

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Osterloh, Steffen

### **Conference Paper**

How do politics affect economic sentiment? The effects of uncertainty and policy preferences

Beiträge zur Jahrestagung des Vereins für Socialpolitik 2018: Digitale Wirtschaft - Session: Policy Uncertainty, No. F14-V2

#### **Provided in Cooperation with:**

Verein für Socialpolitik / German Economic Association

Suggested Citation: Osterloh, Steffen (2018): How do politics affect economic sentiment? The effects of uncertainty and policy preferences, Beiträge zur Jahrestagung des Vereins für Socialpolitik 2018: Digitale Wirtschaft - Session: Policy Uncertainty, No. F14-V2, ZBW - Leibniz-Informationszentrum Wirtschaft, Kiel, Hamburg

This Version is available at: https://hdl.handle.net/10419/181614

#### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



How do politics affect economic sentiment? The effects of uncertainty and policy preferences

Georg Müller<sup>a</sup>, Steffen Osterloh<sup>b,\*</sup>

<sup>a</sup>European Central Bank (ECB), Frankfurt am Main; e-mail: Georg.Muller@ecb.europa.eu <sup>b</sup>European Central Bank (ECB), Frankfurt am Main; e-mail: Steffen.Osterloh@ecb.europa.eu

Preliminary version: March 2018

Abstract Expectations of consumers and investors are drivers of consumption and investment, and consequently the business cycle. In this paper, we study whether these expectations, as proxied by economic sentiment indicators, are affected by the political environment. First, we study the impact of political uncertainty related to elections and weak governments. Surprisingly, we do not find evidence for a negative effect of uncertainty on consumer and business sentiment. On the contrary, our results suggest that consumer confidence even increases in the forefront of elections. This increase is most pronounced in situations where consumers perceive the economic situation as bad, which suggests that positive expectation effects outweigh the negative uncertainty effects. Second, we study the effect of the political preferences of governments on economic sentiment. As measure of political preferences, we use data on party preferences derived from the content analysis of election manifestos. Our results suggest that during the reign of governments whose platforms support economic orthodox policies, such as fiscal consolidations, consumer and, to a lesser extent, business is subdued. Conversely, consumer confidence increases when governments focus on the strengthening of institutions, whereas business sentiment reacts positively to governments highlighting technology and infrastructure.

Classification: E60, H11, P16

**Keywords:** economic sentiment, uncertainty, ideology, political economy, panel data

# 1 Introduction

This paper sheds light on the role played by the political realm for the determination of economic outcomes. The effect of the political environment on economic growth goes beyond the direct effect through government's fiscal policy and economic legislation. Even before passing and implementing economically relevant legislation, government programmes can indirectly affect decisions in the private sector through influencing uncertainty and agent's expectations. One example is the government's attitude on spending policies. The anticipation of an expansionary fiscal policy might already stimulate private consumption and investment spending even before it is implemented as agents foresee a better economic outlook and already adjust their decisions. In turn, political instability might translate into lower private investment, as it increases the uncertainty faced by private agents. We provide a consistent framework to study these indirect effects of politics and policy orientation on economic outcomes by investigating its effect on consumers and business expectations as proxied by sentiment indicators from survey data.

Indicators can in principle track economic sentiment of different decision making agents. We distinguish between household sectors consumer sentiment and firm sector sentiment. Both are important determinants of economic outcomes. The former has been shown to be a good predictor of household consumption (see e.g. Carroll, Fuhrer, Wilcox (1994), Bram and Ludvigson (1998) and Ludvigson (2004)) and thus explaining a considerable part of variation in growth. Business confidence, too, has been shown to improve forecast of industrial production (see e.g. VECM forecast performance in Bodo, Golinelli, Parigi (2000)). Taken together, these sentiment indicators provide an extensive picture of future expectations prevailing in the economy.

While the importance of sentiment for economic outcomes has been studied extensively, the question of what determines sentiment in the first place has received surprisingly little attention. We consider the political environment as a main determinant of sentiment and explicitly study the effects of policy attitudes on these measures. In democratic systems, government policy attitudes reflect the positions of political parties that received the mandate to govern through winning a parliamentary election. We therefore consider these election

events the decisive markers of changes in the political realm. Elections are the defining dates of when uncertainty over the future political environment turns into certainty and is thus should have an impact on agents' expectation formation.

We further explicitly consider the effects of political attitudes of different governments on sentiment of consumers and investors. For this purpose, we utilise datasets from political science that have rarely been used in economic research to quantify the ideological orientation of parties and governments. In previous studies, it has been common to use simple left-right indices to describe political orientation. These methods, however, typically find no relevance of the political environment (see e.g. Vuchelen (1995)). However, such classification is a too rough an indicator for political preferences as they are too general and heterogeneity of what constitutes e.g. leftist policy is very large across countries. Our granular data set allows us to distinguish party preferences on certain policy fields and therefore to analyse ideology on concrete aspects that are expected to have a clear link to economic performance, such as public investment, welfare policies or free market policies.

To study the importance of the political environment for sentiment and thus its importance for economic outcomes, we employ a panel regression framework with data on EU countries. First, we study the role of uncertainty, in particular with respect to the developments around elections as well as the uncertainty resulting from weak governments. Counterintuitively, we find a sizeable improvement of consumer sentiment before elections and a systematic fall thereafter. We find that this development is most pronounced when consumers make a negative assessment of the current economic situation. This finding contrasts with the intuitive evolvement of uncertainty in these periods. Agents tend to be overconfident before elections and expect a policy change in the face of a slow economy. Consequently, this pattern is not visible in times when agents assess the current economic situation as positive. Moreover, political uncertainty as proxied by the weakness of governments is also not strongly related to economic sentiments.

Second, we construct indicators of political orientation to characterise the government's preferences in different policy fields that could potentially be relevant for agent's decision making. We can thus track policy preferences of government parties for example on welfare

spending or on public investment policies. We then test the explanatory power of these indicators for consumer and investor sentiment to analyse the potential indirect impact of the political environment for economic growth. We find that some of the expected mechanisms are supported by the data, e.g. that favourable attitude towards public investment spending tends to boost firm sentiment. Consumer sentiment is strongly negatively affected by expectations of economic "orthodox" policies, such as fiscal consolidations as well as expectations of a better institutional environment. Other policy areas do not seem to have a strong expectation effect, e.g. we show that partisan inclination towards more welfare spending and transfers do not boost consumer sentiment.

# 2 Literature overview and hypotheses

### 2.1 Review of the effects of politics on economics

The effect of the political environment on economic growth can have multiple aspects. It is useful to distinguish between direct effects, such as spending and tax policies or economic regulation, and indirect effects working through expectations of future government actions and uncertainty. The former, is described straightforward by statistical relationships and incorporated in the standard growth models (Barro (1990), fiscal extension Baier and Glomm (2001)). Governments contribute directly to GDP by spending on public consumption and investment as well as through diminishing household disposable income and firm profits by levying taxes on households and enterprises. In theoretical frameworks, the public sector's role for economic growth is typically described by its impact on the intertemporal allocation of consumption, as well as its impact on capital accumulation and household labour supply through distortionary taxes.

The empirical literature typically studies such direct channels by analysing the effects of single economic policies. A straightforward strategy is to use the fiscal budget or its tax or expenditure components as dependent variable. The early literature found evidence that a large budget deficit tends to decrease economic growth, which however is not undisputed as Agell et al. (2006) find no such relation if the sample is restricted to developed countries. The

related discussion is on how a growth-friendly fiscal budget would look like (Knellera et al. (1999), Angelopoulos et a. (2007)). Among public expenditure, government investment is an obvious candidate for providing positive contributions to long-term economic performance as also demonstrated by Romp and de Haan (2007). The identification of indirect effects is less straight forward, but has received an increasing amount of attention. In particular it has been shown that political changes affect economic outcomes already in the short-term without that legislative action actually has to occur. For example, Knight (2006) shows that equity prizes of political sensitive companies in the US, which were likely to gain from economic policy under Republican administration, increased after Bush's electoral victory. Snowberg et al. (2007) show that, in general, the stock and bond market in the US reacted positively to the expectations of a Republican victory. Füss and Bechtel (2007) present similar evidence for Germany, where increased winning probability of rightist parties increased market valuations of small firms.

