motion of confidence failed as intended. *Decision elections 2005* takes on the value 1 when German President Köhler decided to dissolve the parliament and announced when elections would take place. Finally, *constitutional complaint 2005* picks up uncertainty which arose as two members of parliament filed a constitutional complaint in the Federal Constitutional Court, in order to prevent the dissolution of the parliament. Several additional indicator variables were created for other domestic political events such as riots and strikes or attacks committed by right-wing extremists.

A number of economic controls and several other event indicator variables are used to further increase confidence in the empirical estimates. *Inflation* and *interest rate* as well as per capita gross domestic product *GDP pc* are standard economic controls in empirical finance (Robichek/Cohn 1974, Schwert 1989).¹² Inflation is an important variable because of two reasons. First, according to the net-present value model, higher inflation decreases the value of investment in productive capital, with capital-switching triggering downward pressure on stock prices. Secondly, government partisanship is supposed to influence inflation, which in turn affects financial risk. Since this requires an interaction term between government partisanship and inflation, both constitutive terms have to be included in the regressions as well (Brambor et al. 2006, Braumoeller 2004). Higher interest rates increase the costs of borrowing, which makes investment for companies more expensive. Per capita GDP helps us to account for the influence of changing economic conditions on return volatility. According to conventional wisdom in economics, risk is also greatly influenced by the occurrence of natural disasters (floods, crop failure, hurricanes), exchange rate shocks, or international political events such as war onset. Consequently, we account for the occurrence of *Natural Disasters* (floods, earthquakes), terrorist attacks (*Attack WTC 93*, *Attack WTC 01*), the onset of war (*Kosovo 99*, *Afghanistan 99*, *Iraq 03*), and the crisis of the European monetary system in 1992 (*Crisis EMS 92*).¹³

¹²These enter logged or log-differenced in order to ensure stationarity. We tested the stationarity of all variables using unit-root tests. Another potential problem could be that the independent variables and our dependent variable are cointegrated. A necessary condition for a cointegrating relationship to exist, is that the variables are at least $I(1)$. Since the dependent variable, $\sigma(r_t)$, is already $I(0)$ and our metric, independent variables (electoral probability and interest rate) are either $I(1)$ or $I(0)$, the variables are not (can not be) cointegrated.

¹³We are aware of the fact that war and terrorist attacks are very political phenomena (Schmitt 1987[1932]). However, since our focus lies on the impact of domestic politics on financial risk, the effect of war onset and terrorist attacks are of minor interest to this study. For an analysis of stock market reactions to international conflicts see Schneider/Tröger (2006).

Since our dependent variable is metric, ordinary least squares can be used for the empirical estimation. We refrain from applying generalized autoregressive conditional heteroscedasticity (GARCH) models, because our primary aim lies in evaluating hypotheses derived from logically consistent theoretical arguments. Symmetric GARCH as well as asymmetric TARCH/EGARCH techniques however, by definition include such atheoretical terms. We explicitly want to avoid autoregressive terms in the equations to be estimated, since they are not justified on theoretical grounds. The reason why they are essential to any GARCH model is because their main task is to find a specification which fits best to the data in order to make optimal forecasts. Thus, standard regression techniques with corrections for autocorrelation and heteroscedasticity are perfectly suited for carrying out our analysis.

Yet, the Lagrange multiplier as well as the Ljung-Box test clearly suggest that disturbances are autocorrelated, which means that OLS standard errors will be deflated. There are two possibilities in order to address this problem. One common alternative is to use the Prais-Winsten method to estimate the standard errors of the coefficients. However, this estimator assumes that the residual structure follows an AR(1) process. Given the nature of our dependent variable, this assumption is implausible. A more appropriate alternative following Greene (2003, 267) is to use heteroscedasticity and autocorrelation robust (Newey-West) standard errors, where the maximum lag is the smallest integer greater than or equal to $T^{\frac{1}{4}}$, which is 8 in our case. We decide to be even more conservative and employ Newey-West standard errors with a maximum lag of 20.¹⁴ The reason for why we think this choice is most appropriate lies in the construction of our dependent variable, which is estimated on the basis of the past 20 return values. In the robustness section we show that our results do not change if we re-estimate the models varying the length of the volatility estimation window or applying a different estimation technique.

Results

Table 1 displays estimation results from several model specifications in which we regressed our financial risk measure on several political and economic variables. We carried out separate estimations for right-leaning (column I and II) and left-leaning (column I and II) governments. Turning to the electoral factors first, financial risk seems to decrease as the probability of a

¹⁴In the robustness section we assess whether our results are sensitive to this choice.

right-leaning government increases, since the corresponding coefficient is significantly negative (models I and II). The opposite holds for left-leaning governments: When a left-leaning government is more likely to be installed after the upcoming election, financial risk increases (models III and IV). This supports the anticipated partisan effect hypotheses. The market seems to incorporate expectations about future economic policies in its current assessment of investment uncertainty. Interestingly, expected closeness does not seem to influence volatility in a systematic way. However, periods of coalition formation are associated with higher financial risk, which is in line with the hypothesis.

