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ORIGINAL ARTICLE OPEN ACCESS

Political Business Cycles in Varieties of Capitalistic Systems

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ABSTRACT

This study contributes to the literature on political business cycles by assessing the effect of elections on growth expectations based on expert survey data instead of using actual performance data. We analyze the different roles opportunistic and partisan politics play in varieties of capitalistic systems as a source of heterogeneity. Our results show that expectations differ remarkably between Liberal and Coordinated Market Economies (LME vs. CME) even independent of election outcomes.

JEL Classification: P20, P34

1 | Introduction

The literature on political business cycles (PBCs) prominently established by Alesina and co-authors (for a summary, see, e.g., Alesina, Roubini, and Cohen 1997) emphasizes the role of expectations. Opportunistic theories suggest that both right and left-wing governments implement expansionary policies before elections to push economic growth. Partisan theories suggest that, following elections, expansionary policies are rather to be expected from left-wing governments, while right-wing governments are more likely to implement austerity policies.

Yet, recent empirical evidence is rather mixed concerning policies actually implemented (see, e.g., Imbeau, Pétry, and Lamari 2001 and Potrafke 2017 on fiscal spending and Beckmann et al. (2017) and Belke and Potrafke (2012) on monetary policy). We suggest that this may be due to missing important aspects of partisan politics and expectation formation.

With respect to partisan politics, it is argued that they have become less driven by ideological programmatic differences (see, e.g., De Simone and Mourao 2016; Mair et al. 2014) and a

new cleavage independent of the left-right cleavage runs between the support for open versus closed societies (see, e.g., Enyedi 2008). However, traditional partisan ideology may still matter but differ in alternative economic systems. The literature on varieties of capitalism (VoC; Hall and Soskice 2001) distinguishes between liberal market economies (LMEs) and coordinated market economies (CMEs), the latter based more on consensus instead of market driven decisions and, hence, with larger and more active governments. Consequently, left-right ideology determines deviations from country group-specific perceptions about economic policy in the subgroups.

Indeed, Shelton (2012) is able to show that the left-right cleavage has a different meaning for PBCs in LMEs such as the United States and the United Kingdom compared to CMEs such as Germany and Sweden. In the same vein, Beckmann et al. (2020) were able to show for EU countries that the LME-CME divide is even more telling about fiscal policy stance compared to both left/right and east/west divides. Hence, we follow Shelton and others and hypothesize that traditional partisan ideology may still matter for PBCs but that this is moderated by average perception of economic policy prevailing in the subgroups of economic systems in which the elections take place.

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With respect to expectation formation, empirical tests had, with few exceptions, to rely on assumptions about pre-election expectations and actual postelection outcomes for macroeconomic variables such as income, unemployment, or inflation. This ignores that expectation formation of market participants plays a key role for the propagation of policy shocks and are a key feature of economic models. Based on the Lucas (1976) critique which emphasized the importance of expectation building for the evaluation of policy measures, a rich literature has analyzed the expectation building mechanism of market participants, for example with regard to information rigidities or rational inattention (Coibion and Gorodnichenko 2012, 2015). Especially with respect to expert opinions, survey data have increasingly become available and is widely used in several papers, for example in the context of analyzing uncertainty (Beckmann et al. 2025).

Hence, this study explicitly analyzes market expectations around elections by adopting the data set from consensus economics that covers a wide range of institutions and is available at a monthly frequency and has been used by several authors (Istrefi and Mouabbi 2018; Lahiri and Zhao 2019). This allows to test the formation of expectations in different samples of OECD countries to see whether or not we observe systematic election effects on GDP dependent or independent of policy change.

The rest of this study is organized as follows. In Section 2, we introduce arguments from the VoC literature to show how this may moderate elections expectations. Section 3 discusses the data and the construction of monthly GDP expectations for 12 months ahead. Section 4 shows the results. A robust systematic effect of elections on GDP expectations only appears in LME and CME subsamples, revealing different pre- and postelection patterns even if differing election outcomes are neglected. LME countries reveal a pre-election boom and a postelection bust, while the reverse is true for CME countries. Election outcomes moderate these general patterns to different extent in both systems. Section 5 concludes.

2 | Literature Review

Our study relates to several strands of the literature. In particular, we contribute to the literature on PBC, the literature on VoC¹, and empirical research on expectation building.

As outlined in the introduction, opportunistic business cycles and partisan business cycles can be distinguished. Formal models of the opportunistic business cycle go back to the pioneering work of Nordhaus (1975) while the idea that political parties have different preferences over inflation and unemployment goes back Hibbs (1977). The literature has assessed PBCs from various perspectives (see, e.g., the surveys provided by Drazen 2000 and Dubois 2016).

One strand of the empirical literature, following Persson and Tabellini (2005), has established differences in PBC in presidential systems and parliamentary systems with majority voting on the one hand and parliamentary systems with proportional voting on the other hand (see also Blume et al. 2009). Stronger accountability of a president or a single-party government is likely to produce stronger opportunistic business cycles creating

a boom of expectations in the pre-election period. However, empirical evidence is rather mixed and Brender and Drazen (2005) argue that finding opportunistic PBC is due to the inclusion of “new” democracies, while restricting the sample of countries to “old” democracies shown insignificant results because experienced voters tend to punish pre-electoral manipulation. In addition, Canes-Wrone and Park (2012) argue that even a reverse electoral cycle is possible if private investors postpone investment due to pre-election uncertainty, which they assume to increase with electoral competitiveness.

In our context, it is important to note that majority voting is typical for liberal market economies (LMEs) with, in contrast to coordinated market economies (CMEs), a general preference for competitive organization of both economic and political systems (Lijphart 1999). Hence, *opportunistic business cycles, if present in established democracies at all, should be more likely in LME countries with possible reversals more likely due to uncertainty about election outcomes.*

Empirical work on partisan PBCs focusing on expectations for the postelection period depending on election outcomes is based on the work initiated by Alesina and co-authors (see, e.g., Alesina, Roubini, and Cohen 1997) and mostly supports the standard expectation that left-wing governments are expected to follow expansionary policies producing higher (medium-term) growth, lower unemployment, and higher inflation. Alesina, Roubini, and Cohen (1997, Ch. 6) did not consider surprise effects explicitly, that is, implicitly assuming only changes in government as a surprise rather than each election as creating uncertainty (even in the case of no change). More recent work, for example, by Berleemann and Markwardt (2006, 2007) and Shelton (2012), explicitly consider measures of surprise effects driving the significance of partisan effects.

Independent of considering explicit measures of surprise, two papers reveal differences between countries organized as LMEs versus CME. Based on consensus data forecasts, Shelton (2012) shows that the expected expansionary effect in case of a left win is only present in LME countries, while a negative growth effect appears in CME countries. He argues that ideological orientations have different meanings in both types of capitalist systems and, hence, create different expectations. More specifically, in CME “... conservative fiscal policy is perceived to be strictly superior ..., delivering higher output growth...” (Shelton 2012, p. 237).