Uncertainty over the future political environment makes it impossible for agents to fully anticipate economic adjustments and thus play a key role in driving indirect effects. Bloom (2009) shows that as uncertainty shocks hit the economy, firms delay or stop hiring and capital investment decisions, thereby creating swings in the business cycle. To adequately capture the expectation channel related to uncertainty, we decided to utilise sentiment indices. They are implying both variance effects as well as mean effects. Baker et al. (2015) acknowledges that, effectively, sentiment proxies for part of the predictive power of policy uncertainty for economic outcomes. Ilut and Schneider (2014) show that uncertainty and confidence can be even linked on a theoretical level. In economic thought, uncertainty ultimately carries the notion of self-fulfilling prophecies. If uncertainty is high, households might hold back on consumption spending, firms on investment and production and thus reduce their labour demand. If high uncertainty comes along with low sentiment, the drop in activity appears to confirm the dire outlook and start a downward spiral. Eventually, output therefore reduces by more what would be justified by the initial fundamentals and even the initial uncertainty shock. Ng (1992) theorizes such a model in which he explains the mechanisms of a self-fulfilling collapse in business confidence. The literature examining explicitly the role of politics as a determinant of sentiment/confidence is relatively scarce. Among the first to argue that it is mostly election events that affect economic confidence is Vuchelen (1995). He tests, for Belgium, the theory that the political environment matters for confidence when it impacts agent's expectations. He argues that unexpected elections and surprise cabinet restricting alter expectation formation. Vuchelen finds that consumer confidence rises on dates of unexpected elections. His explanation is that such events were connected with periods of economic crisis in Belgium and thus presented an opportunity of policy change. On the other side, he finds no impact of political orientation on confidence, as he uses a simple centre-left vs centre-right indicator.

deBoef and Kellstedt (2004) confirm, for the US, that elections have an important impact on confidence. They extend the research by analysing effects of politics on economics along various dimensions. They motivate their analysis with anecdotal evidence, showing that Republicans assess the state of the economy more positively when a Republican president is in power and vice versa for the case if a Democratic president holds office. Using an error-correction framework, they document empirical evidence that the president's party affiliation as well as the electorate's evaluation of the president's economic management matter for confidence in the long-run. Thereby, they confirm that government partisanship matters for sentiment and economic outcomes in the US (see also Gerber and Huber (2009)).

For EU countries and the US, Hardouvelis and Thomakos (2007) test the relations between elections and confidence with the causality going in both directions. In line with Vuchelen, he finds that consumers tend to be optimistic in the run up to elections, but display declining confidence thereafter. In fact, the larger the winning margin of the first party, the larger is the disappointment of households after elections. They also affirm that it matters for confidence developments around these dates which party wins the election, the incumbent or the opposition. Finally, they point to some evidence that the decline in confidence after elections is stronger if the winning party is categorized as rightist.

Our major contribution is that we are able to extend the aforementioned research by building indicators of political orientation along certain policy fields. The advantage is that we can analyse political attitudes that have a theoretical underpinning to affect the economy, while not having to rely on a general left-right classification, which suffers from two shortcomings. First, this categorization is too general and might not fit all political systems as e.g. leftist policy might mean different things in different countries. Second, it does not allow identifying the reasons behind changes in confidence. We want to be able to track the changes to specific policy fields, which voters value as relevant to form economic expectations.

# 2.2 Hypotheses regarding the effects of politics on economics

The literature agrees that expectation effects are central for understanding the relevance of political environment for economic outcomes. First, the policy uncertainty channel seems important as a transmission channel. Before investigating empirically, one would expect that policy uncertainty is especially high before elections because the path of future political orientation is yet unclear. Subsequently, policy uncertainty is resolved through exactly those elections. We thus expect forward-looking sentiment indicators to contract before elections, since consumers face higher risk to spend and have an incentive to increase precautionary savings. After elections, agents have clarity about future economic policy and would be able to relax on precautionary saving and instead increase consumption.

The second approach of analysing effects of politics on economics is to identify directly the relevant policy factors that determine consumer and firm sentiment. The political realm is expected to influence the economy through affecting the economic agent's expectations with respect to future government spending and taxation intentions. Expectations of higher public expenditure on investment can be thought of stimulating the economy already before its implementation as it creates second round effects for private investment opportunities and increases productivity of the private sector. However, effects of political attitudes on welfare spending and government transfers in general are less obvious. On the one hand, some households might benefit from increased transfers and strengthen those consumer confidence levels, or firms might benefit from state subsidies. On the other hand, agents know these government transfers need to be financed and thus could be expected to dampen confidence for other households. Similarly for producers, some sectors might not benefit as much from government support as others and thus fear to be disadvantaged.

A further interesting aspect of general political attitudes of governments is the stance on conservative economic policy ('economic orthodoxy'), meaning e.g. the support of fiscal consolidations, economic thrift and a strong currency. Literature before the European debt crisis tended to find that prudent fiscal policy increases confidence levels. Giavazzi and Pagano (1990) pointed out episodes where fiscal contractions to tackle high public debt issues had a positive effect on the economy, because reduced interest rates over-compensated the short-fall in demand. After Europe's public debt crisis however, emphasis was on Southern Europe's experience of collapse in confidence, which drove the economies even further into recession beyond the Keynesian demand effect. Alesina et al. (2014), based on a sample of 17 OECD countries over 1978-2009, find a fall in consumer and producer confidence upon consolidation episodes. Beetsma et al. (2015) find that announcements of consolidation plans lead to falling confidence. Fiscal expansion, similarly, has been shown to have an effect on confidence under certain circumstances. In research based on US data, Cimadomo et al (2011) show that temporary fiscal stimulus on the expenditure side spurs confidence.

Other factors are the political realms' visions, attitudes towards institutions and general guidance of the economic system through it setting the legal framework and protecting the basic foundations of economic interactions. We refer to institutions as a set of basic concepts that Western democratic societies with free market economies share, like protecting private property, ensuring the rule of law, human rights, election of its representatives among others. Parties supporting those institutions are expected to strengthen economic confidence. Similarly, the election of free market oriented governments is expected to boost sentiment. In turn, interventionism is thought to have an overall negative net impact on welfare and thus should be rejected by the overall electorate. On the other side, ensuring fair competitive markets requires state intervention and product market regulations.

To sum up, agent's sentiment should increase after elections if there is a clear signal about the future political orientation thus resolving policy uncertainty. This should be even more the case as government coalitions are formed by the majority parties and therefore represent the electorates' preferences. The ruling parties' political directions should be relevant for the economic agent's expectation formation. Among expenditure attitudes, we expect investment-oriented policies to have a positive effect on sentiment, while the effects

of transfer-oriented policies are ex-ante unclear. Among general political views, supporting institutions should have a clear-cut positive effect on sentiment. The effects of attitudes regarding market regulation and budget prudency are controversial.

# 3 Data

We use sentiment indicators from the European Commission's Business and consumer surveys. The survey asks respondents to rate current trends as well as future expectations about production and consumption. Aggregate indicators are available for business climate (broken down to different industries / branches) as well as consumer climate. Values can in principle fluctuate between -100 when all respondents assess the situation as negative to +100 if all responds are giving the most optimistic assessment. The main indicator to construct the level of consumer confidence/sentiment is the consumer survey sub-indicator (ESICON). We further use the Business Climate Indicator (BCI), which tracks sentiment in the manufacturing sector, as measure of producer confidence/sentiment levels.