– table 1 about here –

How do post-electoral factors influence uncertainty on the financial marketplace? In order to empirically answer this question it is important to note that all regressions include two multiplicative terms. The first multiplicative term (Right Government*Second Chamber) is required in order to test whether unified government indeed increases the predictability of government policies and therefore reduces financial risk. The second interaction term (Right Government*Inflation) allows us to take into account the conventional view that right governments generally decrease inflation (Alesina et al. 1997), which might trigger an additional partisan effect on financial risk. A noteworthy consequence of including interaction terms is that coefficients of the multiplicative and lower order terms can no longer be interpreted as marginal effects and their standard errors run danger of being useless for hypothesis testing (Brambor et al. 2006). Therefore, we used the point estimates and the corresponding variance-covariance matrix to calculate marginal effects and appropriate standard errors. Displaying these results graphically greatly facilitates the discussion. Therefore, figure 2 plots the marginal effects of government partisanship as well as those of the other political factors we included in our estimations.

– figure 2 about here –

We can see from figure 2 that financial risk is significantly lower in periods of right-leaning governments. The size of the effect is about 1.5 percentage points. In contrast, under a left-leaning government volatility increases by about 0.6 percentage points. These partisan effects are highly significant, as the small confidence intervals indicate. This lends strong support to

the hypothesis that partisanship matters for risk on the financial marketplace. Interestingly, the effect of right-leaning governments is much stronger in absolute terms — about three times larger.

The results contain an interesting message with regard to the question whether parties influence uncertainty in the economy solely by controlling the majority in the second chamber. The answer is given by the coefficient of the *second chamber control* variable, as it indicates the effect of a party controlling only the second chamber. While a right-leaning majority in the Bundesrat does not exert a significant influence, a left-leaning majority triggers a significant increase in financial risk by about 0.7 percentage points on average. The results also support the hypothesis that grand coalition governments are associated with higher uncertainty about future economic policies. Financial risk increases by about 0.7 percentage points during times of grand coalition governments.

However, also domestic political events influence financial risk, as the coefficients clearly suggest. Interestingly, uncertainty was significantly lower during the time period starting when Chancellor Schröder's call for early elections and ending with the vote on the motion of confidence in Summer 2005. The vote itself seems to have increased uncertainty about future political conditions, as the coefficient is positive and significant. As one would expect, the decision of German president Köhler to have early elections in September 2005 reduced volatility. Thus, this information resolved some uncertainty about future political developments. In sum, single domestic political events may well exert non-negligible influence on financial risk.

Obviously, economic factors are also important for financial risk. Inflation is negatively associated with volatility as is per capita gross domestic product. Also, the need to take into account the impact of international political and economic events is clearly demonstrated by our regression results displayed in the lower panel of table 1. The terrorist attack on September 11 as well as the onset of war in Afghanistan and Iraq increased financial risk, as the positive and significant point estimates suggest. Likewise, the crisis of the European Monetary System in 1992 triggered higher uncertainty in the economy.

Robustness Tests

We will now assess the robustness of our results. First, we are interested in evaluating whether our results are driven by outliers in the data. Second, we will vary the length of the estimation window used for estimating return volatility (T), in order to see whether the estimates presented above are sensitive to our decision to follow contemporary research in empirical finance by setting T to 20. We re-estimate the fully specified model using iterated re-weighted least squares together with heteroscedasticity and autocorrelation robust standard errors. Table 2 reports the results. The estimates are very similar to those reported above. The probability of a right-leaning government significantly decreases financial risk, while periods of coalition formation are systematically associated with higher economic uncertainty.

– table 2 about here –

Also with regard to the relevance of post-electoral factors the picture emerging from our initial estimation results remains the same. The coefficient of the interaction term *right government*second chamber (right)* indicates that the presence of unified government indeed reduces financial risk. The combined partisan effect of right-leaning governments is still significantly negative. In sum, a right-leaning government reduces risk by about 1.5 percentage points on average. With regard to left-leaning governments, the GLS results again lend strong support to political factors influencing financial risk. Interestingly, already a left-leaning majority in the second chamber induces higher risk, as the positive and highly significant point estimate for the *second chamber (left)* variable suggests.

