

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Gáspár, Attila; Sandström, Alexandra; Watson, Taylor; Wochner, Timo

Working Paper Electoral Cycles in Macroprudential Regulation - A Replication of Müller (2023)

I4R Discussion Paper Series, No. 204

Provided in Cooperation with: The Institute for Replication (I4R)

Suggested Citation: Gáspár, Attila; Sandström, Alexandra; Watson, Taylor; Wochner, Timo (2025) : Electoral Cycles in Macroprudential Regulation - A Replication of Müller (2023), I4R Discussion Paper Series, No. 204, Institute for Replication (I4R), s.l.

This Version is available at: https://hdl.handle.net/10419/311309

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.



WWW.ECONSTOR.EU

INSTITUTE for **REPLICATION**

No. 204 I4R DISCUSSION PAPER SERIES

Electoral Cycles in Macroprudential Regulation – A Replication of Müller (2023)

Attila Gáspár Alexandra Sandström Taylor Watson Timo Wochner

February 2025



I4R DISCUSSION PAPER SERIES

I4R DP No. 204

Electoral Cycles in Macroprudential Regulation – A Replication of Müller (2023)

Attila Gáspár¹, Alexandra Sandström², Taylor Watson³, Timo Wochner^{4,5}

¹HUN-REN Centre for Economic and Regional Studies, Budapest/Hungary
 ²Uppsala University, Uppsala/Sweden
 ³Boston University, Boston/USA
 ⁴Ludwig-Maximilians-University Munich/Germany
 ⁵ifo Institute, Munich/Germany

FEBRUARY 2025

Any opinions in this paper are those of the author(s) and not those of the Institute for Replication (I4R). Research published in this series may include views on policy, but I4R takes no institutional policy positions.

I4R Discussion Papers are research papers of the Institute for Replication which are widely circulated to promote replications and metascientific work in the social sciences. Provided in cooperation with EconStor, a service of the <u>ZBW – Leibniz Information Centre for Economics</u>, and <u>RWI – Leibniz Institute for Economic Research</u>, I4R Discussion Papers are among others listed in RePEc (see IDEAS, EconPapers). Complete list of all I4R DPs - downloadable for free at the I4R website.

I4R Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

Editors

Abel Brodeur University of Ottawa Anna Dreber Stockholm School of Economics Jörg Ankel-Peters RWI – Leibniz Institute for Economic Research

E-Mail: joerg.peters@rwi-essen.de RWI – Leibniz Institute for Economic Research Hohenzollernstraße 1-3 45128 Essen/Germany www.i4replication.org

Electoral Cycles in Macroprudential Regulation — A replication of Müller (2023)

Attila Gáspár*

Alexandra Sandström⁺ Uppsala University Taylor Watson[‡] Boston University Timo Wochner[§] University of Munich (LMU) ifo Institute

June, 2024

Abstract

Müller (2023) presents evidence for electoral cycles in macroprudential policy in a sample of 58 countries from 2000 through 2014. Consistent with theoretical arguments, the pattern of looser regulation is larger when election outcomes are uncertain and institutions are weak. In this replication, we first conduct a fully successful computational reproduction, using the provided replication package. We then subject the paper's main results to a series of robustness tests, involving measuring the dependent variable differently, bootstrapping standard errors, and applying different specifications of the main estimations. We also use new data, extending the covered time period, and re-examine the results. We find that the main results are robust to our robustness tests, but vanish using newer data. In an additional analysis, we provide suggestive evidence that the original results are based on rather limited variation in the dependent variable.

JEL Classifications: D72, E32, G01, G21, G28

^{*}HUN-REN Centre for Economic and Regional Studies. Email: gaspar.attila@krtk.hun-ren.hu.

[†]Department of Economics. Email: alexandra.sandstrom@nek.uu.se.

[‡]Department of Economics. Email: watson@bu.edu.

[§]Department of Economics. Email: wochner@ifo.de.

1 Introduction

Müller (2023) examines whether there are electoral cycles in macroprudential policy. Politicians have strong incentives to influence economic policy in a manner that avoids tightening household credit and consumption possibilities in the run-up to elections, and the author provides evidence consistent with such behavior. In the quarters immediately before elections, macroprudential policies are generally looser than they are in other periods, and this pattern seems to hold across a variety of policy measures and indexes.¹ The author goes on to show that this effect is greater in some contexts, such as when elections are close or institutions are poor, further validating the mechanism.

The author provides clean and concise replication code, which runs smoothly to replicate the primary dataset and produce all relevant figures and tables. Our research team was able to quickly reproduce the paper's results (tables and figures) across different machines and operating systems.