We separate the components of these indicators into the evaluation of the current state of the economy (confidence) and the expectations about the future (sentiment). Thus, in our wording sentiment really represents the forward-looking components of economic confidence. It is intended to reveal information about agent's expectation of future economic development. Novel to the existing empirical literature, we exploit this distinction in our regression framework. While the forward looking sentiment is the dependent variable of interest, we use the back-ward looking evaluation of the current state as a control variable.

Table 1 presents the construction of forward-looking and backward-looking measures of confidence from the European Commission's survey questions. The forward-looking indicators are defined and calculated by the European Commission. We constructed the backward-looking indicator by adding up the related questions referring to the past. For example, 'Financial situation over next 12 months' is one question that goes into the sentiment indicator. Accordingly, 'Financial situation over last 12 months' is the back-ward-looking analogue. However, not all questions have such related categories. Especially the manu-

Table 1: Survey questions forming the sentiment and confidence indicators

	(forward-looking) consumer sentiment indicator	(backward-looking) consumer confidence indicato
	ESICON	ESICONPAST
+	Financial situation over next 12 months	Financial situation over last 12 months
+	General economic situation over next 12 months	General economic situation over last 12 months
+	Savings over next 12 months	Savings at present
-	Unemployment expectations over next 12 months	
	(forward-looking) producer sentiment indicator	(backward-looking) producer confidence indicator
	ESIBCI	ESIBCIPAST
+	ESIBCI Assessment of order-book levels	ESIBCIPAST
+		ESIBCIPAST
+	Assessment of order-book levels	ESIBCIPAST

facturing sentiment questions do not have them, but instead there is a specific back-ward looking category that asks to assess production trends over recent months.

The advantage of using this survey dataset is that we have country-specific indicators for sentiment over a long time span on a monthly basis. The survey uses harmonised questionnaires and ensures horizontal comparability. The sentiment survey data provides shorter time series than the political orientation data and thus dictates the sample. This research focuses on EU28 countries and the sample starts in general in 1985m1, but for some, especially Eastern European countries, later.

To describe the political environment, we employ a rich dataset on party positions that has received a great deal of attention in social science but has not found much application in economic research so far. We construct our measure from the Comparative Manifesto Project (Klingemann et al. (2006) and Volkens et al. (2016)), which collects information on party positions in party manifestos regarding various fields such as external relations, democracy and the political system, social justice and welfare as well as economics. The comprehensive dataset covers over 1000 parties in 56 countries participating in parliamentary elections starting 1945 for Western European democracies. Manifesto data for Southern and Eastern European countries becomes available from the dates they transited to democracy and thus the sample becomes considerably broader after 1990. The latest update of the political environment data is available up until 2014m12. In total, there are 307 election events in our data sample.

Party positions are coded for each category by frequency of (quasi-)sentences. For ex-

ample, the category 'Free Market Economy' reflects how many times the party's manifesto favourably mentions free market / capitalism / laissez-faire economy or emphasizes private property rights and the superiority of private enterprises over state controlled entities.

The information from this manifesto data is combined with a second dataset that contains information on the composition of governments. For each election event, we thus know which party or which party coalition formed the government. The dataset by Seki and Williams (2014) makes it possible to weigh the political orientation indicator by party control of the government. Constructed in this way, the indicators reflect the political orientation of the government's partisanship. We use the share of the number of seats in parliament to calculate the weights of the coalition partners. Any manifesto categories can in principle be used in empirical applications, but this is problematic because single categories are sometimes very small and consequently prone to reflect a large amount of noise. Furthermore, very often, the boundaries between them are blurred. For instance, there are two categories for welfare state policies which have exactly opposite meanings (welfare state expansion vs. welfare state limitation), and another one with a very similar meaning (social justice)

For the above reasons, it is well-established practice to aggregate the various sub-categories of the manifesto data into more encompassing indicators by adding or subtracting them. The creators of the database, as documented in Klingemann et al. (2006), deliver some already aggregated categories as well. One of them adds up party position according to a political left-right spectrum, where typical liberal positions like 'Free Market Economy' are added and typical social or interventionist positions like 'Market Regulation' are subtracted. The resulting index is supposed to indicate the degree of leftist and rightist positions of the parties and thus the government. However, it turns out that this indicator is still too general and broad to be relevant for our purposes. The reason is that it encompasses too many policy fields and for example the political rightist dimension mixes (market-)liberal attitudes with traditional conservative attitudes like strengthening security and defence. The simple classification into a left-right spectrum is therefore often not convincing.

We follow Osterloh (2012) who constructed indicators of political orientation by grouping together party positions that could potentially affect economic growth. Specifically, we

choose the following measures, where detailed information on how they are compiled from the manifesto data can be found in table 2:

- Interventionism: Favors protectionism, market regulation, nationalization
- Technology: Favors spending on science, technology and infrastructure
- Economic Orthodoxy: Favors austerity and rejects Keynesian demand management
- Incentives for businesses: Favors subsidies, business friendly policies
- Institutions: Favors law and order, anti-corruption, constitutionalism
- Welfare state: Favors social justice and strong public welfare systems

Table 2: Construction of political orientation indicators

	manifesto categories	Mean	STDEV	Min	Max
Interventions		2.3	4.8	-20.6	24.9
_	Free Enterprise (401)				
+	Market Regulation (403)				
+	Economic Planing (404)				
+	Protectionism (406-407)				
+	Controlled Economy (412)				
+	Nationalisation (413)				
Technology and infrastructure		5.5	4.0	0.0	20.4
+	Technology and infrastructure				
Economic orthodoxy		2.1	3.0	-6.1	21.2
+	Economic Orthodoxy (414)				
_	Keynsian Demand Management (409)				
Incentives for business		5.3	4.6	0.0	48.1
+	Incentives (402)				
+	Productivity (410)				
Institutions		17.4	8.5	0.0	53.1
+	Freedom and Human Rights (201)				
+	Democracy (202)				
+	Constitutionalism (203-204)				
+	Governmental and Administrative Efficiency (303)				
+	Political Corruption (304)				
+	Political Authority (305)				
+	Law and Order (605)				
Welfare state		11.9	6.8	-0.9	46.2
+	Social Justice (503)				
+	Welfare State Expansion (504)				
-	Welfare State Limitation (505)				

To illustrate an example evolution of these measures of political orientation, figure 1 plots the indicators 'Economic orthodoxy' and 'Welfare state' for Germany. An indicator changes at the time of investiture of a new government. Regularly, this is the case after elections and can be caused by the incumbent party/coalition winning, where the parties

have posted different manifestos than the previous election, or entirely new party/coalition won the election, thus the government is based on entirely different political manifestos. But changes can also reflect non-election related transformation of government like cabinet shake-ups or parliamentary votes of confidence, leading to new government coalitions. Also care-taker governments can rule a country without an explicit manifesto. In this case, the time series has a break and is empty.

Figure 1: Illustration of the evolution of two political orientation indicators on the example of Germany

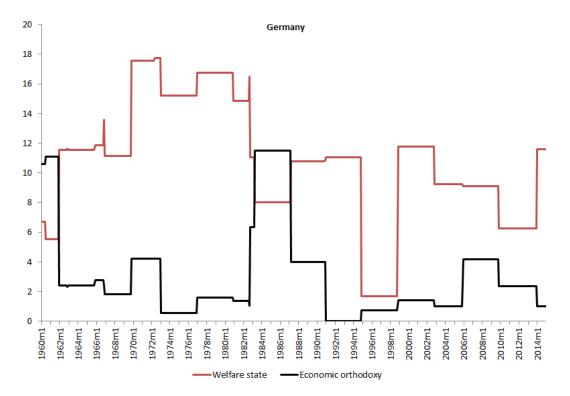


Figure 1 shows exemplary how the indicators track the evolution of Germany's political environment over time. The manifestos of the social democrat-led governments of Willy Brandt and Helmut Schmidt exhibited strongly welfare oriented policy preferences. Emphasize on social justice was considerably reduced with the election of Helmut Kohl as Chancellor leading a new centre-right coalition in the Federal Republic of Germany. In a similar vein, policies subsumed under 'Economic orthodoxy' received a boost. The new government took power with the promise to get the public sector deficit under control which increased dramatically in the face of the expanded welfare system and having to cope with economic

crisis and reduced growth figures. This stance was completely muted with the unification of East and West Germany, which necessitated higher public deficits. Emphasise on public thrift increased slightly afterwards and eventually notched up again with the election of Angela Merkel and the formation of the social democrat - conservative coalition government in Germany to address the high public sector debt level at the time.