This may explain a “fear of a left win” in CME countries leading to reversed expectations about partisan preferences. In addition, actually reversed preferences are observed both with respect to left and right parties. Nontraditional partisan behavior is witnessed by, for example, left-wing labor market reforms and fiscal conservatism in Germany following the Hartz-reforms and expansionary policies by populist right-wing governments in Hungary and Poland (for a discussion, see, e.g., Beckmann et al. 2020).²

However, government activity, that is, fiscal spending and regulation, is generally higher in CME countries, that is, a left win in a low-activity LME environment may well be less expansionary compared to a right win in a high-activity CME environment. In both cases, the systems converge toward the (international) average. This is in line with the results provided

by Beckmann et al. (2020) on the divide between LME and CME countries concerning partisan and other drivers of realized fiscal policy in EU countries. The divide between LME and CME subsamples clearly dominates ideological effects indicating that the assumed left-right cleavage concerning government activity has become less telling over recent decades. At least, if it is to be found within LME and CME subsamples for specific cases only.

In addition, Potrafke (2012) reveals that the expansionary left win effect is only significant in two-party systems. As argued above this is characteristic for LME countries with majority voting in either presidential or parliamentary systems, that is, with single-party governments. The major argument made by Potrafke is that single-party governments have the political mandate to actually implement policies without compromising in coalition negotiations. Taking this argument for granted, it also applies for the pre-election opportunistic policy choice. Incumbent single-party governments are more likely to be held accountable for a pre-election boom in expectations. *This would suggest that both pre-election booms in general and postelection booms in the case of a left win is more likely in LME countries.*

Most empirical evidence produced so far suffered from the fact that little is known about actually realized expectations of market participants around elections and that hypotheses about expectations have been tested by actual performance. As mentioned above, the exception is Shelton (2012) implementing expectations derived from consensus economics and also distinguishing between varieties of capitalist systems and different outcomes. The descriptive pattern of cycles in output growth forecasts for the period 9 months before and 9 months after elections (Shelton 2012, Figure 1) reveals clear differences between left and right wins in LME and CME countries. In addition, cyclical pattern of pre- and postelection expectations in the existing literature have suggested that opportunistic and partisan aspects have to be interpreted in an integrated approach.

Expectation building has attracted a lot of attention recently and the data by consensus economics has been widely used recently. Biljanowska, Grigoli, and Hengge (2021) consider policy

uncertainty spillovers from the United States to Canada and the United Kingdom and between Europe, China, and the United States respectively based in data from consensus economics and Beckmann and Geiger (2024) assess how uncertainty is transmitted via expectation shocks. Dovern, Fritsche, and Scalacek (2012) rely on Consensus data to focus on disagreement among professionals.

3 | Data and Methods

3.1 | Subsampling and Data Construction

3.1.1 | Subsampling

Because we assume that both system and outcome matter, we avoid the use of dummy variables. Our empirical investigation will adopt a subsample approach separating the OECD world into more liberal and more coordinated market economies (LME vs. CME) for an empirical test for the significance of monthly deviations from trend forecasts. The sample of OECD countries is determined by the availability of forecast data by consensus economics.³ For defining LME and CME subsamples, we rely on empirical evidence provided by the cluster analysis based on macroeconomic policy and performance variables (Ahlborn, Ahrens, and Schweickert 2016).⁴ The subsample of the coordinated-market economies (CME) consists of Germany, Japan, France, Italy, Norway, and Sweden. The subsample of liberal-market economies (LME) include the United States, Canada, the United Kingdom, New Zealand and Switzerland.⁵

The subsample approach also allows for sub-samples with respect to the outcome of elections but different to other approaches also allows to consider a Scenario for “same direction” explicitly. This scenario is normally treated as the benchmark scenario for the analysis of “right” and “left.” Basically, “same direction” is treated implicitly as the no-surprise scenario by Alesina, Roubini, and Cohen (1997). Different to the literature we also allow for a subsample showing the effects if the direction of ideology is toward “Center,” which is however only relevant for CME countries with coalition governments.

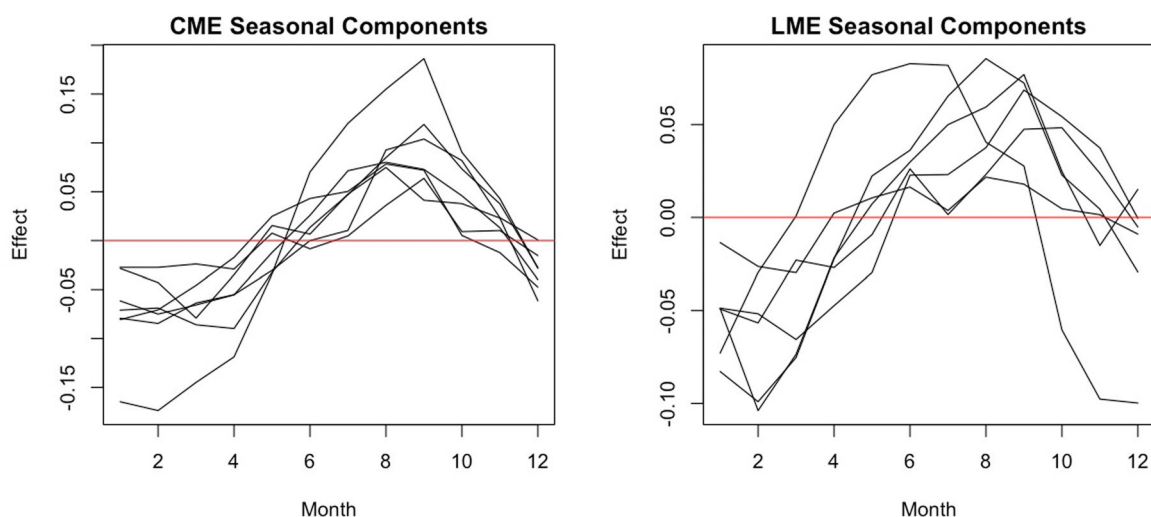


FIGURE 1 | Seasonal components. The effects show the decomposition assuming an additive series. [Color figure can be viewed at wileyonlinelibrary.com]

3.1.2 | Expectation Formation

Because we use expert opinions, we assume that there is no systematic surprise in forecasts concerning the ideological orientation of incoming governments. As a consequence, insignificant results may be due to a violation of this assumption. This assumption is plausible given that forecaster use all available information in an efficient way. It is also important to keep in mind that forecasts are often not revised due to rational inattention which reflects the fact that acquiring information comes with substantial costs for individuals. Hence, any revision in forecasts around elections would reflect strong evidence that the information in elections is considered relevant information.

3.1.3 | Growth Expectations

There is no unique measure of expectations. In a nutshell, survey and market-based measures can be distinguished. Survey data are widely used to analyze expectation building and uncertainty among market participants. Data from consensus economics has been adopted by several studies and authors to understand how expectations are formed and how they adjust to new information. There is mountain evidence that expectations often adjust with a delay to new information since informal frictions make it difficult or costly to process new information. Assessing whether expectation change before or after an election is important since it allows for a direct test of both rational and PBCs. So far, evidence on expectations in the context of elections is scarce. Expectation data on annual GDP growth is constructed on the basis of monthly data from Consensus Economics. The number of forecasters varies between 15 and 40 depending on the variable under investigation. The fact that the name of contributing professional forecaster is published increases the credibility of forecasts due to reputation effects.⁶

The forecasts provided by consensus economics are fixed event forecasts, that is expectations are provided for the current and the next year at each point in time. $g_{i,j}$ denotes the expected growth rate in period j for period i . This implies that disagreement about the current year naturally decreases over time, that is the uncertainty about this year's inflation or GDP growth is for example, much lower in November than in January. We therefore adopt the approach suggested by Patton and Timmermann (2010), which has also been applied by Dovern (2015) to transform fixed event into fixed horizon forecasts via weighted averaging. See Knüppel and Vladu (2016) for an alternative way of transforming fixed event into fixed horizon forecasts by choosing a different weighting. The intuitive idea is to use the weighted average of fixed event forecasts for the current and the next year with the weight of the former (latter) linearly decreasing (increasing) as time evolves based on the following formula

$$\hat{g}_{t,t-12} = w\hat{g}_{1,0} + (1 - w)\hat{g}_{2,1}, \quad (1)$$

where $\hat{g}_{t,t-12}$ denotes the approximated fixed horizon growth rate forecast while $\hat{g}_{1,0}$ and $\hat{g}_{2,1}$ give the fixed event forecasts for the current and the next year and w denotes the ad hoc weight $(24 - t)/12$.