We subject this paper's main results to a variety of robustness tests, finding that the key results appear strongly robust throughout. These tests include testing the significance of key coefficients in more stringent ways (e.g., bootstrapping significance, accounting for multiple hypothesis testing where appropriate, and measuring the dependent variable differently) and applying alternative specifications of key estimation models.

In a separate analysis, we replicate the paper's main analysis using only self-collected data (i.e. no data from the replication package). We first try to replicate the paper's main results, and then use our alternative dataset to extend the covered years in the sample. While we are able to produce results reasonably close to those of the original paper using the alternative data, the results vanish if we extend the study period to the whole horizon offered by the new data set. This cast some doubts over the external validity of the original paper.

Finally, we examine the story being told in the paper: macroprudential policy being looser in preelection quarters because politicians enact policies with looser regulation; *not* because of (1) politicians' inertia or (2) more stricter policies being enacted in other (rather election unrelated) quarters. Having a closer look at the variation in the dependent variable, we find that those claims appear less robust.

¹The author uses two indexes to measure macroprudential policies: (1) A sector-specific capital buffer index (SSCB) taken directly from Cerutti et al. (2017), and (2) a self-created "targeted policy index" (TPI).

Institute for Replication

2 Computational Reproducibility

The author provides clean and concise replication code, which runs smoothly to replicate the primary dataset and produce all relevant figures and tables. Our research team was able to quickly reproduce the paper's results (tables and figures) across different machines and operating systems. We found no coding errors.

3 Robustness Tests

In total, we conduct five robustness tests:

- 1. We replicate the paper's main results (Table 2) with bootstrapped significance.
- 2. We change the main specification, using linear time trends and calendar quarter fixed effects instead of year-quarter fixed effects.
- 3. We deal with missings in control variables, which in the original analysis cause the sample size to drop substantially.
- 4. We measure the second main dependent variable (the Targeted Policy Index) in alternative ways.
- 5. We correct for multiple hypothesis testing (where applicable).

Our headline finding is that the paper's main results are robust to those tests. Table 1 provides a summary of the results of our robustness exercises and allows to compare the author's original estimates with ours. In what follows, we provide more information on the nature of our robustness tests, and refer to the individual results tables in the Online Appendix.

In the author's baseline results (Table 2 of the original paper), the standard errors are calculated by clustering them at the country level. While we agree that this is the appropriate level at which to cluster, the relatively small number of clusters is cause for some concern about asymptotic approximations. Bootstrapping the standard errors via the Wild Cluster Bootstrap is one way to account for this, and doing so did not significantly alter the relevant p-values of these results (see Table A1).

The key specification in the baseline results is the original Table 2 Column (3), yet the choice of this specification was not thoroughly explained. We assess the robustness of main results by estimating alternative specifications. This included substituting a linear time trend and calendar quarter fixed effects for year-quarter fixed effects (robustness test 2), and separately imputing missing values of control variables

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. sector-specific capital buffer index						
Election quarter (t-1)	-0.022	-0.022	-0.021	-0.013		
	(0.010)	(0.010)	(0.010)	(0.008)		
	[0.026]	[0.009]	[0.036]	[0.089]		
Election quarter (t-2)	-0.007	-0.007	-0.007	0.001		
-	(0.020)	(0.020)	(0.020)	(0.014)		
	[0.731]	[0.829]	[0.711]	[0.920]		
Observations	2 279	2 279	2 279	3 248		
Countries	50	50	50	58		
R^2	0.061	0.061	0.036	0.050		
Den variable mean	0.001	0.001	0.000	0.000		
Den variable SD	0.012	0.012	0.012	0.185		
Dep. variable 5D	0.207	0.207	0.207	0.105		
Country FE	Voc	Vos	Voc	_		
Time FE	Voc	Vos	165	Vos		
Basalina Controls	Vos	Vos	Voc	Voc		
Linear Time Trend	165	165	Vos	165		
Calendar Quarter FF			Voc			
Imputed Missing Controls			165	Voc		
Imputed missing Controls				ies		
Panel B. Targeted Policy Index						
Election quarter (t-1)	-0.097	-0.097	-0.089	-0.060	-0.098	-0.056
	(0.023)	(0.023)	(0.023)	(0.025)	(0.025)	(0.020)
	[0.000]	[0.000]	[0.000]	[0.022]	[0.000]	[0.006]
Election quarter (t-2)	-0.043	-0.043	-0.039	-0.033	-0.066	-0.015
	(0.028)	(0.028)	(0.027)	(0.022)	(0.035)	(0.017)
	[0.133]	[0.149]	[0.156]	[0.133]	[0.069]	[0.366]
Observations	2,357	2,357	2,357	3,386	2,357	2,357
Countries	50	50	50	, 58	50	50
R^2	0.078	0.078	0.047	0.073	0.086	0.103
Dep. variable mean	0.029	0.029	0.029	0.030	0.037	-0.036
Dep. variable SD	0.310	0.310	0.310	0.314	0.363	0.186
1						
Country FE	Yes	Yes	Yes	-	Yes	Yes
Time FE	Yes	Yes		Yes	Yes	Yes
Baseline Controls	Yes	Yes	Yes	Yes	Yes	Yes
Linear Time Trend			Yes			
Calendar Quarter FE			Yes			
Imputed Missing Controls				Yes		