The approach of using manifesto project data as measure of political orientation has strength and weaknesses and of course is not the only possibility of constructing indicators for party preferences (see Volkens (2007). Nonetheless, it seems well suited for our application as it is possible to identify time-varying party positions and has granular information that makes it possible to aggregate flexibly. Manifest-based measures have been proven useful to investigate various questions. For example, Quinn and Toyoda (2007) show that the category 'Free enterprise' is a good proxy for 'pro-capitalist' policy and explains changes in international capital account regulations. According to Duso and Seldeslachts (2010), the category 'Market regulation' contributes to explaining entry liberalisations in the telecommunication market. Finally, Osterloh (2012) shows that partisan emphasize on categories indicating market intervention have negative impact on GDP growth, while emphasize on technology, infrastructure and incentives for businesses has a positive impact.

In the original manifesto data, political indicators change at the time of the investiture of government. For our application, this is not ideal since agents get to know the new political environment directly after election outcomes have been presented. It usually takes a few months to form the new government and to its formal investiture. It can even be argued that voters anticipate the likely nature of the political environment even already before elections due to publication of poll results. To properly account for anticipation effects and because we want to study the expectation channel, we shift the timing of our measure such that our indicator changes already three months before the election date instead of at the investiture date.

# 4 Empirical strategy and results

### 4.1 Baseline model

We estimate a (unbalanced) country panel regression model for 28 EU countries covering 1980 to 2014. We include country- as well as time fixed effects on a monthly basis that pick up country-specific heterogeneity and global shocks respectively. The fixed effects model also makes it possible to interpret the results in terms of deviations from the mean, which is important because the means of the different political orientation measures vary strongly. By defining dependent and independent variables in levels and employing a fixed effects model, we effectively investigate deviations from the mean levels. The general testable model equation is the following:

$$Y_{i,t} = \alpha + \beta_1 X_{i,t} + \beta_2 Pol_{i,t} + \sum_{j=-3}^{3} \gamma_j delect_{i,t+j} + \mu_i + \theta_t + \epsilon_{i,t}$$

where  $\alpha$  is a constant, i the country fixed effect and t the time fixed effect. The dependent variable Y is consumer or producer sentiment respectively. As described in section 3, this is only the forward looking part of the confidence indicator collected from the European Commission survey. We further use the current assessment of the economic situation from the European Commission survey as a control variable X. This would be the consumer assessment in case the dependent variable is consumer sentiment and the producer assessment in the other case. We further estimate the model for each political orientation measure Pol separately in order to avoid potential multicollinearity among the party positions. We include a set of dummy variables to identify the months around elections. delect takes the value one if the current date is an election month and zero otherwise. The dummy are included as lags and leads in order to capture a window of three month before and after the election date. Summary statistics of all control variables of the regression X and delect can be found in table 12 in the annex.

# 4.2 Uncertainty around elections

A first test to identify the role of politics for sentiment is to regress the latter on election dummies and its leads and lags without yet including political indicators. Table 3 presents panel regression results for consumer sentiment. We find a peculiar pattern of coefficients on the leads and lags of the election dummy. Consumer sentiment levels tend to rise in the month before elections, reaching a local maximum exactly at the date of elections. Thereafter, sentiment levels first fall slightly in the next month before collapsing completely below its pre-election level. This consumer sentiment cycle around elections is consistent with the finding of Hardouvelis and Thomakos (2007), who identify a similar behaviour.

Table 3: Regression results of consumer sentiment on election dummy and control variable

	(1)
	consumer sentiment
consumer confidence (past)	0.695***
	(0.0805)
election t-3	0.425
	(0.382)
election t-2	0.703
	(0.426)
election t-1	1.420***
	(0.472)
election t	2.810***
	(0.581)
election t+1	2.609***
	(0.532)
election $t+2$	1.100**
	(0.511)
election t+3	0.353
0.000.0011	(0.463)
Observations	6808
Controlls	

Standard errors in parentheses

It is interesting to note that the cycle is quantitatively strong and statistically significant

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

for consumer sentiment, while regression results for business sentiment are less pronounced. The coefficients from a regression with business sentiment as dependent variable (table 4) are quantitatively lower and not significant. Nonetheless, a rough shape of a cycle is also visible in the case of firms.

Table 4: Regression results of business sentiment on election dummy and control variable

	(1)
	business sentiment
business confidence (past)	0.368***
	(0.0465)
election t-3	0.0757
	(0.446)
election t-2	-0.547
	(0.430)
election t-1	0.310
	(0.268)
election t	0.474
	(0.394)
election t+1	0.253
	(0.303)
election $t+2$	0.361
	(0.417)
election $t+3$	-0.424
0.000.0011	(0.334)
Observations	7507

Standard errors in parentheses

The results overall indicate that economic expectations are affected by upcoming elections as well as their outturns. The results are stronger for consumer confidence than for business confidence. It is interesting to note at this point, that the direction of consumer confidence cycle runs against the expectation that political uncertainty is supposed to have a negative effect on sentiment. Consequently, we will next test the alternative hypothesis that the electorate views election events as opportunities of change in the face of economic difficulty.

To illustrate our hypothesis, we plot regression results for the full sample, but also for

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

economic good times as well as bad times. Figure 2 refers to consumer sentiment, while figure 3 displays the illustration for business sentiment. Good times are defined as cases where the assessment of the current situation is above its full sample mean. Conversely, bad times are the states when the agent's assessment of the current situation is below its full sample mean. Solid lines mark points of statistically significant results, while dotted lines mark areas with insignificant estimations.

Figure 2: Consumer sentiment cycles around election dates

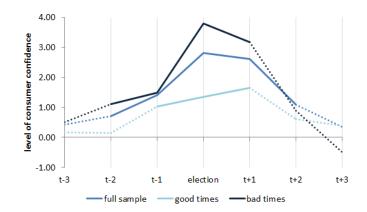
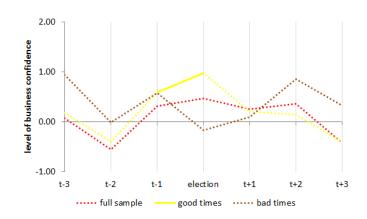


Figure 3: Producer sentiment cycles around election dates



There is a clear picture for the pattern of consumer sentiment. The level significantly increases right before elections, and this especially in economic bad time. There is a first indication that the electorate take elections as opportunity of change. Still, there is a slight cycle visible in the other state as well, but especially the disappointments after elections are not statistically significant there. Turning to producer sentiment, we find a less clear

picture. In fact, nothing can be really referred from the regressions as most coefficients are insignificant.

For an actual econometric test of the hypothesis that consumer sentiment cycle is indeed stronger in economically bad times, we perform the regression with interacting the election dummy and the control variable. Table 5 present the results for consumer confidence and, for completeness, table 6 the results for producer confidence. We find that the interaction terms for consumer sentiment have statistically significant coefficients. Therefore, we can infer that the better the current situation is assessed by agents, the stronger is the sentiment cycle. At least, the fall of sentiment after elections is quite stronger in such cases.