The monthly data-set provides a forecast value for the end of the respective year, $x_{m,t}$, and the forecast value for the end of the next year $x_{m,t+1}$. Thus, there are 24 forecast values available for each year and with each month approaching the end of the projection horizon, the forecast values are getting more precise and are less uncertain, which is shown by lesser disagreement between the forecasters alongside a decreasing projection horizon. In addition to the decreasing variability within the forecast series, the noncontinuity of the data poses another issues as there is a jump in values between December to January, where the forecast value of $x_{m,t+1}$ turns into $x_{m,t}$ and a new, independent, $x_{m,t+1}$ is enters the data-set. To get around these issues we combined the two forecast values to create a weighted average between of the two which results in the projected amount of total GDP growth in the next 12 months, $x12_m$.⁷ With this transformation toward a continuous 12 month ahead forecast value, we partly account for the heterogeneity of the data, as adjustments to the forecasts towards the end of the year, which have usually been smaller, may appear with the same likelihood as in previous months.

The $x12_m$ -series share several properties such as a seasonal component, contributing positively in the beginning of the beginning of the second half of the year (Figure 1) and a range of GDP growth between -5% and 5% within the 12-month period. With an average value of 2.324% , GDP growth forecast were the highest in LME countries. Growth-forecasts in LME countries have been significantly lower, 1.797% and more volatile (Tables A1 and A2). Periods of negative growth can be mainly attributed to the financial crisis and to have remained an exception apart from Spain and Italy which experienced several periods of negative growth during the euro-crisis after the financial crisis until 2015.

Within the LME subsample the series show strong cross-country correlations (Figure 2). While this is the case for a subgroup of CME countries as well (Germany, Spain, France, and Italy), this is less the case for the Asian variant (Japan) and the Nordic variant (Norway, Sweden). Hence, expectations about business cycles reflect the results from cluster analysis on institutional design that LME countries are much more homogeneous compared to CME countries.

3.1.4 | Elections

Global data on elections is taken from the Database of Political Institutions (DPI2020) (Scartascini, Cruz, and Keefer 2021). The data set covers a wide variety of elections, which on the national level are divided into legislative and executive elections. The data is summarized in Table 1 (details are provided in Table A3). However, the consideration of one or another depends as “the main” election variable depends on the political system. The authors mainly divided them into presidential and parliamentary systems. For the presidential systems, the executive elections are to be considered and for the parliamentary systems the legislative elections are to be considered. We label these elections as General Elections.⁸ Since the start of the panel in 1989 up to 2018, France has held 6 General Elections which represents the lowest value of the sample as general elections are held every 5 years.

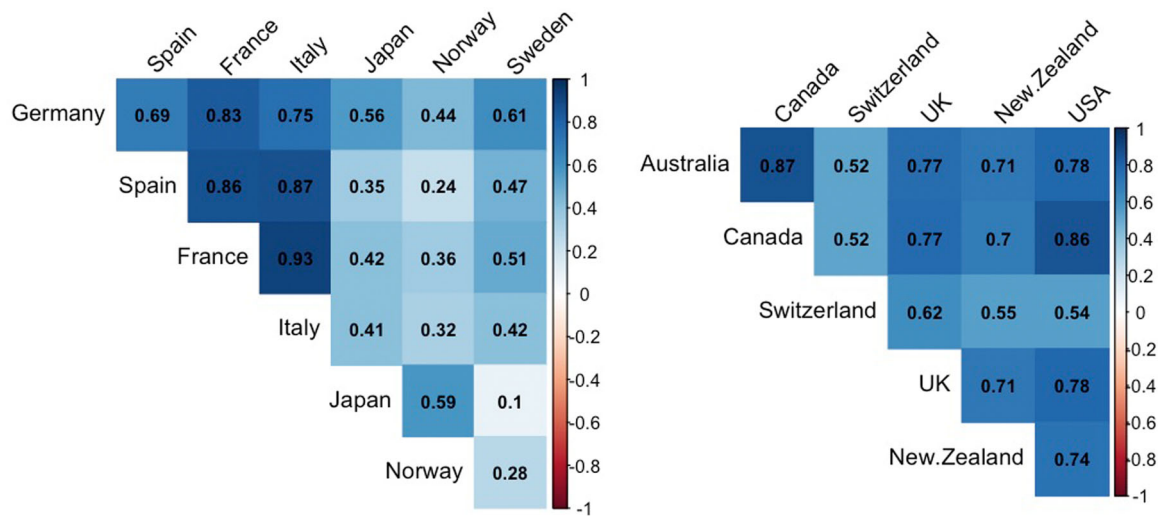


FIGURE 2 | Cross-country correlation. The figure shows the correlation of the x_{12_m} -series within the two subsets. Data are taken from Consensus Economics. [Color figure can be viewed at wileyonlinelibrary.com]

TABLE 1 | Elections by country.

Country	AE	GE	Right	Left	Center	Same
Australia	9	9	2	1	0	6
Canada	8	8	1	2	0	5
France	6	6	2	2	1	1
Germany	8	8	1	1	0	6
Italy	8	8	3	1	1	2
Japan	10	10	0	1	0	8
New Zealand	9	9	1	2	0	6
Norway	7	7	2	1	0	4
Spain	8	8	2	1	0	5
Sweden	7	7	2	2	0	3
Switzerland	7	7	0	1	0	4
United Kingdom	7	7	1	1	0	5
United States	14	7	2	2	0	3

Note: Descriptive statistics by country. Includes all OECD 1990 countries election winner in Japan in 2009 has not been classified and therefore no direction has been assigned. Same for Italy in 2013 and Switzerland in 2003 and 2015.

Japan with 10 General Elections, at a frequency of the 3 years, represents the Country with the highest number of general elections. These General Elections can be affiliated with a change in government ideology as well.

3.1.5 | Ideology

The DPI data set also allows to create subsamples indicating whether the governments ideology has changed due to an election and if, to which direction: same, right, center, and left. This variable represents the overall change which does not include the magnitude of the change, that is, a change towards the left could originate from a previous centrist or a right wing government. However, this is only relevant for the CME group because in the two-party world of LME countries the choice is

between what is (system-dependent) left or right. Anyhow, in some cases the party ideology could not be determined and the data is marked as NA. Notably, the considered sample of countries shows a very stable pattern, where for the majority of the elections revealed no change in ideology occurred. This is an additional justification to consider this category explicitly and not only as a benchmark assuming no surprise. Regression analysis will have to show whether we detect interpretable cycles in this category as well.