Standard errors are clustered at the country level. Column (1) recreates the original Column (3) of Table 2 in Müller (2023). Column (2) replicates with bootstrapped p-values. Column (3) uses an alternative specification in timing controls. Column (4) imputes missing values of control variables. Column (5) uses an intensive definition of the TPI outcome, and Column (6) uses a minimum value definition for the TPI outcome.

for a larger sample size in this specification (robustness test 3). The key results here were robust to all our alternative specifications, returning similar coefficients and significance levels for the key variables of pre-election quarter indicators (see Columns 5 and 6 of Table A2).

The Target Policy Index (TPI), used in the paper as one of two main dependent variables, is constructed by creating a "net change" in policy by summing across different tools. The different tools take values of -1 if they are loosened and 1 if they are tightened in a specific quarter and country (0 if no change). After summing over the tools, a final index is created by restricting values to lie between -1and 1. To assess the robustness of this dependent variable, we recode the final index in two alternative ways. First, we do not restrict the final index to lie between -1 and 1, but instead allow the index to vary in intensity. The results of this exercise are presented in column (2) of Table A3, while column (1) of the same table replicates the original coding. Second, we restrict the final index to focus on loosening of policy by coding the index to have a value of -1 if there is any loosening in any of the tools and zero otherwise. The result of the second exercise is presented in column (3) of Table A3. The original results are robust to both alternative ways of measuring the dependent variable.

Finally, applying multiple hypothesis testing to those results of the original paper's Table 3 did not conclusively alter the interpretation of the overall results pattern (see Table A4). It is necessary to make this adjustment, as the author is effectively testing in one table a substantial number of related hypotheses, the significance of coefficients for nine variables across over a dozen outcomes.

Re-doing the analysis with own data. Going beyond standard robustness tests, we conduct two additional exercises:

- 1. Using no data from the replication package, we recode the paper's main analysis (for the same sample).
- 2. Using our alternative dataset, we extend the covered time-period until 2019, examining the external validity of the results.

We examine if the paper's main results can be qualitatively reproduced using novel data, without relying on the replication package at all. In particular, we use the IMF's integrated Macroprudential Policy (iMaPP) Database, originally constructed by Alam et al. (2019), which builds on Cerutti et al. (2017), but has been consistently updated since (the current iteration is from April 2023). This includes prudential policies for over a hundred countries on a monthly level up until 2021. The coverage does,

however, not completely overlap with the data used by Müller (2023) – therefore we can not use the exact same sample. We combine this with the Database of Political Institutions from 2020 (Scartascini et al., 2021), which is a newer version of the database used by Müller (2023).

We constrained the sample to include exactly the same countries as Müller (2023) and chose the relevant election dates using the exact same procedure. We note that the data would allow for analysis on a monthly level (as both the macroprudential data and the election data is of monthly frequency) but decided not to, given that Müller (2023) performs the analysis using quarterly aggregation.

Given that Müller (2023) uses a host of different sources for control variables, we could not aim for updating all of these with newer versions. Because of this, in this exercise we aimed to replicate Column 2 of Table 2 (the specification that includes country and time fixed effects, but excludes control variables).

We defined three outcome variables: two indices which (to our judgment) best approximate the capital buffer index (CBI) and the targeted policy index (TPI) from Müller (2023), and a third index which incorporates all policy tools from iMaPP and thus does not rely on our personal judgment. The construction of the indices is identical to Müller (2023).²

We estimate the following regression:

$$R_{it} = \alpha_i + \mu_t + \sum_{h=-4}^{4} \beta_h Election_{it} + \epsilon_{it},$$

where R_{it} is the dependent variable of interest: our Targeted Policy Index (TPI), our Capital Buffer Index (CBI), and our combined index ("Combined"), while α_i and μ_t are country and quarter fixed effects, $Election_{it}$ is a dummy indicating that an election happened in country *i* at quarter *t*, and ϵ_{it} is the error term.