### 4.3 Uncertainty related to weak governments

In this section, we focus on the strength of governments as another indicator of political uncertainty. In this context, a government which does not hold a majority in the parliament or only a marginal majority is perceived as weak. In this case, we expect a higher political uncertainty, as a weak government might not be able to govern effectively and might face the risk of snap elections. The construction of our indicators for the strength of governments is based on the classification of Woldendorp et al. (2000) and the extension of his dataset by Seki and Williams (2014). In particular, the following five dummy variables have been used in order to differentiate the types of government:

- Very weak government: only care-taker governments
- Weak government: care-taker + multi-party minority
- Minority government: care-taker + multi-party minority + single-party minority
- Strong government: single party + surplus coalition + minimal winning coalition
- Very strong government: single party

The effect of these different government categories on economic sentiment is again analysed in regressions using as dependent variable the consumer confidence indicator (table 7)

Table 5: Regression results of consumer sentiment on interaction terms election\*confidence

	(1)
	(1) $consumer sentiment$
consumer confidence (past)	0.697***
consumer confidence (past)	(0.0805)
	(0.0000)
election t-3	0.545
	(0.448)
election t-2	0.731
election t-2	(0.429)
	(0.120)
election t-1	1.304**
	(0.509)
election t	2.144***
election t	(0.452)
	(0.402)
${\rm election}\ t\!+\!1$	1.904***
	(0.435)
election t+2	0.685
election $t+2$	(0.428)
	(0.420)
election t+3	0.315
	(0.559)
election*confidence t-3	0.00962
election confidence t-3	(0.0236)
	(0.0290)
election*confidence t-2	0.00201
	(0.0228)
election*confidence t-1	-0.00689
election confidence t-1	(0.0264)
	(0.0201)
election*confidence t	-0.0531**
	(0.0218)
election*confidence t+1	-0.0570**
election confidence t+1	(0.0232)
	(0.0202)
election*confidence $t+2$	-0.0318
	(0.0192)
election*confidence $t+3$	-0.00175
erection confidence (+3	(0.0187)
Observations	6808

Standard errors in parentheses

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

 ${\it Table 6: Regression \ results \ of \ business \ sentiment \ on \ interaction \ terms \ election*} confidence$ 

	( )
	(1)
	business sentiment
business confidence (past)	0.364***
	(0.0475)
election t-3	-0.191
	(0.478)
	(0.110)
election t-2	-0.560
	(0.449)
election t-1	0.256
	(0.356)
election t	0.016
election t	0.216
	(0.462)
election $t+1$	0.204
	(0.378)
	(0.010)
election t+2	0.282
	(0.429)
	0.450
election $t+3$	-0.473
	(0.357)
election*confidence t-3	0.0593**
cicciion confidence 6-5	(0.0251)
	(0.0201)
election*confidence t-2	0.00638
	(0.0318)
	,
election*confidence t-1	0.0163
	(0.0375)
election*confidence t	0.0625
election confidence t	0.0635
	(0.0459)
election*confidence t+1	0.0194
	(0.0327)
	(0.0021)
${\it election*} confidence \ t{+}2$	0.0289
	(0.0310)
a de de oc	
election*confidence $t+3$	0.0188
	(0.0278)
Observations	7507

Standard errors in parentheses

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

and the business confidence indicator (table 8). As shown in the table, the effect of both indicators is insignificant for all specifications, i.e. economic is insensitive to both very weak and very strong governments. While in the case of business sentiment, the signs are in line with expectations (negative effect of weak governments on sentiment), in the case of consumer confidence, the relationship between weak governments and sentiment is even positive, albeit insignificant in all specifications. This finding of a surprisingly weak or absent relationship between political uncertainty and sentiment is in line with the findings of the previous section.

Table 7: Regression results of consumer sentiment on type of government dummy

	(1)	(2)	(3)	(4)	(5)
consumer confidence (past)	0.700***	0.700***	0.700***	0.699***	0.697***
	(0.0808)	(0.0810)	(0.0809)	(0.0813)	(0.0803)
_					
very weak government	2.859				
	(2.270)				
		1.050			
weak government		1.250			
		(1.155)			
minority government			0.821		
minority government			(0.929)		
			(0.929)		
strong government				-0.323	
0.0				(0.801)	
				(0.001)	
very strong government					0.944
					(1.039)
Constant	-8.291**	-8.572**	-8.558**	-8.093**	-8.656**
	(3.371)	(3.421)	(3.385)	(3.605)	(3.506)
Observations	6892	6892	6892	6892	6892

Standard errors in parentheses

# 4.4 The role of government partisanship and political orientation

In the next step, we turn to investigating political orientation (ideology) as determinants of sentiment. Election dates are the events when the political environment changes and households become aware of the new sets of attitudes of the next government in power,

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 8: Regression results of business sentiment on type of government dummy

	(1)	(2)	(3)	(4)	(5)
	(1)				
business confidence (past)	0.368***	0.367***	0.368***	0.367***	0.366***
	(0.0470)	(0.0468)	(0.0471)	(0.0472)	(0.0467)
very weak government	-1.003				
	(0.758)				
${ m weak\ government}$		-0.961			
		(0.771)			
		,			
minority government			-0.119		
v o			(0.686)		
			()		
strong government				0.220	
0.0				(0.656)	
				(0.000)	
very strong government					-1.332
, or j sor on 8 80 , or miner.					(0.886)
					(0.000)
Constant	-3.548	-3.328	-3.503	-3.690	-3.254
	(2.165)	(2.149)	(2.178)	(2.169)	(2.224)
Observations	7591	7591	7591	7591	7591

Standard errors in parentheses

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

which affects their expectations of future fiscal and economic policies. We now employ our general empirical framework, where we include all independent variables on the right-hand-side: (leads and lags of) the election date as well as political indicators derived from the manifesto project.

Table 9 displays regression of consumer sentiment on six political indicators. Note that we do not include all indicators at once in order to avoid tendencies of multicollinearity but instead estimate the empirical model six times separately. We thus recover six different estimates for the control variables as well. First, the consumer's assessment of the current economic situation (confidence) is significant throughout and has the expected sign. The more optimistic are agents about the current state of the economy the more positive they view future developments.

Regarding political attitudes, some categories are statistically significant. The strongest effect comes from a government positioning itself towards 'economic orthodoxy', which tends to hurt consumer sentiment. The category comprises policies that favour austere economic policies such as fiscal tightening in the face of hardship and increasing public savings in crisis as well as the rejection of Keynesian demand management.

Another statistically significant political category is 'institutions', comprising policies towards strengthening law and order, constitutional rights, the democratic order and increasing administrative efficiency as well as fighting corruption. It tends to increase consumer sentiment. Government's favouring of business incentives has a negative sign, which however should not be over-interpreted given the only marginal significance of this estimate.

We do not find a significant result for spending related policies. As discussed above, the direction of the effect of favouring social justice and expanding the welfare state is ambiguous, since the surveyed consumers are not only recipients of social transfers, but also tax/contribution payers. The sign of the coefficient points to a positive effect, but it is statistically insignificant. Similarly, interventionist and protectionist attitudes do not systematically dampen consumer sentiment.