In a second step we vary the length of the window used to estimate return volatility. We estimate one model where T is set to 15 and another with T equal to 30, again separating between right- and left-leaning governments. Standard errors robust to autocorrelation and heteroscedasticity in the disturbances with a maximum lag of T equal to 15 and 30, respectively, are employed.¹⁵ As can be seen from table 2 the results do not change. Political factors like expected and current government partisanship, coalition formation, divided government, and grand coalition governments still exert significant influence on financial risk. We interpret the

¹⁵We also varied the lag order of the HAC standard errors. The results, which are available upon request, did not change.

robustness of our results as lending strong support to the view that political factors matter for uncertainty on the financial marketplace.

5 Conclusion

The main message of our study is simple: Political factors indeed matter for financial risk, as they influence the predictability of future economic developments. As our results based on an analysis of data from the German political system demonstrate, politics affects financial risk in several ways. We distinguished between several pre-electoral and post-electoral sources of financial risk, in order to get a more fine-grained picture of how politics influences uncertainty on the financial marketplace. First, financial risk is affected by expectations about future government partisanship. In the pre-election time uncertainty decreases if a right-leaning government becomes more likely and increases if the electoral prospects of a left-leaning government increase.

After elections have been held, uncertainty about government policy during times of coalition formation induces higher risk. However, also other post-electoral factors are important. Left-leaning governments increase risk present on financial markets, while right-leaning governments seem to be more successful in providing a politically tranquil and predictable environment. Moreover, left-leaning governments trigger higher financial risk just by controlling the second chamber of the German political system. Finally, institutions are important for policy uncertainty, as unified government tempers uncertainty about future economic policies and therefore has a risk-reducing effect. In sum, the evidence highlights the importance of political factors which already figure prominently in the political economy literature. Our results show that they may also matter for risk on financial markets.

Our findings give rise to several questions which hopefully provide impetus for further research. First, while our results support the hypothesis of parties differently influencing financial risk, it would be interesting to explore to what extent this effect can be traced back to greater variance in parties' economic policies and/or their ability in avoiding unexpected policy consequences. For example, future research could employ data on parties' ideal policies (e.g. from the Comparative Manifesto Project) in order to assess whether left parties change their economic policies more often and more strongly than right-leaning parties. A second interesting question arises from the finding that the effect of right-leaning governments on financial risk is

much stronger in absolute terms than that of left-leaning governments. This difference in effect size clearly deserves an explanation and we hope that future research will be able to provide an answer. Third, research on the political economy of financial markets should explicitly control for periods of grand coalition governments, as these are likely to induce additional uncertainty about future economic policies. Finally, as our results are based on data from Germany, an important task for further research is to assess the impact of pre- and post-electoral and institutional factors as well as political events on financial risk across countries. Our findings strongly encourage such future scholarly efforts.

References

- Alesina, Alberto/Roubini, Nouriel/Cohen, Gerald (1997): *Political Cycles and the Macroeconomy*. Cambridge (Mass.): MIT Press.
- Alesina, Alberto/Rosenthal, Howard (1995): *Partisan Politics, Divided Government, and the Economy*. New York: Cambridge University Press.
- Alt, James E./Lowry, Robert C. (1994): *Divided Government, Fiscal Institutions, and Budget Deficits – Evidence from the States*, in: *American Political Science Review* 88 (4): 811-828
- Austen-Smith, David (1994): *Strategic Transmission of Costly Information*, in: *Econometrica* 62 (4): 955-963.
- Bachman, Daniel (1992): *The Effect of Political Risk on the Forward Exchange Rate Bias: The Case of Elections*, in: *Journal of International Money and Finance* 11 (2): 208-219.
- Bandyopadhyay, Siddhartha/Chatterjee, Kalyan (2006): *Coalition Theory and its Applications: A Survey*, in: *Economic Journal* 116 (2) 136-155.
- Benoit, Kenneth/Laver, Michael (2006): *Party Policy in Modern Democracies*. London: Routledge.
- Bernhard, William/Leblang, David (2006): *Democratic Processes and Financial Markets: Pricing Politics*. Cambridge: Cambridge University Press.
- Bernhard, William/Leblang, David (2002): *Democratic Processes, Political Risk, and Foreign Exchange Markets*, in: *American Journal of Political Science* 46 (2): 316-333.
- Bräuninger, Thomas/Bernhagen, Patrick (2005): *Structural Power and Public Policy: A Signaling Model of Business Lobbying in Democratic Capitalism*, in: *Political Studies* 53 (1): 43-64.
- Bräuninger, Thomas/König, Thomas (1999): *The checks and balances of party federalism: German federal government in a divided legislature*, in: *European Journal of Political Research* 36 (2): 207-234.
- Brambor, Thomas/Clark, William R./Golder, Matthew (2006): *Understanding Interaction Models: Improving Empirical Analyses*, in: *Political Analysis* 14 (1): 63-82.
- Braumoeller, Bear (2004): *Hypothesis Testing and Multiplicative Interaction Terms*, in: *International Organization* 58 (4): 807-820.
- Budge, Ian/Klingemann, Hans-Dieter/Volkens, Andrea/Bara, Judith/Tanenbaum, Eric (2001): *Mapping Policy Preferences. Estimates for Parties, Electors and Governments 1945-1998*. Oxford: Oxford University Press.
- Coleman, John J. (1999): *Unified Government, Divided Government, and Party Responsiveness*, in: *American Political Science Review* 93 (4): 821-835.
- Debus, Marc (2007): *Pre-Electoral Alliances, Coalition Rejections, and Multiparty Governments*. Baden-Baden: Nomos [forthcoming].
- Demirgüç-Kunt, Ash/Levine, Ross (1996): *Stock Markets, Corporate Finance, and Economic Growth: An Overview*, in: *World Bank Economic Review* 10 (2): 223-239.
- Dewan, Torun/Maytt, David P. (2007): *Scandal, Protection, and Recovery in the Cabinet*, in: *American Political Science Review* 101 (1): 63-92.
- Downs, Anthony (1957): *An Economic Theory of Democracy*. New York: Harper.
- Edwards, George C. III/Barrett, Andrew/Peake, Jeffrey (1997): *The Legislative Impact of Divided Government*, in: *American Journal of Political Science* 41 (2): 545-563.