3.2 | Methods

A standard way to test for the existence of a political cycle is to run an autoregression of the variable itself, a small set of economic variables, and political dummies (Drazen 2000).

In this spirit, our modeling approach is based on the following equation:

$$x12_{i,t} = x12_{i,t-1} + \sum_{t=-9}^{t=+9} \text{Election}_{i,t} + \text{Optional Controls}_{i,t}.$$

On the left-hand side of the equation, we have the GDP forecast in 12 months ($x12_{i,t}$) and on the right-hand side the first lag of the dependent variable, the respective election variables as dummy variables, reaching from 9 months before an election until 9 months after an election. We also provide robustness check by including the effective real exchange rate as a catch-all control variable. It seems to be justified not to consider other controls as in the literature using actual policy outcomes, for which the part influenced by expectations would have to be determined.

With respect to the lag-structure or the endogenous variable the nature of the time-series problem at hand poses a trade-off because the time series could be easily modeled completely by including additional lags leaving no room for an explanation by the hypothesis discussed above. We argue that short-term expectations are adequate for the base line model because they reflect the direct response to election events. Alternatively, we also consider lags of one quarter and 1 year respectively in robustness checks. The corresponding results are provided in Appendix A.

Seasonality naturally arises since 12-month expectations are strongly correlated with the previous month. Using the lag of expectations over the next 12 months on the right-hand side accounts for the resulting autocorrelation which arises from the construction of the data based on averages of growth expectations for this year and next year. The strong overlap results in strong correlations between both series which is propagated by the pattern that expectations also frequently remain unchanged. Hence, significance of any elections dummy constitutes a strong result.

Our sample period consists of data from 1989:01 until 2019:12 on a monthly basis.

Table 2 provides standard panel tests for the data under investigation which suggest that fixed effects reflect a more adequate specification compared to random effects. However, our main approach is based on a Panel AR methodology

because this allows us to account for autocorrelation in expert forecasts which arises from the nature of fixed event forecasts.

4 | Results

The results of our AR(1) panel based on the Prais-Winsten feasible generalized least squares (FGLS). are presented graphically in Figure 3, which shows the point estimates for the election lag dummies from $t = -9$ to $t = +9$ highlighting the significant results at, at least the 10% level. The corresponding estimates are provided in Appendix A.

As a first important result, the graph for general elections, that is, not distinguishing between election outcomes, reveals clearly distinct patterns for the LME and CME subgroups resulting in insignificant results for the OECD sample countries as a group. With respect to opportunistic cycles, this explains insignificant results in the literature but is also the confirmation for the LME group—as suggested by Persson and Tabellini—as well as the reversal of opportunistic cycle based on uncertainty—as suggested by Canes-Wrone and Park—for the CME group. Combining our findings with these hypotheses, the expert expectations seem to follow the idea that LME single-party government or presidents respectively find it much more attractive to create boom expectations because of the likelihood to reap the benefits in terms of electoral success, while this is much less clear in CME with uncertain coalition formation. This might, at the same time, explain a higher level of uncertainty dominating the pre-election phase in CME. The pre-election part of the cycle ends with elections upcoming with both boom expectations in LME and bust expectations in CME ending close to trend expectations. The postelection cycle starting with election month shows a clear reversal with above-trend expectations in CME and below-trend expectations in LME. Still looking at all elections independent of outcome this is rather significant for the case of LME starting in the second quarter after election month. Taking the cyclical pattern for granted, this fits nicely with the uncertainty hypothesis in the case for CME. If uncertainty about election outcome has meant lower expectations for 12-month GDP growth, this should create a positive cycle after uncertainty is eliminated. At the same time, the negative phase of the cycle in LMEs can be explained by relative austerity (expectations) after the pre-election boom. If, for example, fiscal or monetary have been (thought to be)

TABLE 2 | Standard tests for panel data.

Method	Statistic	p-value	Alternative
F test for individual effects	1.594	0.086	Significant effects
Lagrange multiplier test—time effects (Breusch-Pagan) for unbalanced panels	5, 110.974	0	Significant effects
Lagrange multiplier test—(Honda) for unbalanced panels	0.434	0.332	Significant effects
Lagrange multiplier test—time effects (Honda) for unbalanced panels	71.491	0	Significant effects
Breusch-Pagan LM test for cross-sectional dependence in panels	5, 942.703	0	Cross-sectional dependence
Pesaran CD test for cross-sectional dependence in panels	74.455	0	Cross-sectional dependence
Hausman test	10.406	0.960	One model is inconsistent

Note: Descriptive statistics by country. Includes all OECD 1990 countries.

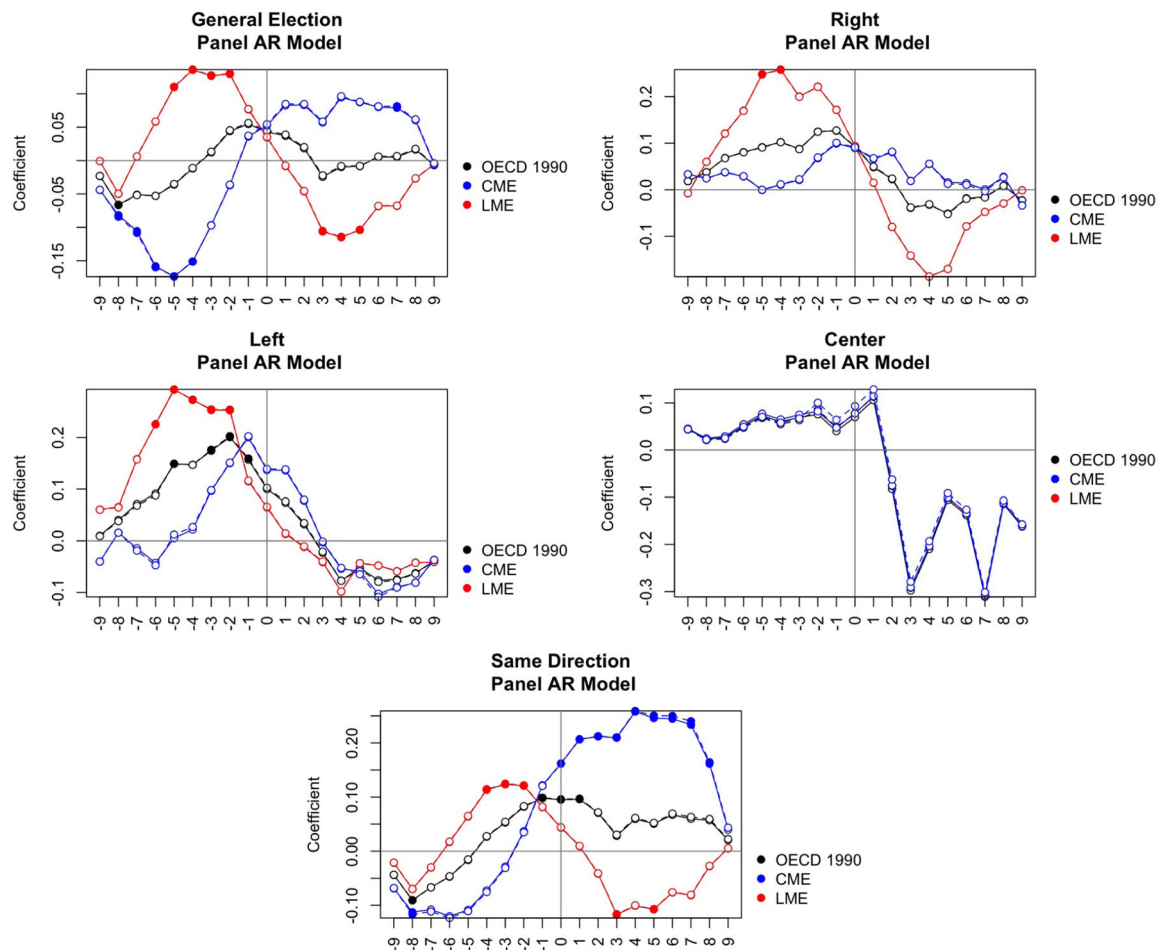


FIGURE 3 | Panel AR results. [Color figure can be viewed at wileyonlinelibrary.com]