We now turn to the determinants of firm sentiment. The results of a regression of producer sentiment on measures of political attitudes and control variables can be found

Table 9: Regression results of business sentiment on political indicators

	(1)	(2)	(3)	(4)	(5)	(6)
esibcipast	0.371***	0.368***	0.366***	0.369***	0.369***	0.370***
	(0.0491)	(0.0488)	(0.0492)	(0.0496)	(0.0495)	(0.0496)
govt_intervent_3	0.0736					
	(0.0679)					
govt tech 3		0.173**				
801.0_00m_0		(0.0639)				
mout onthodox 2			-0.197			
govt_orthodox_3			(0.116)			
			(0.220)			
govt_incent_3				-0.0630 $(0.109)$		
				(0.109)		
govt_institut_3					0.0426	
					(0.0318)	
govt_welfarenarrow_3						0.0157
						(0.0734)
F3.d elect	-0.0507	-0.0229	-0.0619	-0.0592	-0.0499	-0.0492
<del>-</del>	(0.464)	(0.468)	(0.459)	(0.461)	(0.463)	(0.461)
F2.d elect	-0.646	-0.619	-0.642	-0.661	-0.640	-0.649
1 2.u_clcct	(0.416)	(0.420)	(0.419)	(0.414)	(0.416)	(0.416)
D 1 1 4	0.050	0.404	0.255	0.944	0.950	0.000
$F.d\_elect$	0.373 $(0.300)$	0.404 $(0.307)$	0.377 $(0.302)$	0.344 $(0.300)$	0.372 $(0.299)$	$0.360 \\ (0.300)$
	,	,	,	,	,	, ,
$d_{elect}$	0.304	0.284	0.335	0.298	0.292	0.294
	(0.376)	(0.376)	(0.387)	(0.376)	(0.371)	(0.377)
$L.d\_elect$	0.112	0.101	0.150	0.106	0.0994	0.104
	(0.284)	(0.285)	(0.318)	(0.283)	(0.278)	(0.281)
L2.d elect	0.372	0.357	0.347	0.363	0.359	0.361
<del>_</del>	(0.423)	(0.423)	(0.420)	(0.421)	(0.417)	(0.423)
L3.d elect	-0.400	-0.411	-0.425	-0.406	-0.409	-0.409
Lo.u_cicco	(0.343)	(0.343)	(0.324)	(0.342)	(0.337)	(0.342)
C .	,	,	,	,	, ,	, ,
Constant	-3.532 (2.124)	-4.339* (2.099)	-2.868 (2.149)	-3.146 $(2.293)$	-4.226 (2.057)	-3.695 $(2.040)$
Observations	$\frac{(2.124)}{7214}$	$\frac{(2.099)}{7214}$	$\frac{(2.149)}{7212}$	$\frac{(2.293)}{7214}$	$\frac{(2.037)}{7214}$	$\frac{(2.040)}{7214}$

Standard errors in parentheses

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

in table 10. Again, firm's assessment of the current situation pushes their expectations in the same direction, but the effect is quantitatively smaller. The category 'technology', which is mostly related to investment in education and science as well as in fixed capital infrastructure such as roads and bridges, is strongly statistically significant. The empirical result shows that investment-oriented attitudes, including in human capital, tends to boost business sentiment.

None of the other expenditure-oriented policy attitudes are statistically significant. Interestingly, 'Incentives for business', which includes political inclination towards granting subsidies and tax breaks as well as support for starting businesses and incentivise economic growth, has no significant effect on business sentiment with the coefficient having even an unexpected sign. Also, orientations pro welfare state expansion do not seem to matter even though employers are considered to dislike higher social security contributions.

On political indicators, we notice that again 'economic orthodoxy' negatively impacts sentiment albeit much less significantly than for consumers. The size of the coefficient on this category is quite large. In fact, it is the largest for producer sentiment. Again, we find tight fiscal policy and rejection of Keynesian demand management to hurt agent's sentiment.

At the same time, several variables which could have been expected to be strongly related to firm sentiment, do not show strong results. Our indicator for interventionist and protectionist attitudes does not seem to explain any variation in firm sentiment. This is even though this category includes attitudes against private property rights and freedom of doing business as well as attitudes pro market regulation. On the other hand, it also includes protectionism and planning, which some firms might favour. Lastly, the coefficient on the category 'institutions' is this time not significant, but the sign goes towards positive contributions for business sentiment. Overall, it can be seen that business sentiment is less affected by political factors than consumer sentiment.

# 4.5 Identifying changes in political orientation that affect sentiment

As a final step, it is useful to investigate how the sentiment cycle interacts with the political environment. Does the sentiment cycle look different depending on the political orientation

Table 10: Regression results of consumer sentiment on political indicators

	(1)	(2)	(3)	(4)	(5)	(6)
esiconpast	0.685***	0.695***	0.675***	0.678***	0.691***	0.684***
	(0.0816)	(0.0792)	(0.0802)	(0.0832)	(0.0813)	(0.0827)
$govt\_intervent\_3$	0.0539					
	(0.174)					
govt_tech_3		-0.199				
		(0.125)				
govt_orthodox_3			-0.275***			
			(0.0957)			
govt_incent_3				-0.261		
0				(0.153)		
govt_institut_3					0.137**	
8011_1115111411_5					(0.0652)	
govt_welfarenarrow_3						0.0946
gove_wentarenarrow_o						(0.150)
F3.d elect	0.373	0.320	0.358	0.348	0.353	0.386
ro.u_erect	(0.387)	(0.379)	(0.404)	(0.397)	(0.389)	(0.372)
F2 d. alaat	0.672	0.617	0.665	0.650	0.675	0.681
$F2.d\_elect$	(0.423)	(0.414)	(0.442)	(0.433)	(0.425)	(0.413)
		,	,			
$F.d\_elect$	$1.458^{***}$ $(0.465)$	$1.366^{***}$ $(0.447)$	1.461*** (0.489)	$1.398^{***}$ $(0.472)$	$1.467^{***}$ $(0.469)$	$1.452^{***}$ $(0.465)$
	,	, ,	, ,	, ,	, ,	, ,
$ m d\_elect$	$2.614^{***}$ $(0.585)$	2.595*** (0.555)	2.655*** $(0.620)$	$2.645^{***}$ $(0.566)$	2.570*** $(0.553)$	2.605*** $(0.577)$
		, ,	,	,	,	,
$L.d\_elect$	2.496***	2.469***	2.528***	2.520***	2.442***	2.491***
	(0.554)	(0.523)	(0.589)	(0.542)	(0.515)	(0.548)
$L2.d\_elect$	0.977*	$0.953^*$	0.998*	0.990*	$0.935^*$	0.971*
	(0.536)	(0.506)	(0.568)	(0.518)	(0.503)	(0.528)
$L3.d\_elect$	0.186	0.168	0.215	0.210	0.155	0.184
	(0.462)	(0.441)	(0.495)	(0.455)	(0.443)	(0.452)
Constant	-8.561**	-7.574**	-7.645**	-6.953**	-10.55***	-9.235**
	(3.332)	(3.095)	(3.383)	(3.101)	(3.085)	(3.925)
Observations	6536	6536	6536	6536	6536	6536

Standard errors in parentheses

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

of the newly elected government? To test this, we extend the regression equation by including interaction terms between the political orientation measure and the election date dummy and its lags and leads respectively. The resulting testable model equation is:

$$Y_{i,t} = \alpha + \beta_1 X_{i,t} + \beta_2 Pol_{i,t} + \sum_{j=-3}^{3} \gamma_j delect_{i,t+j} + \sum_{j=-2}^{2} \delta_j Pol_{i,t} * delect_{i,t+j} + \mu_i + \theta_t + \epsilon_{i,t}$$

where the coefficient on the interaction term picks up additional effects of political environment change on sentiment.

It turns out that this regression strategy delivers interpretable coefficients that are statistically significant for consumer confidence only. This is understandable since the pattern around election was already in the baseline regression not significant for producer sentiment. We thus focus in this part on significant results for consumer confidence (Table 11), while the regression results for the other indicators and for business confidence can be found in the annex.

Column 1 of table 11 shows the results for the interaction using 'economic orthodoxy'. Interestingly, the interaction term's coefficient is negative throughout and statistically significant for some periods after elections. Thus, in cases where newly elected governments are more favouring economic thrift and fiscal tightening, the sentiment cycle is significantly different from the baseline result. The collapse of consumer sentiment after the election event (t+1 and t+3) is considerably stronger.