- Engle, Robert F. (2001): GARCH 101: The Use of ARCH/GARCH Models in Applied Econometrics, in: *Journal of Economic Perspectives* 15 (4): 157-68.
- Ezrow, Lawrence (2007): The Variance Matters : How Party Systems Represent the Preferences of Voters, in: *Journal of Politics* 69 (1): 182-192.
- Fama, Eugene F. (1970): Efficient Capital Markets: A Review of Theory and Empirical Work, in: *Journal of Finance* 25 (2): 383-417.
- Fiorina, Morris P. (1992): An Era of Divided Government, in: *Political Science Quarterly* 107 (3): 387-410.
- Fowler, James (2006): Elections and Markets: The Effect of Partisanship, Policy Risk, and Electoral Margins on the Economy, in: *Journal of Politics* 68 (1): 89-103.
- Greene, William H. (2003): *Econometric Analysis*. Fifth Edition. New Jersey: Prentice Hall.
- Herron, Michael C. (2000): Estimating the Economic Impact of Political Party Competition in the 1992 British Election, in: *American Journal of Political Science* 44 (2): 320-331.
- Hibbs, Douglas A. (1977): Political Parties and Macroeconomic Policy, in: *American Political Science Review* 71 (4): 1467-1487.
- Howell, William/Adler, Scott/Cameron, Charles/Riemann, Charles (2000): Divided Government and the Legislative Productivity of Congress, 1945-94, in: *Legislative Studies Quarterly* 25 (2): 285-312.
- Kamara, Avraham (1997): The Relation Between Default-Free Interest Rates and Expected Economic Growth Is Stronger Than You Think, in: *Journal of Finance* 52 (4): 1681-1694.
- Karol, David (2000): Divided Government and U.S. Trade Policy: Much Ado About Nothing?, in: *International Organization* 54 (4): 825-844.
- Kedar, Orit (2005): When Moderate Voters Prefer Extreme Parties: Policy Balancing in Parliamentary Elections, in: *American Political Science Review* 99 (2): 185-199.
- Knight, Frank H. (1921): *Risk, Uncertainty and Profit*. Boston MA: Hart, Schaffner and Marx, Houghton Mifflin Company.
- König, Thomas (2001): Bicameralism and Party Politics in Germany: an Empirical Social Choice Analysis, in: *Political Studies* 49 (3): 411-437.
- Laver, Michael/Shepsle, Kenneth A. (1996): *Making and Breaking Governments: Cabinets and Legislatures in Parliamentary Democracies*. Cambridge: Cambridge University Press.
- Leblang, David/Mukherjee, Bumba (2005): Government Partisanship, Elections, and the Stock Market: Examining American and British Stock Returns, in: *American Journal of Political Science*: 49 (4): 780-802.
- Levine, Ross/Zervos, Sara (1998): Stock Markets, Banks, and Economic Growth, in: *American Economic Review* 88 (3): 537-558.
- Levine, Ross/Zervos, Sara (1996): Stock Market Development and Long-Run Growth, in: *World Bank Economic Review* 10 (2): 323-339.
- Lijphart, Arend (1999): *Patterns of Democracy: Government form and performance in thirty-six countries*. New Haven: Yale University Press.
- Lintner, John (1965): The Valuation of Risk Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets, in: *Review of Financial Statistics* 47 (1): 13-37.