Table 2 shows the results. In the odd-numbered of columns we include observations from the same time horizon as Müller (2023), while in the even-numbered columns we extend the sample until 2019. The first two columns show results for the TPI, the next two for CBI, and the last two for the Combined index. As Müller (2023), we only report coefficients from the two quarters preceding the elections. These results are most directly comparable to the original estimates in Column 2 of Table 2. Unlike there, we only find significant effects two quarters before the elections (and not one before), and only in the case of the TPI and the Combined index. The magnitudes are remarkably similar in the case of TPI for the same

²Our CBI includes CCB Conservation Capital Gen "Countercyclical buffers", "Capital conservation buffers", "Capital requirements: General"; Our TPI includes "Loan loss provisions", "Limits on credit growth (Households)", "Loan restrictions: Household sector targeted", "Restrictions on foreign currency loans", "Limits on the loan-to-value ratio", "Tax measures for macroprudential purposes", "Reserve requirements".

time period (-0.047 here against -0.057 there). In line with the comparable specification of the original study, we find no significant effect of the election on CBI. Importantly, however, we find no significant effect on any macroprudential variable once we extend the sample with the period until 2019.

4 Assessing the available Variation

Lastly, we examine alternative stories that would generate the same empirical patterns, but would differ from the main story being told in the original paper. More specifically, we examine the claim of "no inertia". When policymakers restrain from changing policies before elections, this would create a similar empirical pattern. The author, however, argues that inertia in policy decisions is an unlikely explanation because of an asymmetry in the empirical patterns: Policies are less likely to be tightened but not less likely to be loosened before elections. Although we do not provide definitive evidence against that claim, a closer look at the available variation in the dependent variable casts some doubts on the reliability of this statement.

A first look at the *changes* in the first of the indexes, the SSCB, shows that there is very little variation in the quarter before elections. 99.5% of the observations take a value of zero and only 1 (out of 205) observation takes a value of -1 (a loosening of policy). The picture is a bit more nuanced for the TPI index. There are 14 loosenings, 9 tightenings and 193 observations with zero changes in the pre-election quarter. Table 3 lists, for the election quarter and the 4 quarters before and after elections, the number of policies that resulted in a a loosening or tightening of the SSCB and TPI index. The descriptive statistics provide no clear picture that most of the policy-changes were implemented before the elections, suggesting that the effects for the overall index (Table 2 in the original paper) *might* be driven by a lack of policy changes in the quarter before elections. The results for the subcomponents of the SSCB index support this notion: the data shows not a single loosening of regulation in two of the three subcomponents in the quarter before the elections, and the third subcomponent (the real estate capital buffer) reports only one loosening of policy – yet the coefficients for the first quarter when using those subindex components are mostly negative and statistically significant (see Table 3 in the original paper).

5 Conclusion

We subject the main results of Müller (2023) to a series of robustness test. Our main finding is that the results appear to be robust. In addition, the replication code is well organized and allows to successfully

and quickly reproduce the tables and figures in the paper. We also recode the paper's analysis using only self-collected data. Using a similar, but not the identical outcome variable, we are able to produce results that are close to the paper's original estimates. This data also allows us to extend the sample by five years. We show that the results seem to vanish when extending the covered sample period. Lastly, we show suggestive evidence that the dependent variable offers rather limited variation. Patterns in the changes of the outcome variable are not conclusive to fully rule out inertia as an alternative driver of the results.

	ТРІ		Buffer		All	
	(1)	(2)	(3)	(4)	(5)	(6)
q_f1	0.007	0.013	0.007	-0.000	0.004	0.002
	(0.843)	(0.655)	(0.591)	(0.986)	(0.914)	(0.960)
q_f2	-0.047	-0.033	-0.001	-0.006	-0.061	-0.029
	(0.069)*	(0.183)	(0.912)	(0.585)	$(0.027)^{**}$	(0.291)
Sample	2000-2014	2000-2019	2000-2014	2000-2019	2000-2014	2000-2019
r2	0.087	0.082	0.087	0.254	0.107	0.155
Observations	3480	4640	3480	4640	3480	4640

Notes: The table shows the replication of Column 2 of Table 2 in Müller (2023) using iMaPP data. The dependent variables are our versions of the Targeted Policy Index (Columns 1-2), Capital Buffer Indices (Columns 3-4), and an index that combines all macroprudential variables from iMaPP (Columns 5-6). The regressions include country and quarter fixed effects. Odd-numbered columns use the same time frame as Müller (2023), while even-numbered column extend it by an additional 5 years (ending in 2019). Standard errors are clustered at the country level, p-values are shown in parenthesis.