In a similar fashion, coefficients of the interaction terms using 'interventionism' (table 11, column 2) can be interpreted. The coefficient is positive throughout and statistically significant for some periods after elections. Thus, whenever elected governments are favouring market regulation and protectionism, they have a significant impact on the consumer sentiment cycle. It should be noted however, that the estimated cycle in this case is lower than in the baseline, indicating reduced expectations about future prospects. Election of interventionist parties in such cases seems to soften the fall in sentiment after elections slightly. These results, however, should be interpreted with caution, because the underlying control variable 'interventionism' is not significant (as in the baseline regression).

Finally, coefficients on the interaction term using 'technology' (table 11, column 3) also

Table 11: Regression results of consumer sentiment on interaction term with political indicators

	(1)	(2)	(3)
	Pol = orthodox	Pol = intervent	Pol = tech
consumer confidence (past)	0.674***	0.684***	0.694***
	(0.0797)	(0.0811)	(0.0789)
Pol	-0.270***	0.0422	-0.193
	(0.0929)	(0.175)	(0.129)
election t-3	-0.236	0.604	2.244**
	(0.460)	(0.514)	(1.008)
election t-2	0.0722	0.913	2.436**
	(0.494)	(0.574)	(0.983)
election t-1	1.224*	1.487**	2.524***
	(0.659)	(0.553)	(0.901)
election t	3.324***	2.331***	1.837**
	(1.018)	(0.542)	(0.802)
election t+1	2.992***	2.301***	1.441*
	(0.717)	(0.610)	(0.745)
election t+2	1.223*	0.832	0.218
	(0.611)	(0.626)	(0.910)
election t+3	0.749	-0.0626	-0.772
	(0.614)	(0.474)	(0.715)
election*Pol t+3	0.281**	-0.138	-0.301**
	(0.132)	(0.161)	(0.120)
election*Pol t+2	0.281**	-0.150	-0.285**
	(0.122)	(0.161)	(0.110)
election*Pol t+1	0.125	0.00105	-0.184
	(0.139)	(0.142)	(0.111)
election*Pol t	-0.291	0.181	0.116
	(0.209)	(0.127)	(0.0913)
election*Pol t+1	-0.188**	0.139**	0.160*
	(0.0814)	(0.0507)	(0.0843)
election*Pol t+2	-0.0801	0.109	0.112
	(0.104)	(0.0811)	(0.107)
election*Pol t+3	-0.233**	0.157**	0.143
	(0.0849)	(0.0620)	(0.0942)
Observations	6536	6536	6536

Standard errors in parentheses

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

are strongly statistically significant. Again, results have to be interpreted with caution since the control variable is not significant. This time the interaction term's coefficients are positive and significant before the election date. Therefore, consumer sentiment can be thought of being elevated when agents' expect an investment and technology oriented government to be elected. The sentiment cycle anyway exists as the coefficient on the election date is still the highest point and estimates before the election are not strong.

To sum up, when investigating how much political orientation matters in determine the consumer sentiment cycle, the most convincing results appear for 'economic orthodoxy'. In this case, estimation of the cycle stays consistent with the baseline. Furthermore, the control variable is statistically significant. The other results of interaction terms do not appear to make a strong case.

# 5 Conclusion

We have shown that the political environment has some effect on economic sentiment and thus is a factor that agents take into account when forming expectations, whereas the role of uncertainty is surprisingly limited. Politics matters for economic outcomes not only through direct effects, but through agent's understanding that political decisions might affect future outcomes and thus already take them into account before actual policy implementations. We have identified a consumer sentiment cycle around elections, where expectation effects dominate the impact of lower policy uncertainty after a new government is voted into power. In fact, we have shown that this cycle mostly relates to economic bad times when agents interpret elections as possibility for change. Furthermore, we have shown which policy fields are important for agent's expectation formation about the future economic path. A tight public budget emerges as a main concern of the electorate, which we have found to even reinforce the systematic drop of sentiment after elections.

A regression of sentiment on election dates reveals that there is a systematic pattern of consumer sentiment with households tending to be overconfident before and disappointed after elections. This runs against an intuitive mechanism of policy uncertainty, which would

be higher before elections than after, since elections are supposed to clarify the future political path of a country. Our analysis then showed that expectation effects dominate the policy uncertainty effect, because the cyclical pattern emerges when the current economic situation is perceived as bad. We conclude that the electorate tends to view elections as a possibility of change. This optimistic outlook prior to elections probably emerges because of voters' confidence in a single party. Election outcomes, however, are always an aggregation of many voters' preferences and thus seldom reflect the ideal situation for an individual voter. Our empirical results point to the fact that the aggregate voting outcome leads to a broad dissatisfaction among consumers, in particular in an environment of dissatisfaction about economic developments in the recent past. Overall, this effect is stronger than any positive effect from resolved uncertainty about future politics. We further answered the question of how government partial partial affects sentiment. The political environment affects the economy through political attitudes of governments in certain policy fields. Attitudes on spending policies give a rather mixed picture regarding their confidence effects. While there is a strong case that investment-oriented policy, both in fixed capital infrastructure as well as in human capital, boosts business sentiment, consumer sentiment does not seem to be supported by it.

Spending policies regarding transfers, in general, do not have a clear effect. Welfareoriented transfer spending policies for one, do not impact consumer nor producer sentiment.

A reason could be that, because the electorate is split into net receivers and net payers of
social security benefits, two opposing preferences regarding the political orientation prevail
in the aggregate. Net receivers might support higher welfare spending, while net payers
understand that welfare expansions mean higher social security contributions. Similarly,
we have found subsidy transfers to producers ('incentives for business') not to be relevant
for business sentiment. This is at first surprising, but a possible explanation could again
be that incentives and subsidies are often granted only to a certain branch of the economy,
consequently would those firms not benefiting offset the effect of enthusiasm of the benefiting
sectors. It is mostly 'soft' attitudes in politics that drive the general confidence levels. Indeed,
defending institutions and the rule of law seems to generally support especially consumer
sentiment. The category 'institutions' turns out to have a strong positive effect. It includes

such stances like protecting freedom and human rights, fighting corruption and increasing administrative and government efficiency, which are all attitudes that already intuitively should boost economic confidence and foster growth in the long run.

On the other hand, 'interventionism' can also ex-ante thought to have a negative effect on confidence. It summarises political orientation favouring market regulation and protectionism, as well as economic planning and even nationalisation. We find, however, no empirical evidence that these attitudes systematically dampen confidence levels. The reason could be that there are only few cases were the government partisanship is strongly for economic planning and nationalisation - policies only favoured by communist parties. Less stringent attitudes are also summarised here. Protectionism, for example, could be welcomed by some sectors of the economy and some households thinking of benefiting from such policies. Thus different stances go into different direction for different parts of the population possibly rendering the findings non-significant.

Finally, we also discovered that if parties standing for economic thrift and prudent fiscal budget policies are voted into power, sentiment tends to decline. This finding is in line with research that finds negative confidence effects of fiscal consolidation that hurts the economy beyond negative demand effects (Beetsma et al. (2015)). Under linear interpretations, this would also confirm the finding that fiscal stimulus tends to have a positive effect on consumer confidence (Cimadomo et al (2011)). One interpretation would be that the electorate in our sample was not concerned that the sustainability of public debt was a problem. Before the public debt crisis, there was likely to be a belief that other European countries would bail out their economies in case of debt problems (despite the non-bail-out clause). After the crisis, international lenders stepped in to resolve the high public debt problem, but national governments that support fiscal consolidation were often viewed by the electorates as damaging the economy even further thereby aggravating the debt issue rather than solving it.