- Lohmann, Susanne/Brady, David W./Rivers, Douglas (1997): Party Identification, Retrospective Voting, and Moderating Elections in a Federal System: West Germany, 1961-1989, in: *Comparative Political Studies* 30 (4): 420-449.
- Lohmann, Susanne/O'Halloran, Sharyn (1994): Divided Government and U.S. Trade Policy: Theory and Evidence, in: *International Organization* 48(4): 595-632.
- Martin, Lanny W./Stevenson, Randolph T (2001) Government Formation in Parliamentary Democracies, in: *American Journal of Political Science* 45 (1): 33-50.
- Mayhew, David R. (1991): Divided Party Control: Does It Make a Difference? in: *PS: Political Science and Politics* 24 (4): 637-640.
- McCubbins, Mathew D. (1991): Government on Lay-Away: Federal Spending and Deficits under Divided Party Control, in: Cox, Gary W./Kernell, Samuel (eds.): *The Politics of Divided Government*. Boulder: Westview Press.
- McMenamin, Iain/Schoenman, Rober (2007): Together Forever? Explaining Exclusivity in Party-Firm Relations, in: *Political Studies* 55 (1): 153-173.
- Mossin, Jan (1966): Equilibrium in a Capital Asset Market, in: *Econometrica* 34 (4): 768-783.
- O'Halloran, Sharyn (1994): *Politics, Process, and American Trade Policy*. Ann Arbor: University of Michigan Press.
- Olson, Mancur (1993): Dictatorship, Democracy, and Development, in: *American Political Science Review* 87 (3): 567-576.
- Pantazis, Christos/Stangeland, David A./Turtle, Harry J. (2000): Political Elections and the Resolution of Uncertainty, in: *Journal of Banking and Finance* 24 (10): 1575-1604.
- Persson, Torsten/Tabellini, Guido (2000): *Political Economics. Explaining Economic Policy*. Cambridge (Mass.)/London: MIT Press.
- Poterba, James (1994): State Responses to Fiscal Crisis: The Effects of Budgetary Institutions and Policies, in: *Journal of Political Economy* 102 (4): 799-821.
- Roberts, Brian E. (1990): Political Institutions, Policy Expectations, and the 1980 Election, in: *American Journal of Political Science* 34 (2): 289-310.
- Robichek, Alexander A./Cohn, Richard A. (1974): The Economic Determinants of Systematic Risk, in: *Journal of Finance* 29 (2): 493-447.
- Roubini, Nouriel/Sachs, Jeffrey D. (1989): Political and Economic Determinants of Budget Deficits in the Industrial Democracies, in: *European Economic Review* 33 (5): 903-938.
- Santa-Clara, Pedro/Valkanov, Rossen (2003): The Presidential Puzzle: Political Cycles and the Stock Market, in: *Journal of Finance* 58 (5): 1841-1872.
- Scharpf, Fritz W. (1988): The Joint Decision Trap: Lessons from German Federalism and European Integration, in: *Public Administration* 66 (3): 239-278.
- Schmitt, Carl (1987 [1932]): *Der Begriff des Politischen. Text von 1932 mit einem Vorwort und 3 Corollarien*. Berlin: Duncker & Humblot.
- Schneider, Gerald/Tröger, Vera (2006): War and the World Economy. Stock Market Reactions to International Conflicts, in: *Journal of Conflict Resolution* 50 (5): 623-45.
- Schwert, G. William (1989): Why does Stock Market Volatility change over Time, in: *Journal of Finance* 44 (5): 623-45.

- Sharpe, William F. (1964): Capital Asset Prices: A Theory of Equilibrium under Conditions of Risk, in: *Journal of Finance* 19 (3): 425-442.
- Simmons, Beth A. (2001): The International Politics of Harmonization: The Case of Capital Market Regulation, in: *International Organization* 55 (3): 589-620.
- Studenmund, Arnold H. (2006): *Using Econometrics: A Practical Guide*, Fifth Edition, Boston: Pearson/Addison-Wesley Longman.
- Wadhvani, Sushil B. (1986): Inflation, Bankruptcy, Default Premia and the Stock Market, in: *Economic Journal* 96 (381): 120-138.