expansionary macroeconomic balance of the cycle requires some conservatism. The other graphs in Figure 3 help to explain to which extend this overall picture is driven by partisan effects. As can be seen, the boom expectations in LME countries in the pre-election phase are to be observed in all possible outcome scenarios and within similar months in the two pre-election quarters. This further supports the Persson-Tabellini-hypothesis about pronounced opportunistic cycles in single-party government countries. Different to that, in CME the negative deviation from trend expectations before election is only significant in the case of no postelection change in government ideology. As argued above, we assume that there is no systematic bias in expert forecasts of election outcomes. Given this assumption, the uncertainty argument seem to be especially relevant if no clear change towards extreme ideological positions is expected to happen. Given that the number of parties forming coalitions increases or minority governments are common, this seems to be plausible. Concerning the postelection phase of the cycle, the picture is different for the case of LME countries. Here only no change produces a negative impact on expectations, which suggests that the expectation of an austerity phase following a boom phase is especially relevant if the incumbent president/government stays in power. A new incoming government may feel less obliged to correct to expansionary pre-election policies for those the former government could be blamed. The scenario for same ideological orientation also produces the most pronounced result for the CME subsample. After no-change is

actually the result, similar constellations of coalition partners may agree on expansionary packages to close coalition agreements. All in all, the results presented in Figure 3 support both the hypothesis about electoral systems and about election uncertainty if moderated by the LME/CME-divide. There is also some support for the hypothesis that PBCs are more likely and/or more pronounced in an LME environment. Beyond that, however, there is no indication that either left or right wins if connected to a change are thought to make an expansionary scenario more likely. The no-change scenario produces the most clear-cut results for both LME and CME countries. Some robustness checks for the results including all elections are provided in Tables A4 and A5. Table A4 reveals that, neglecting the lagged endogenous variable as an explanation for current expectations and including of the effective real exchange rate does not change the results presented in Figure 2. In Table A5, different lag structures for the endogenous variable as an explanation for current expectations are considered with a 1-year lag (M_{12}) and lags of one quarter and 1 year ($M_{12,3}$). While, again the inclusion of the real exchange rate does not have an effect on the results. Assuming longer lags for the endogenous variable does confirm the general result of contrasting boom and bust cycles in LME and CME subsamples. Looking at more long-term deviations shifts the cycle with the postelection cycle already setting in in the last quarter before elections. With respect to expectation formation this is plausible given that forecasts are capable of incorporating relevant information rather quickly.

5 | Conclusion

This study has contributed to the literature on PBCs by assessing the effect of elections on growth expectations based on expert survey data instead of using actual performance data. Monthly expert forecasts have been used to construct a monthly data set for forecasts of annual GDP growth, that is, 12 months ahead of forecast months. For a sample of 13 OECD countries, for which data were available for the period from 1989, we have analyzed the pre- and postelection deviations for trend forecasts from 9 months before to 9 months after elections.

Our results based on a Panel AR approach, that is, AR(1) panel model which allows for specific auto-correlation as well as panel heteroskedasticity and/or contemporaneous correlation based on the Prais-Winsten feasible generalized least squares (FGLS), shows that significant results are revealed within subsamples of LMEs and CMEs as suggested by Shelton (2012). However, our results on both pre- and postelection phases of PBCs reveal opposite signs with boom expectations before and bust expectations after elections in LMEs, while the opposite is true for CMEs. This result is independent of election outcomes and supports the Persson-Tabellini (2005) hypothesis on differences between majority voting (as in LME) and proportional voting (as in CME) explaining the LME cycle as well as the Canes-Wrong/Park (2012) hypothesis on election uncertainty driving CME opportunistic cycles. Hence, opportunistic cycles are not restricted to new democracies as suggested by Brender and Drazen (2005) but to LMEs.

Postelection booms as assumed in the literature due to left wins in presidential systems (LMEs) and found by Potrafke (2012) and due to a right-win (relief from left-win) as found by Shelton (2012) for CMEs are not confirmed by our results. Pre-election booms are revealed for LMEs in all cases, that is, changing ideology to left, right, and staying the same. For CMEs, pre-election bust and postelection boom are driven mainly for the same direction scenario, in which, arguably, both uncertainty before election and relief after election is higher compared to LMEs. In the scenario for a change of ideology to a left-leaning government we find no expansionary postelection effect on expectations at all.

Overall, we show that allowing for heterogeneity of OECD countries with respect to their institutional design, with LMEs preferring competitive solutions for both the political and the economic system, is informative for analyzing hypothesis raised in the literature. This is in line with findings that especially drivers of fiscal policy are different in both systems with the LME/CME divide dominating ideology effects. At the same time, theorizing on this divide still remains eclectic and would benefit from a consistent framework for analysis and empirical testing. From a general point of view, our results illustrate that expectation building take into account political decisions making and the political environment, illustrating the need for clear policy communication.

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Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Endnotes

¹We use the term Varieties of Capitalism because this is well established in the literature following the seminal paper by Hall and Soskice (2001), which focused on innovation and production largely neglecting the role of government. Following Esping-Andersen (1990) and others, a consistent implementation of economic systems implies that the divide between LME and CME countries is also to be found with respect to government activity broadly defined. For a summary and empirical evaluation see, for example, Schröder (2013).

²With respect to Eastern European countries, Tavits and Letki (2009) have argued such reversed partisan preferences for left-wing parties in these countries. However, this has been shown to be a temporary effect most likely due to EU enlargement conditionality (see Beckmann et al. 2020 for a discussion of reversed preferences).

³Widening the approach to non-OECD countries has been implemented but did not show significant results, neither with regional nor with system subsampling. Obviously, the PBC approach developed for OECD countries is not appropriate for other institutional environments.

⁴Cluster analysis is the workhorse technique for empirical analyses in the VoC literature because it maximizes the homogeneity of subgroups of countries according to a theoretically established set of indicators. Ahlborn et al. replicate earlier cluster results based on micro indicators by using aggregate macro variables on relevant government policy variables (overall government size, transfer spending, and regulation) and performance variables (innovative capacity, fiscal stability, and income equality) likely to be relevant for expert market observers as well. Hence, this approach is closest to our analysis. However, there is also a considerable consensus in the VoC literature with respect to the allocation of our traditional European OECD countries into LME and CME subsamples.