Loosenings	Tightenings	No change
0	3	206
0	2	207
1	4	202
1	0	204
0	6	201
2	6	206
3	5	203
0	3	211
1	2	210
4	17	194
6	15	194
9	8	197
14	9	193
6	14	199
7	15	198
8	19	193
4	14	203
14	10	195
	Loosenings 0 0 1 1 0 2 3 0 1 4 6 9 14 6 7 8 4 14	LooseningsTightenings030214100626350312417615981496147158194141410

Table 3: Descriptive statistics of the available variation

The table lists the number of policies that tightened or loosened regulation policy in the estimation sample.

References

- Alam, Z., Alter, A., Eiseman, J., Gelos, G., Kang, H., Narita, M., Nier, E. and Wang, N.: 2019, Digging deeper—evidence on the effects of macroprudential policies from a new database, *Journal of Money*, *Credit and Banking*.
- Cerutti, E., Correa, R., Fiorentino, E. and Segalla, E.: 2017, Changes in prudential policy instruments-a new cross-country database, *International Journal of Central Banking* **13**(2), 477–503.
- Müller, K.: 2023, Electoral cycles in macroprudential regulation, *American Economic Journal: Economic Policy* **15**(4), 295–322.

Scartascini, C., Cruz, C. and Keefer, P.: 2021, The database of political institutions 2020 (dpi2020).

()			11	0
	(1)	(2)	(3)	(4)
Panel A. sector-specific capital buffer index				
Election quarter (t-1)	-0.014	-0.012	-0.022	-0.024
	(0.007)	(0.007)	(0.010)	(0.011)
Original p-value	[0.042]	[0.099]	[0.026]	[0.028]
Bootstrapped p-value	[0.023]	[0.077]	[0.009]	[0.010]
Election quarter (t-2)	0.001	0.002	-0.007	-0.007
• • • •	(0.016)	(0.014)	(0.020)	(0.021)
Original p-value	[0.949]	[0.903]	[0.731]	[0.739]
Bootstrapped p-value	[0.959]	[0.938]	[0.829]	[0.849]
Observations	3,248	3,248	2,279	2,268
Countries	58	58	50	50
R^2	0.002	0.040	0.061	0.117
Country FE		Yes	Yes	-
Country by Election cycle FE				Yes
Time FE		Yes	Yes	Yes
Baseline controls			Yes	Yes
Panel B. Targeted Policy Index				
Election quarter (t-1)	-0.059	-0.057	-0.097	-0.092
-	(0.024)	(0.025)	(0.023)	(0.022)
Original p-value	[0.017]	[0.028]	[0.000]	[0.000]
Bootstrapped p-value	[0.009]	[0.025]	[0.000]	[0.000]
Election quarter (t-2)	-0.040	-0.034	-0.043	-0.037
-	(0.022)	(0.021)	(0.028)	(0.027)
Original p-value	[0.081]	[0.118]	[0.133]	[0.168]
Bootstrapped p-value	[0.100]	[0.113]	[0.149]	[0.174]
Observations	3,386	3,386	2,357	2,347
Countries	58	58	50	50
R^2	0.005	0.060	0.078	0.157
Country FE		Yes	Yes	-
Country by Election cycle FE				Yes
Time FE		Yes	Yes	Yes
Baseline controls			Yes	Yes

Table A1: Müller	(2023)	Table 2 - Baseline Results - Bootstrap	ped Significance
INDICITIES INTOLICE		Tuble - Dubenne Rebuild Doolburg	ped orginiteditee

Parentheses contain p-values bootstrapped using the wild cluster bootstrap method, clustering at the country level.