Figure 1: Political and Economic Sources of Financial Risk

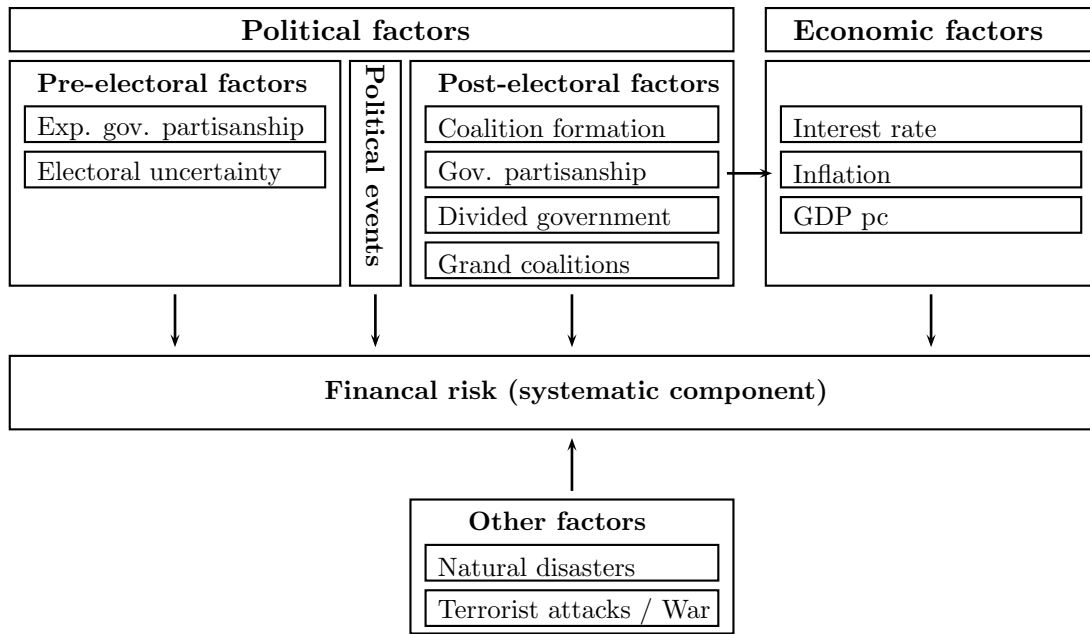
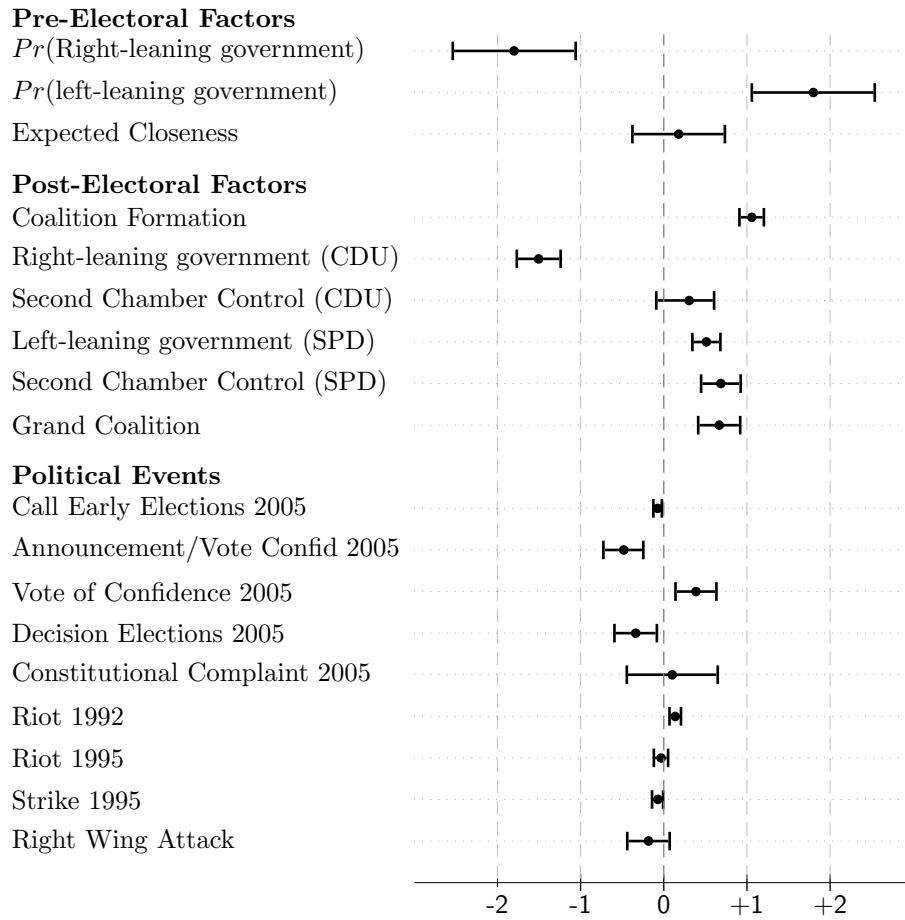


Figure 2: The Effects of Political Variables on Financial Risk [% points]



Quantities given are marginal effects $\frac{\partial Y}{\partial X}$ together with a 95% confidence interval based on regressions with HAC robust (Newey-West) standard errors (lag order=20) for the fully specified model. For right/left-leaning government the combined effect is shown with the corresponding standard error calculated on the basis of the variance-covariance matrix of the coefficient estimates.