⁵Different to Shelton (2012), we do not consider so-called Mediterranean market economies (MME). As shown by cluster analysis this is a subcategory of CME systems. In the same vein, allowing for subclusters, Japan represents an Asian model and Norway and Sweden belong to a Nordic Cluster (see, e.g., Schröder 2013). In general, this reveals that the CME cluster is significantly more heterogeneous compared to the LME cluster. This is also valid for differences in fiscal policy (see Beckmann et al. 2020 on this point).

⁶See <http://www.consensuseconomics.com/> for further details.

⁷The following formula is applied: $x_{12,m} = \alpha \times x_{m,t} + (1 - \alpha) \times x_{m,t+1}$; where $\alpha = (13 - m)/12$.

⁸We also considered a variable for Any Elections. However, the only country in which legislative and executive elections are held independently are the United States. In contrast to the remainder of the sample, legislative elections in the United States are held independently from the executive ones resulting in a higher number of any elections. In other cases, such as France, both elections are held at the same time. In addition, using Any Elections did not produce different results.

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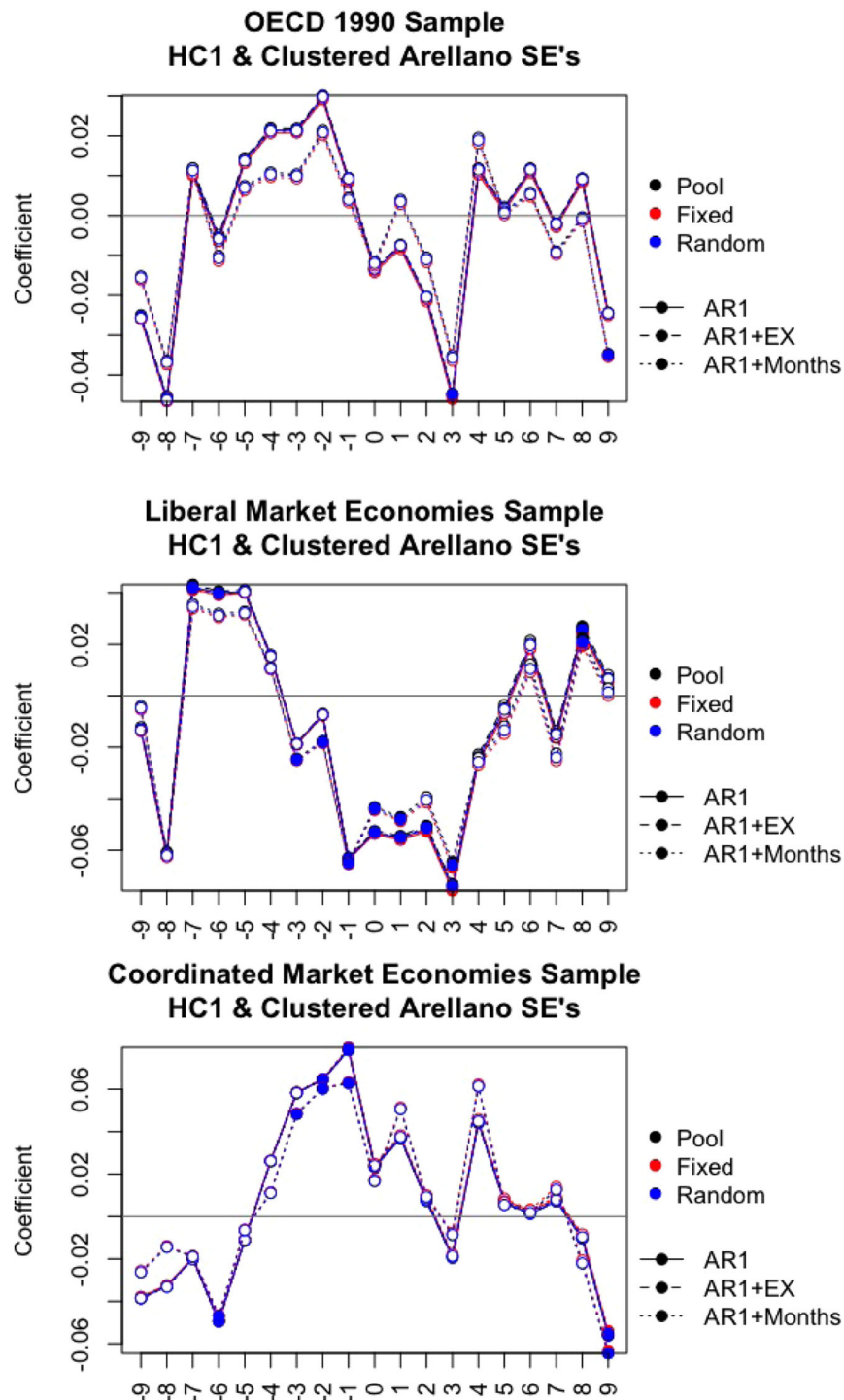


FIGURE A1 | General elections: Baseline results robust. The three figures illustrate the estimation result of nine combinations of estimators and equations for all three subsets. Filled points represent significant coefficients at the 10% level using clustered Arellano Standard Errors. The black lines correspond to a standard linear model (pool), the red lines to a country-fixed effects model (fixed) and the blue lines to a random effects model (random). The straight lines, corresponding to AR1, represent the results of baseline equation $M12_t = M12_{t-1} + \text{Election}_{t-9:t+9}$. AR1 + EX indicates the addition of the real effective exchange rate to the equation and AR1 + months represents the addition of a dummy for each month. The Results are based on a monthly data set based on economic forecasts data by Consensus Economics, the Database for Political Institutions (Scartascini, Cruz, and Keefer 2021) and the real exchange rate from the IMF. The corresponding tables are provided in Appendix A. [Color figure can be viewed at wileyonlinelibrary.com]

See Table [A1](#)

TABLE A1 | Summary statistics by subset.

	Mean	SD	Min	Median	Max	Obs.
OECD 1990	2.040	1.142	−4.675	2.205	4.948	4, 441
LME	2.324	0.977	−2.446	2.472	4.619	2, 043
CME	1.797	1.214	−4.675	1.879	4.948	2, 398

Note: OECD 1990 is the full data set and contains both CME and LME countries.

See Table [A2](#)

TABLE A2 | Summary statistics by country.

Country	Mean	SD	Min	Median	Max	Obs.	Subset
France	1.725	0.948	−1.781	1.810	3.592	343	CME
Germany	1.626	1.052	−3.274	1.695	4.129	343	CME
Italy	1.258	1.107	−2.763	1.352	3.400	343	CME
Japan	1.425	1.313	−4.675	1.431	4.948	343	CME
Norway	2.342	0.878	−0.699	2.383	3.900	342	CME
Spain	2.102	1.517	−2.300	2.660	4.664	342	CME
Sweden	2.106	1.172	−2.399	2.402	3.952	342	CME
Australia	3.034	0.676	−0.054	3.130	4.290	336	LME
Canada	2.435	0.914	−1.224	2.570	3.888	343	LME
New Zealand	2.570	0.751	−1.083	2.682	4.148	336	LME
Switzerland	1.555	0.664	−1.522	1.592	2.855	342	LME
United Kingdom	1.880	1.030	−2.446	2.133	3.388	343	LME
United States	2.487	0.990	−2.063	2.599	4.619	343	LME

Note: Descriptive statistics by country. Includes all OECD 1990 countries.