	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. sector-specific capital buffer index						
Election quarter (t-1)	-0.014	-0.012	-0.022	-0.024	-0.021	-0.013
	(0.007)	(0.007)	(0.010)	(0.011)	(0.010)	(0.008)
	[0.042]	[0.099]	[0.026]	[0.028]	[0.036]	[0.089]
Election quarter (t-2)	0.001	0.002	-0.007	-0.007	-0.007	0.001
	(0.016)	(0.014)	(0.020)	(0.021)	(0.020)	(0.014)
	[0.949]	[0.903]	[0.731]	[0.739]	[0.711]	[0.920]
Observations	3,248	3,248	2,279	2,268	2,279	3,248
Countries	58	58	50	50	50	58
R^2	0.002	0.040	0.061	0.117	0.036	0.050
Country FE		Yes	Yes	-	Yes	Yes
Country by Election cycle FE				Yes		
Time FE		Yes	Yes	Yes		Yes
Baseline controls			Yes	Yes	Yes	Yes
Linear Time Trend					Yes	
Calendar Quarter FE					Yes	
Panel B. Targeted Policy Index						
Election quarter (t-1)	-0.059	-0.057	-0.097	-0.092	-0.089	-0.060
	(0.024)	(0.025)	(0.023)	(0.022)	(0.023)	(0.025)
	[0.017]	[0.028]	[0.000]	[0.000]	[0.000]	[0.022]
Election quarter (t-2)	-0.040	-0.034	-0.043	-0.037	-0.039	-0.033
	(0.022)	(0.021)	(0.028)	(0.027)	(0.027)	(0.022)
	[0.081]	[0.118]	[0.133]	[0.168]	[0.156]	[0.133]
Observations	3,386	3,386	2,357	2,347	2,357	3,386
Countries	58	58	50	50	50	58
R^2	0.005	0.060	0.078	0.157	0.047	0.073
Country FE		Yes	Yes	-	Yes	Yes
Country by Election cycle FE				Yes		
Time FE		Yes	Yes	Yes		Yes
Baseline controls			Yes	Yes	Yes	Yes
Linear Time Trend					Yes	
Calendar Quarter FE					Yes	

Table A2: Müller (2023) Table 2 - Baseline Results - Additional Specifications

Standard errors are clustered at the country level. The first four columns replicate the original table, while the new specification in Column (5) uses a linear time trend and calendar quarter fixed effects instead of time fixed effects. The new specification in Column (6) imputes all missing values of control variables as the value -99, and includes dummy variables indicating whether each observation is missing each variable.

	(1)	(2)	(3)
Panel B. Targeted Policy Index			
Election quarter (t-1)	-0.097	-0.098	-0.056
-	(0.023)	(0.025)	(0.020)
	[0.000]	[0.000]	[0.006]
Election quarter (t-2)	-0.043	-0.066	-0.015
	(0.028)	(0.035)	(0.017)
	[0.133]	[0.069]	[0.366]
Observations	2,357	2,357	2,357
Countries	50	50	50
R^2	0.078	0.086	0.103
Dep. variable mean	0.029	0.037	-0.036
Dep. variable SD	0.310	0.363	0.186
Country FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes
Baseline controls	Yes	Yes	Yes

 Table A3: Müller (2023) Table 2 - Baseline Results - Alternative Outcome Specifications

Standard errors are clustered at the country level. All columns use the specification of Müller (2023) Table 2, Column (3). Here, Column (1) reports the original estimate, Column (2) recodes the outcome with greater intensity variation, and Column (3) uses a recoded binary outcome for any loosening.

Table A4: Müller (2023) Table 3	Tightening Panel	- Regression by Tool ·	- Multiple Hypothesis	Testing
---------------------------------	------------------	------------------------	-----------------------	---------