Table 1: The Political Sources of Risk

	I	II	III	IV
Pre-Electoral Factors				
Pr(Right Government)	-1.972*** (0.316)	-1.798*** (0.385)		
Pr(Left Government)			1.972*** (0.316)	1.798*** (0.179)
Expected Closeness	0.254 (0.244)	0.179 (0.292)	0.179 (0.244)	0.292 (0.292)
Post-Electoral Factors				
Coalition Formation	1.040*** (0.115)	1.058*** (0.117)	1.040*** (0.115)	1.058*** (0.117)
Right Government	-1.102*** (0.201)	-1.132*** (0.196)		
Second Chamber (Right)	0.363* (0.170)	0.303 (0.162)		
Right Government*Second Chamber	-1.024*** (0.154)	-0.991*** (0.159)		
Left Government			2.126*** (0.243)	2.122*** (0.237)
Second Chamber (Left)			0.662*** (0.128)	0.688*** (0.129)
Left Government*Second Chamber			-1.024*** (0.154)	-0.991*** (0.159)
Grand Coalition	0.656*** (0.137)	0.667*** (0.137)	0.656*** (0.137)	0.667*** (0.137)
Political Events				
Call Early Elections 05		-0.074* (0.034)		-0.074* (0.034)
Announcement/Vote of Confidence 05		-0.486*** (0.130)		-0.486*** (0.130)
Vote of Confidence 05		0.387** (0.133)		0.387** (0.133)
Decision Early Elections 05		-0.339* (0.138)		-0.339* (0.138)
Constitutional Complaint 05		0.102 (0.287)		0.102 (0.287)
Riot 92		0.138** (0.043)		0.138** (0.043)
Riot 95		-0.034 (0.052)		-0.034 (0.052)
Strike 95		-0.071 (0.041)		-0.071 (0.041)
Right-wing attack		-0.183 (0.138)		-0.183 (0.138)
Economic Factors				
Inflation (<i>log</i>)	-0.908*** (0.221)	-0.923*** (0.206)	-0.308*** (0.075)	-0.304*** (0.076)
Right Government*Inflation (<i>log</i>)	0.600** (0.231)	0.618** (0.218)		
Left Government*Inflation (<i>log</i>)			-0.600** (0.231)	-0.618** (0.218)
Interest rate ($\Delta \log$)	0.316 (1.292)	1.054 (1.288)	0.316 (1.292)	1.054 (1.288)
GDP pc ($\Delta \log$)		-4.185* (2.019)		-4.185* (2.019)
Other Events				
Natural Disaster		0.244 (0.318)		0.244 (0.318)
Attack WTC 93		-0.124** (0.046)		-0.124** (0.046)
Attack WTC 01		1.253*** (0.116)		1.253*** (0.116)
Kosovo 99		-0.420 (0.224)		-0.420 (0.224)
Afghanistan 99		0.437*** (0.097)		0.437*** (0.097)
Iraq 03		1.652*** (0.147)		1.652*** (0.147)
Crisis EMS 92		0.596*** (0.037)		0.596*** (0.037)
Constant	2.987*** (0.264)	2.997*** (0.263)	-0.748* (0.322)	-0.621 (0.397)
Adj R^2	0.37	0.43	0.37	0.43
N	3595	3595	3595	3595

Dependent variable: DAX return volatility. OLS regression coefficients shown with HAC robust (Newey-West) standard errors (lag order=20) in parentheses. * $p < .10$, ** $p < .05$, *** $p < .01$.

Table 2: The Political Sources of Risk: GLS Estimates and Varying Estimation Window