See Table [A3](#)

TABLE A3 | Elections by country (detailed).

Country	General elections	Right	Left	Center	Same
Australia	9	1996-03 2013-09	2007-11		1993-03
					1998-10
					2001-11
					2004-10
					2010-08
					2016-07
Canada	8	2006-01	1993-10 2015-10		1997-06
					2000-11
					2004-06
					2008-10
					2011-05
Switzerland	7		1995-10		1991-10
					1999-10

(Continues)

TABLE A3 | (Continued)

Country	General elections	Right	Left	Center	Same
Germany	8	2005-09	1998-09		2007-10
					2011-10
					1990-12
					1994-10
					2002-09
					2009-09
					2013-09
					2017-09
Spain	8	1996-03 2011-11	2004-03		1989-10
					1993-06
					2000-03
					2008-03
					2016-12
France	6	1993-03 2002-06	1997-05 2012-06	2017-06	2007-06
United Kingdom	7	2010-05	1997-05		1992-04
					2001-07
					2005-05
					2015-05
Italy	8	1994-03 2001-05 2008-04	2006-04	1996-04	2017-06
					1992-04
					2018-03
Japan	10		1993-07		1990-02
					1996-10
					2000-06
					2003-11
					2005-09
					2010-07
					2014-12
Norway	7	1997-09 2013-09	2005-12		2017-10
					1993-09
					2001-09
					2009-09
					2017-09
New Zealand	9	2008-11	1999-11 2017-09		1993-11
					1996-10
					2002-07
					2005-09
					2011-11
Sweden	7	1991-09 2006-09	1994-09 2014-09		2014-09
					1998-09
					2002-09

(Continues)

TABLE A3 | (Continued)

Country	General elections	Right	Left	Center	Same
United States	7				2010-09
		2000-11	1992-11		1996-11
		2016-11	2008-11		2004-11
					2012-11

Note: Descriptive statistics by country. Includes all OECD 1990 countries.

See Table A4

TABLE A4 | Panel AR, general election.

	OEC-AR1	OEC-EXR	LME-AR1	LME-EXR	CME-AR1	CME-EXR
(Intercept)	2.09*** (0.39)	2.43*** (0.43)	2.27*** (0.32)	2.35*** (0.40)	1.95*** (0.41)	2.52*** (0.53)
GE_F9	−0.02 (0.02)	−0.02 (0.02)	−0.00 (0.03)	−0.00 (0.03)	−0.04 (0.03)	−0.04 (0.03)
GE_F8	−0.07** (0.03)	−0.07** (0.03)	−0.05 (0.04)	−0.05 (0.04)	−0.08** (0.04)	−0.08** (0.04)
GE_F7	−0.05 (0.03)	−0.05 (0.03)	0.01 (0.04)	0.01 (0.04)	−0.11** (0.05)	−0.11** (0.05)
GE_F6	−0.05 (0.04)	−0.05 (0.04)	0.06 (0.05)	0.06 (0.05)	−0.16*** (0.05)	−0.16*** (0.05)
GE_F5	−0.04 (0.04)	−0.04 (0.04)	0.11** (0.05)	0.11** (0.05)	−0.17*** (0.06)	−0.17*** (0.06)
GE_F4	−0.01 (0.04)	−0.01 (0.04)	0.14** (0.05)	0.14** (0.05)	−0.15*** (0.06)	−0.15*** (0.06)
GE_F3	0.01 (0.04)	0.01 (0.04)	0.13** (0.06)	0.13** (0.06)	−0.10 (0.06)	−0.10 (0.06)
GE_F2	0.04 (0.04)	0.05 (0.04)	0.13** (0.06)	0.13** (0.06)	−0.04 (0.06)	−0.04 (0.06)
GE_F1	0.05 (0.04)	0.06 (0.04)	0.08 (0.06)	0.08 (0.06)	0.04 (0.06)	0.04 (0.06)
GE	0.04 (0.04)	0.04 (0.04)	0.03 (0.06)	0.04 (0.06)	0.05 (0.06)	0.05 (0.06)
GE_L1	0.04 (0.04)	0.04 (0.04)	−0.01 (0.06)	−0.01 (0.06)	0.08 (0.06)	0.08 (0.06)
GE_L2	0.02 (0.04)	0.02 (0.04)	−0.05 (0.06)	−0.05 (0.06)	0.08 (0.06)	0.08 (0.06)
GE_L3	−0.02 (0.04)	−0.02 (0.04)	−0.11* (0.06)	−0.11* (0.06)	0.06 (0.06)	0.06 (0.06)
GE_L4	−0.01 (0.04)	−0.01 (0.04)	−0.11** (0.05)	−0.11** (0.05)	0.09 (0.06)	0.10 (0.06)
GE_L5	−0.01 (0.04)	−0.01 (0.04)	−0.10** (0.05)	−0.10** (0.05)	0.09 (0.06)	0.09 (0.06)

(Continues)

TABLE A4 | (Continued)

	OEC-AR1	OEC-EXR	LME-AR1	LME-EXR	CME-AR1	CME-EXR
GE_L6	0.01 (0.04)	0.01 (0.04)	−0.07 (0.05)	−0.07 (0.05)	0.08 (0.05)	0.08 (0.05)
GE_L7	0.01 (0.03)	0.01 (0.03)	−0.07 (0.05)	−0.07 (0.05)	0.08* (0.05)	0.08* (0.05)
GE_L8	0.02 (0.03)	0.02 (0.03)	−0.03 (0.04)	−0.03 (0.04)	0.06 (0.04)	0.06 (0.04)
GE_L9	−0.01 (0.02)	−0.01 (0.02)	−0.01 (0.03)	−0.01 (0.03)	−0.01 (0.03)	−0.00 (0.03)
REER_L		−0.00 (0.00)		−0.00 (0.00)		−0.01* (0.00)
R ²	0.02	0.02	0.03	0.03	0.03	0.03
Num. obs.	4211.00	4211.00	1936.00	1936.00	2275.00	2275.00
Num. panels	13.00	13.00	6.00	6.00	7.00	7.00

Note: This table provides the estimates of a generalized panel autoregressive model, see Figure A1.
****p* < 0.01; ***p* < 0.05; **p* < 0.1.

See Table A5

TABLE A5 | Robustness baseline results.