	sscb_res	sscb_cons	sscb_oth	LTV	DSTI	TAX	CONC	PROV	RW_oth	cap_req	ibex	rr_local	rr_foreign
f1eq	-0.013	-0.001	-0.006	0.006	-0.005	-0.000	-0.030	-0.014	-0.007	0.013	-0.035	0.000	-0.014
	(0.005)	(0.002)	(0.003)	(0.010)	(0.002)	(0.011)	(0.008)	(0.007)	(0.004)	(0.014)	(0.015)	(0.017)	(0.006)
	[0.040]	[0.693]	[0.099]	[0.554]	[0.059]	[0.990]	[0.009]	[0.089]	[0.049]	[0.287]	[0.059]	[0.980]	[0.089]
f2eq	0.008	-0.001	-0.005	-0.011	-0.006	-0.007	-0.013	-0.020	0.015	0.001	-0.021	0.031	-0.002
	(0.010)	(0.001)	(0.002)	(0.003)	(0.003)	(0.009)	(0.010)	(0.009)	(0.012)	(0.013)	(0.010)	(0.021)	(0.012)
	[0.485]	[0.307]	[0.138]	[0.019]	[0.198]	[0.445]	[0.247]	[0.069]	[0.327]	[0.940]	[0.039]	[0.138]	[0.881]
f3eq	-0.008	-0.002	-0.007	0.002	-0.007	-0.000	-0.010	-0.005	-0.002	-0.003	-0.000	0.017	-0.009
	(0.007)	(0.002)	(0.004)	(0.010)	(0.004)	(0.010)	(0.010)	(0.013)	(0.007)	(0.011)	(0.032)	(0.016)	(0.009)
	[0.198]	[0.387]	[0.118]	[0.812]	[0.198]	[0.990]	[0.386]	[0.762]	[0.831]	[0.851]	[0.999]	[0.287]	[0.396]
f4eq	0.006	-0.002	-0.006	0.021	0.017	-0.004	-0.012	0.004	0.021	0.004	-0.030	0.003	-0.003
	(0.013)	(0.002)	(0.003)	(0.013)	(0.011)	(0.008)	(0.011)	(0.013)	(0.015)	(0.011)	(0.013)	(0.012)	(0.014)
	[0.604]	[0.208]	[0.089]	[0.118]	[0.237]	[0.733]	[0.297]	[0.683]	[0.287]	[0.712]	[0.069]	[0.861]	[0.831]
eq	-0.007	0.006	0.001	-0.001	0.009	0.001	0.002	-0.016	-0.000	0.004	-0.014	0.028	0.009
	(0.007)	(0.008)	(0.006)	(0.008)	(0.010)	(0.010)	(0.015)	(0.007)	(0.008)	(0.011)	(0.009)	(0.020)	(0.011)
	[0.287]	[0.535]	[0.811]	[0.901]	[0.376]	[0.911]	[0.940]	[0.049]	[0.960]	[0.762]	[0.188]	[0.128]	[0.485]
l1eq	0.021	-0.000	0.008	0.005	0.004	0.012	-0.018	0.009	0.013	-0.000	-0.025	-0.014	-0.010
	(0.015)	(0.002)	(0.008)	(0.010)	(0.006)	(0.013)	(0.009)	(0.015)	(0.012)	(0.016)	(0.011)	(0.012)	(0.016)
	[0.218]	[0.831]	[0.356]	[0.574]	[0.633]	[0.386]	[0.089]	[0.623]	[0.237]	[0.990]	[0.079]	[0.316]	[0.524]
l2eq	0.004	0.005	0.008	0.019	0.014	0.020	0.012	0.005	-0.004	0.000	0.005	-0.017	-0.027
	(0.010)	(0.007)	(0.009)	(0.015)	(0.011)	(0.015)	(0.017)	(0.014)	(0.005)	(0.011)	(0.029)	(0.011)	(0.012)
	[0.733]	[0.525]	[0.376]	[0.148]	[0.267]	[0.257]	[0.445]	[0.693]	[0.564]	[0.999]	[0.901]	[0.158]	[0.079]
13eq	-0.004	0.005	-0.006	-0.007	-0.005	0.013	-0.023	0.002	0.010	-0.013	-0.039	-0.013	-0.010
	(0.009)	(0.007)	(0.003)	(0.003)	(0.003)	(0.013)	(0.006)	(0.012)	(0.012)	(0.008)	(0.018)	(0.015)	(0.014)
	[0.703]	[0.545]	[0.138]	[0.039]	[0.099]	[0.317]	[0.009]	[0.841]	[0.376]	[0.138]	[0.069]	[0.524]	[0.524]
l4eq	-0.002	0.006	-0.004	0.006	0.003	-0.000	-0.009	-0.012	0.009	0.007	-0.003	0.023	-0.009
	(0.008)	(0.008)	(0.002)	(0.010)	(0.007)	(0.008)	(0.011)	(0.009)	(0.010)	(0.010)	(0.024)	(0.018)	(0.010)
	[0.772]	[0.505]	[0.099]	[0.713]	[0.722]	[0.999]	[0.485]	[0.158]	[0.415]	[0.584]	[0.881]	[0.237]	[0.386]

Standard errors are clustered at the country level. P-values are calculated using the Romano-Wolf multiple hypothesis testing correction.