	Right-leaning government			Left-leaning government		
	GLS	OLS (T=15)	OLS (T=30)	GLS	OLS (T=15)	OLS (T=30)
Pre-Electoral Factors						
Pr(Right Government)	-1.798*** (0.271)	-1.669*** (0.349)	-1.891*** (0.417)			
Pr(Left Government)				1.798*** (0.271)	1.669*** (0.349)	1.891*** (0.382)
Expected Closeness	0.179 (0.238)	0.092 (0.270)	0.263 (0.296)	0.179 (0.238)	0.092 (0.270)	0.263 (0.274)
Post-Electoral Factors						
Coalition Formation	1.058*** (0.097)	1.111*** (0.128)	0.896*** (0.115)	1.058*** (0.097)	1.111*** (0.128)	0.896*** (0.110)
Right Government	-1.132*** (0.222)	-1.059*** (0.173)	-1.192*** (0.227)			
Second Chamber (Right)	0.303 (0.170)	0.280* (0.140)	0.317 (0.187)			
Right Government*Second Chamber	-0.991*** (0.114)	-1.023*** (0.164)	-0.858*** (0.165)			
Left Government				2.122*** (0.195)	2.082*** (0.227)	2.050*** (0.227)
Second Chamber (Left)				0.688*** (0.092)	0.743*** (0.143)	0.541*** (0.125)
Left Government*Second Chamber				-0.991*** (0.114)	-1.023*** (0.164)	-0.858*** (0.149)
Grand Coalition	0.667*** (0.097)	0.674*** (0.140)	0.596*** (0.131)	0.667*** (0.097)	0.674*** (0.140)	0.596*** (0.131)
Combined Partisan Effect ($\frac{\partial Y}{\partial \text{govparty}}$)	-1.504*** (0.127)	-1.516*** (0.153)	-1.374*** (0.147)	0.514*** (0.042)	0.493*** (0.082)	0.516*** (0.093)
Political Events						
Call Early Elections 05	-0.074*** (0.008)	-0.072** (0.025)	0.091*** (0.023)	-0.074* (0.008)	-0.072** (0.025)	0.091*** (0.026)
Announcement/Vote of Confidence 05	-0.486*** (0.103)	-0.477*** (0.116)	-0.433** (0.142)	-0.486*** (0.103)	-0.477*** (0.116)	-0.433*** (0.126)
Vote of Confidence 05	0.387*** (0.097)	0.330** (0.121)	0.364* (0.144)	0.387*** (0.097)	0.330** (0.121)	0.364** (0.129)
Decision Early Elections 05	-0.339*** (0.096)	-0.308* (0.126)	-0.336* (0.147)	-0.339*** (0.096)	-0.308* (0.126)	-0.336* (0.132)
Constitutional Complaint 05	0.102 (0.117)	0.017 (0.280)	0.218 (0.294)	0.102 (0.117)	0.017 (0.280)	0.218 (0.280)
Riot 92	0.138** (0.017)	0.147*** (0.039)	0.260*** (0.044)	0.138*** (0.017)	0.147*** (0.039)	0.260*** (0.039)
Riot 95	-0.034 (0.035)	-0.096* (0.048)	-0.0007 (0.058)	-0.034 (0.035)	-0.096* (0.048)	0.007 (0.052)
Strike 95	-0.071* (0.029)	-0.083* (0.037)	-0.048 (0.045)	-0.071* (0.029)	-0.083* (0.037)	-0.048 (0.040)
Right-wing attack	-0.183*** (0.031)	-0.184* (0.079)	-0.140 (0.143)	-0.183*** (0.031)	-0.184* (0.079)	-0.140 (0.146)
Economic Factors						
Inflation (<i>log</i>)	-0.923*** (0.179)	-0.857*** (0.179)	-0.972*** (0.239)	-0.304*** (0.050)	-0.291*** (0.070)	-0.295*** (0.069)
Right Government*Inflation (<i>log</i>)	0.618** (0.215)	0.566** (0.192)	0.677** (0.251)			
Left Government*Inflation (<i>log</i>)				-0.618** (0.215)	-0.566** (0.192)	-0.677** (0.220)
Interest rate ($\Delta \log$)	1.054* (0.499)	0.578 (1.405)	0.302 (1.038)	1.054* (0.499)	0.578 (1.405)	0.302 (1.112)
GDP pc ($\Delta \log$)	-4.185*** (0.679)	-4.059* (2.050)	-4.119* (1.884)	-4.185*** (0.679)	-4.059* (2.050)	-4.119* (1.876)
Other Events						
Natural Disaster	0.244 (0.262)	0.226 (0.272)	0.264 (0.340)	0.244 (0.262)	0.226 (0.272)	0.264 (0.310)
Attack WTC 93	-0.124*** (0.029)	-0.221*** (0.042)	-0.149** (0.049)	-0.124** (0.029)	-0.221*** (0.042)	-0.149*** (0.044)
Attack WTC 01	1.253*** (0.051)	1.462*** (0.114)	0.828*** (0.110)	1.253*** (0.051)	1.462*** (0.114)	0.828*** (0.105)
Kosovo 99	-0.420*** (0.119)	-0.423* (0.195)	-0.362 (0.226)	-0.420 (0.119)	-0.423* (0.195)	-0.362 (0.219)
Afghanistan 99	0.437*** (0.051)	0.565*** (0.084)	0.243* (0.107)	0.437*** (0.051)	0.565*** (0.084)	0.243* (0.094)
Iraq 03	1.652*** (0.121)	1.773*** (0.131)	1.336*** (0.165)	1.652*** (0.147)	1.773*** (0.131)	1.336*** (0.140)
Crisis EMS 92	0.596*** (0.019)	0.607*** (0.037)	0.476*** (0.041)	0.596*** (0.037)	0.607*** (0.037)	0.476*** (0.038)
Constant	2.997*** (0.272)	2.897*** (0.243)	2.998*** (0.278)	-0.621* (0.251)	-0.574 (0.378)	-0.627 (0.369)

GLS estimated via iterated re-weighted least squares. Coefficients shown with HAC robust (Newey-West) standard errors in parentheses (lag order=T) * $p < .10$, ** $p < .05$, *** $p < .01$.