	OEC (1)	LME (2)	CME (3)	OEC (4)	LME (5)	CME (6)	OEC (7)	LME (8)	CME (9)	OEC (10)	LME (11)	CME (12)
lag(GE, -9:9)-9	-0.026 (0.029)	-0.014 (0.022)	-0.038 (0.053)	-0.020 (0.056)	0.002 (0.026)	-0.040 (0.105)	-0.026 (0.030)	-0.014 (0.022)	-0.038 (0.053)	-0.020 (0.057)	0.001 (0.026)	-0.040 (0.105)
lag(GE, -9:9)-8	-0.046 (0.029)	-0.062 (0.045)	-0.032 (0.035)	-0.066 (0.061)	-0.050 (0.054)	-0.081 (0.106)	-0.047 (0.029)	-0.062 (0.045)	-0.033 (0.035)	-0.067 (0.061)	-0.050 (0.054)	-0.082 (0.106)
lag(GE, -9:9)-7	0.010 (0.017)	0.041* (0.024)	-0.020 (0.018)	-0.060 (0.056)	-0.023 (0.066)	-0.095 (0.087)	0.010 (0.017)	0.041* (0.024)	-0.020 (0.018)	-0.061 (0.056)	-0.023 (0.066)	-0.096 (0.087)
lag(GE, -9:9)-6	-0.006 (0.019)	0.039*** (0.012)	-0.049* (0.026)	-0.041 (0.050)	0.029 (0.066)	-0.106* (0.064)	-0.006 (0.019)	0.039*** (0.012)	-0.049* (0.026)	-0.042 (0.050)	0.029 (0.065)	-0.107 (0.065)
lag(GE, -9:9)-5	0.013 (0.021)	0.040 (0.026)	-0.011 (0.029)	0.018 (0.049)	0.122** (0.053)	-0.077 (0.060)	0.013 (0.021)	0.040 (0.025)	-0.011 (0.030)	0.018 (0.049)	0.122** (0.052)	-0.077 (0.061)
lag(GE, -9:9)-4	0.021 (0.019)	0.015 (0.030)	0.026 (0.023)	0.028 (0.045)	0.100* (0.055)	-0.035 (0.060)	0.021 (0.019)	0.015 (0.030)	0.026 (0.023)	0.028 (0.045)	0.100* (0.055)	-0.035 (0.061)
lag(GE, -9:9)-3	0.021 (0.023)	-0.019 (0.014)	0.059 (0.036)	0.054 (0.041)	0.045 (0.051)	0.067 (0.058)	0.021 (0.023)	-0.019 (0.014)	0.058 (0.036)	0.054 (0.041)	0.046 (0.051)	0.066 (0.058)
lag(GE, -9:9)-2	0.029 (0.021)	-0.008* (0.005)	0.065* (0.033)	0.071 (0.051)	0.003 (0.040)	0.141* (0.078)	0.029 (0.021)	-0.008 (0.005)	0.065* (0.033)	0.072 (0.052)	0.003 (0.040)	0.143* (0.079)
lag(GE, -9:9)-1	0.008 (0.033)	-0.064** (0.029)	0.079* (0.042)	0.058 (0.069)	-0.073* (0.038)	0.192* (0.101)	0.009 (0.033)	-0.063** (0.029)	0.080* (0.041)	0.059 (0.069)	-0.073* (0.038)	0.195* (0.101)
lag(GE, -9:9)0	-0.014 (0.022)	-0.054** (0.024)	0.024 (0.030)	0.024 (0.065)	-0.108** (0.053)	0.158* (0.086)	-0.014 (0.022)	-0.054** (0.024)	0.025 (0.030)	0.026 (0.066)	-0.108** (0.054)	0.161* (0.086)
lag(GE, -9:9)1	-0.008 (0.028)	-0.056** (0.025)	0.037 (0.042)	-0.009 (0.074)	-0.154** (0.073)	0.136 (0.095)	-0.008 (0.028)	-0.056** (0.025)	0.038 (0.042)	-0.008 (0.075)	-0.154** (0.074)	0.139 (0.095)
lag(GE, -9:9)2	-0.022 (0.020)	-0.053** (0.025)	0.008 (0.026)	-0.039 (0.064)	-0.147** (0.072)	0.069 (0.085)	-0.021 (0.020)	-0.052** (0.026)	0.009 (0.026)	-0.036 (0.064)	-0.146** (0.072)	0.073 (0.084)
lag(GE, -9:9)3	-0.046* (0.025)	-0.076*** (0.023)	-0.019 (0.041)	-0.071 (0.065)	-0.173*** (0.063)	0.029 (0.094)	-0.045* (0.025)	-0.075*** (0.023)	-0.018 (0.041)	-0.069 (0.065)	-0.171*** (0.063)	0.032 (0.094)
lag(GE, -9:9)4	0.010 (0.027)	-0.026 (0.020)	0.045 (0.045)	-0.051 (0.063)	-0.145** (0.060)	0.040 (0.096)	0.011 (0.027)	-0.026 (0.021)	0.046 (0.044)	-0.049 (0.063)	-0.144** (0.061)	0.043 (0.095)
lag(GE, -9:9)5	0.001 (0.027)	-0.007 (0.020)	0.008 (0.045)	-0.027 (0.063)	-0.102** (0.060)	0.042 (0.096)	0.001 (0.027)	-0.007 (0.021)	0.008 (0.044)	-0.026 (0.063)	-0.102** (0.061)	0.045 (0.095)

(Continues)

TABLE A5 | (Continued)

	OEC (1)	LME (2)	CME (3)	OEC (4)	LME (5)	CME (6)	OEC (7)	LME (8)	CME (9)	OEC (10)	LME (11)	CME (12)
lag(GE, -9:9)6	(0.017) 0.011 (0.021)	(0.023) 0.018 (0.014)	(0.024) 0.002 (0.039)	(0.055) 0.025 (0.052)	(0.046) -0.016 (0.035)	(0.087) 0.061 (0.091)	(0.017) 0.011 (0.021)	(0.024) 0.018 (0.015)	(0.024) 0.003 (0.038)	(0.056) 0.026 (0.051)	(0.046) -0.016 (0.035)	(0.086) 0.063 (0.090)
lag(GE, -9:9)7	-0.003 (0.021)	-0.016 (0.017)	0.008 (0.035)	0.013 (0.055)	-0.006 (0.038)	0.027 (0.099)	-0.002 (0.021)	-0.016 (0.017)	0.009 (0.035)	0.015 (0.055)	-0.006 (0.039)	0.030 (0.099)
lag(GE, -9:9)8	0.008 (0.015)	0.024*** (0.007)	-0.009 (0.026)	0.016 (0.054)	0.022 (0.029)	0.005 (0.099)	0.009 (0.015)	0.024*** (0.007)	-0.008 (0.026)	0.018 (0.054)	0.022 (0.030)	0.008 (0.099)
lag(GE, -9:9)9	-0.025 (0.019)	0.005 (0.005)	-0.055* (0.031)	-0.016 (0.047)	0.011 (0.024)	-0.047 (0.084)	-0.025 (0.019)	0.006 (0.005)	-0.054* (0.031)	-0.015 (0.047)	0.011 (0.024)	-0.043 (0.084)
lag(EREER_IX)							-0.001 (0.0004)	-0.001* (0.0003)	-0.001 (0.001)	-0.002* (0.001)	-0.001 (0.001)	-0.003 (0.002)
lag(M_12)	0.979*** (0.003)	0.975*** (0.003)	0.982*** (0.003)				0.979*** (0.003)	0.975*** (0.004)	0.981*** (0.003)			
lag(M_12, 3)				0.885*** (0.015)	0.858*** (0.012)	0.899*** (0.018)				0.884*** (0.014)	0.858*** (0.013)	0.897*** (0.017)
Observations	4211	1936	2275	4211	1936	2275	4211	1936	2275	4211	1936	2275
R ²	0.965	0.953	0.971	0.797	0.745	0.826	0.965	0.953	0.971	0.797	0.745	0.827
Adjusted R ²	0.965	0.952	0.971	0.796	0.741	0.824	0.965	0.953	0.971	0.796	0.741	0.824

Note: This table provides the robust baseline results with an alternative lag structure.

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.