The main finding of this paper is that expectation effects dominate uncertainty effects and that the political orientation matters for determining these expectation effects. The sentiment cycle around elections can be observed unconditional to the political environment though. Instead it is conditional on the current state of the economy. This means, the electorate is always overconfident in looking for change prior to elections if the economy is bad. Voters tend to be disappointed by the partisanship of the new government after the political process does not reflect the individuals' views. One peculiarity is the political orientation favouring tight fiscal policies, which even reinforces the drop of sentiment after elections.

# References

Agell, J., Ohlsson, H. and Thoursie, P. (2006). Growth effects of government expenditure and taxation in rich countries: A comment. European Economic Review, Vol. 50(1), pp. 211-218.

Alesina A., Favero, C. and Giavazzi, F. (2014). The Output Effects of Fiscal Adjustments, mimeo, Harvard University / University of Bocconi - IGIER.

Alesina, A., Mirrlees, J. and Neumann, M. (1989). Politics and Business Cycles in Industrial Democracies. Economic Policy, Vol. 4(8), pp. 55-98.

Alesina, A. and Roubini, N. (1992). Political Cycles in OECD Economies. The Review of Economic Studies, Vol. 59(4), pp. 663-688.

Angelopoulos, K., Economides, G. and Kammas, P. (2006). Tax-spending policies and economic growth: Theoretical predictions and evidence from the OECD. European Journal of Political Economy, Vol. 23(4), pp. 885-902.

Baier, S. and Glomm, G. (2001). Long-run growth and welfare effects of public policies with distortionary taxation. Journal of Economic Dynamics and Control, Vol. 25(12), pp. 2007-2042.

Barro, J. (1990). Government Spending in a Simple Model of Endogeneous Growth. Journal of Political Economy, Vol. 98(5), pp. 103-125.

Baker, S., Bloom, N., and Davis, S. (2016). Measuring economic policy uncertainty. Quarterly Journal of Economics, Vol. 131(4), pp. 1593-1636.

Beetsma, R., Cimadomo, J., Furtuna, O. and Guiliodori, M. (2015). The confidence effects of fiscal consolidation. ECB Working Paper Series, No. 1770.

Benoit, K., Laver, M. and Mikhaylov, S., (2009). Treating words as data with error: uncertainty in text statements of policy positions. American Journal of Political Science 53 (2), 495-513.

Bloom, N. (2009). The impact of uncertainty shocks. Econometrica, Vol. 77(3), pp. 623-685.

Bodo, G., Golinelli, R. and Parigi, G. (2000). Forecasting Industrial Production in the Euro Area. Banca d'Italia, Economic working papers, Nr. 370.

Bram, J. and Ludvigson, S. (1998). Does Consumer Confidence Forecast Household Expenditure? A Sentiment Index Horse Race, Federal Reserve Bank of New York Economic Policy Review, June, pp. 59-78.

Carroll, C., Fuhrer, J. and Wilcox, D. (1994). Does Consumer Sentiment Forecast Household Spending? If So, Why? American Economic Review, Vol. 84(5), pp. 1397-1408.

Cimadomo, J., Hauptmeier, S. and Sola, S. (2011). Identifying the Effects of Government Spending Shocks with and without Expected Reversal: an Approach Based on U.S. Real-Time Data. ECB Working Paper, No. 1361.

DeBoef, S. and Kellstedt, P. (2004). The Political (and Economic) Origins of Consumer Confidence. American Journal of Political Science, Vol. 48(4), pp. 633-649.

Duso, T. and Seldeslachts, J. (2010). The political economy of mobile telecommunications liberalization: Evidence from the OECD countries. Journal of Comparative Economics, Vol. 38(2), pp. 199-216.

Füss, R. and Bechtel, M. (2008), Partisan politics and stock market performance: The effect of expected government partisanship on stock returns in the 2002 German federal election. Public Choice, Vol. 135(3), pp. 131-150.

Gerber, A. and Huber, G, (2010). Partisanship and Economic Behavior: Do Partisan Differences in Economic Forecasts Predict Real Economic Behavior? American Political Science Review. Vol. 103(3), pp. 407-426.

Giavazzi, F. and Pagano, M. (1990). Can Severe Fiscal Contractions Be Expansionary? Tales of Two Small European Countries. NBER Macroeconomics Annual 1990, Volume 5, pp. 75-122, National Bureau of Economic Research, Inc.

Hibbs, D. (1977). Political Parties and Macroeconomic Policy. American Political Science Review, Vol. 71(4), pp. 1467-1487.

Hüfner, F. and Schröder, M. (2002). Forecasting Economic Activity in Germany - How Useful are Sentiment Indicators? ZEW Discussion Paper No. 02-56.

Ilut, C. and Schneider, M. (2014). Ambiguous Business Cycles. American Economic Review, Vol. 104(8), pp. 2368-2399.

Klingemann, Hans-Dieter / Volkens, Andrea / Bara, Judith / Budge, Ian / McDonald, Michael (2006): Mapping Policy Preferences II. Estimates for Parties, Electors, and Governments in Eastern Europe, the European Union and the OECD, 1990-2003. Oxford: Oxford University Press.

Knellera, R., Bleaneyb, M. and Gemmellb, N. (1999). Fiscal policy and growth: evidence from OECD countries. Journal of Public Economics, Vol. 74(2), pp. 171-190.

Knight, B. (2006). Are policy platforms capitalized into equity prices? Evidence from the Bush/Gore 2000 Presidential Election. Journal of Public Economics, Vol. 90(4-5), pp. 751-773.

Ludvigson, S. (2004). Consumer Confidence and Consumer Spending. The Journal of Economic Perspectives, Vol. 18(2), pp. 29-50.

Ng, Y. (1992). Business Confidence and Depression Prevention: A Mesoeconomic Perspective. American Economic Review, Vol. 82(2), pp. 365-371.

Nordhaus, D. (1975). The political business cycle. Review of Economic Studies, Vol. 42(2), pp. 169-190.

Osterloh, S. (2012). Words speak louder than actions: The impact of politics on economic performance. Journal of Comparative Economics, Vol 40, pp. 318-336.

Qinn, D. and Toyoda, M. (2007). Ideology and Voter Preferences as Determinants of

Financial Globalization. American Journal of Political Science, Vol. 51(2), pp. 344-363.

Romp, W. and De Haan, J. (2007). Public Capital and Economic Growth: A Critical Survey. Perspektiven der Wirtschaftspolitik, Vol. 8(S1), pp. 6-52.

Seki, K. and Williams, L. (2014). Updating the Party Government Data Set, Electoral Studies.

Snowberg, E., Wolfers, J. and Zitzewitz, E. (2007). Partisan Impacts on the Economy: Evidence from Prediction Markets and Close Elections. The Quarterly Journal of Economics, Vol. 122(2), pp. 807-829.

van Aarle, B. and Kappler, M. (2012). Intereconomics, Volume 47, pp. 44-51.

Volkens, A. (2007). Strengths and weaknesses of approaches to measuring policy positions of parties. Electoral Studies, Vol. 26(1), pp. 108-120.

Volkens, A., Lehmann, P., Matthieß, T., Merz, N., Regel, S. and Werner, A. (2016): The Manifesto Data Collection. Manifesto Project (MRG / CMP / MARPOR). Version 2016a. Berlin: Wissenschaftszentrum Berlin für Sozialforschung (WZB).

Vuchelen, J. (1995). Political events and consumer confidence in Belgium, Journal of Economic Psychology, 16, pp. 563-579

# 6 Appendix

Table 12: Summary statistics

	$\operatorname{count}$	mean	$\operatorname{sd}$	$\min$	max
esicon	7184	-14.2	17.1	-83.8	30.8
${\it esiconpast}$	7003	-13.7	21.7	-81.6	39.1
esibci	7646	-5.2	11.3	-53.9	31.3
$\operatorname{esibcipast}$	7826	3.3	16.9	-76.4	78.6
$d_{elect}_{q_1}$	307	1.0	0.0	1.0	1.0
N	8449				