Tuble field (2020) fuble o Ecosetting Fuller Regression by foor manufic Hypothesis resting													
	sscb_res	sscb_cons	sscb_oth	LTV	DSTI	TAX	CONC	PROV	RW_oth	cap_req	ibex	rr_local	rr_foreign
f1eq	0.004	-0.001	-0.001	0.004	-0.001	0.034	0.016	-0.002	0.011	0.000	-0.004	0.018	-0.004
	(0.007)	(0.001)	(0.001)	(0.008)	(0.001)	(0.015)	(0.011)	(0.003)	(0.010)	(.)	(0.005)	(0.020)	(0.011)
	[0.713]	[0.327]	[0.614]	[0.703]	[0.662]	[0.039]	[0.257]	[0.425]	[0.336]	[.]	[0.158]	[0.415]	[0.663]
f2eq	0.003	0.000	0.006	0.010	0.007	-0.005	0.014	0.011	-0.003	0.000	-0.003	0.015	-0.001
	(0.007)	(0.000)	(0.008)	(0.011)	(0.008)	(0.008)	(0.012)	(0.009)	(0.003)	(.)	(0.003)	(0.018)	(0.003)
	[0.654]	[0.227]	[0.426]	[0.435]	[0.327]	[0.643]	[0.287]	[0.277]	[0.287]	[.]	[0.118]	[0.366]	[0.613]
f3eq	-0.006	-0.000	-0.003	0.008	-0.001	0.008	0.005	-0.004	-0.005	0.000	-0.004	-0.004	-0.005
	(0.003)	(0.001)	(0.002)	(0.010)	(0.001)	(0.018)	(0.009)	(0.003)	(0.003)	(.)	(0.004)	(0.020)	(0.012)
	[0.119]	[0.703]	[0.247]	[0.475]	[0.217]	[0.752]	[0.663]	[0.336]	[0.089]	[.]	[0.128]	[0.881]	[0.762]
f4eq	-0.003	-0.000	-0.002	-0.004	-0.001	-0.011	0.005	-0.004	-0.003	0.000	-0.002	-0.020	-0.010
	(0.002)	(0.000)	(0.002)	(0.002)	(0.001)	(0.005)	(0.009)	(0.004)	(0.002)	(.)	(0.002)	(0.012)	(0.009)
	[0.257]	[0.673]	[0.396]	[0.049]	[0.198]	[0.039]	[0.594]	[0.455]	[0.207]	[.]	[0.237]	[0.128]	[0.336]
eq	-0.002	0.000	-0.001	0.002	-0.001	0.012	-0.000	-0.003	-0.003	0.000	-0.004	-0.012	-0.007
	(0.002)	(0.001)	(0.001)	(0.008)	(0.001)	(0.012)	(0.002)	(0.003)	(0.002)	(.)	(0.003)	(0.015)	(0.009)
	[0.178]	[0.762]	[0.336]	[0.752]	[0.327]	[0.356]	[0.920]	[0.396]	[0.069]	[.]	[0.099]	[0.396]	[0.514]
l1eq	0.009	0.006	0.005	-0.005	-0.002	-0.000	0.013	-0.002	0.015	0.000	-0.003	0.004	0.010
	(0.008)	(0.006)	(0.007)	(0.003)	(0.001)	(0.011)	(0.010)	(0.003)	(0.012)	(.)	(0.003)	(0.016)	(0.010)
	[0.317]	[0.326]	[0.544]	[0.089]	[0.099]	[0.990]	[0.207]	[0.445]	[0.307]	[.]	[0.069]	[0.814]	[0.366]
l2eq	0.010	0.007	0.005	-0.005	-0.001	0.015	0.011	-0.003	0.003	0.000	-0.005	-0.014	0.009
	(0.009)	(0.007)	(0.005)	(0.004)	(0.001)	(0.011)	(0.009)	(0.004)	(0.007)	(.)	(0.005)	(0.019)	(0.013)
	[0.337]	[0.307]	[0.346]	[0.227]	[0.307]	[0.297]	[0.247]	[0.505]	[0.712]	[.]	[0.099]	[0.554]	[0.505]
13eq	-0.005	0.000	-0.001	-0.006	-0.001	-0.003	-0.002	0.004	-0.005	0.000	-0.004	0.004	0.007
	(0.003)	(0.000)	(0.002)	(0.003)	(0.001)	(0.007)	(0.003)	(0.007)	(0.003)	(.)	(0.004)	(0.016)	(0.009)
	[0.257]	[0.485]	[0.356]	[0.069]	[0.247]	[0.762]	[0.534]	[0.554]	[0.148]	[.]	[0.089]	[0.811]	[0.485]
l4eq	0.001	-0.000	-0.003	-0.005	-0.001	0.014	0.012	0.004	0.008	0.000	-0.004	-0.015	0.012
	(0.007)	(0.000)	(0.002)	(0.003)	(0.001)	(0.013)	(0.010)	(0.007)	(0.010)	(.)	(0.003)	(0.015)	(0.013)
	[0.931]	[0.812]	[0.307]	[0.089]	[0.188]	[0.327]	[0.237]	[0.673]	[0.445]	[.]	[0.029]	[0.316]	[0.415]

Table A5: Müller (2023) Table 3 Loosening Panel - Regression by Tool - Multiple Hypothesis Testing

Standard errors are clustered at the country level. P-values are calculated using the Romano-Wolf multiple hypothesis testing correction.