Coalition trimming in spiraling economies: Evidence from the fall of Venezuela's Oil Czar [*]

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Abstract

Do leaders court or cut the entourage of sidelined elites during economic crises? We look at the case of Rafael Ramirez, Venezuela's former Oil Czar, who was purged from Chavismo's Cabinet in late 2014. We find that Ramirez-affiliated individuals and firms became discretely less likely to receive government appointments and contracts upon his purge. Effects on appointments are greatest for high-spending agencies, and firms affiliated with the military and with Nicolas Maduro gained access to government contracts. Downstream agents seem to share the fortunes of their patrons after coalition-shaping policies induced by worsening economic conditions.

1 Introduction

How do leaders of hybrid or autocratic regimes distribute rents during economic collapses? Selectorate Theory (De Mesquita et al., 2005, 1999) argues that in the context of dwindling resources and growing grievances, leaders of systems with small winning coalitions should reallocate private goods to retain the loyalty of a few "essentials." Once coalition-shaping policies have been made, leaders have a choice on how to treat sidelined elites' support base: while courting them minimizes the short-term destabilizing potential of a purge, doing so requires resources that could be saved or used to satisfy essential groups.

In this paper, we provide original empirical evidence about the fortunes of economic agents affiliated to a sidelined elite in a hybrid regime facing economic duress. We focus on the case of Rafael Ramirez, Venezuela's Oil Czar during the oil boom years between 2004 and 2014. Upon Chavez's death and with the economy in a tailspin, Nicolas Maduro decided to remove Ramirez from the Cabinet. We take data on government appointments from Venezuela's *Gacetas Oficiales* and on public contracts from Venezuela's *Registro Nacional de Contratistas* to evaluate whether benefits for individuals and firms in Ramirez's orbit were affected after his purge. We measure individuals and firms' affiliations to Ramirez by whether they were appointed to or received contracts from PDVSA (Venezuela's National Oil Company) or the Ministry of Energy between 2007 and 2010 - a baseline period of relative political stability for the Chavista government.

We implement a regression discontinuity methodology considering the number of days before Ramirez was sidelined from the energy sector in September and after he was removed from the Cabinet in late December, removing the transition period from the sample. Moreover, we restrict our analysis to appointments and contracts outside the energy sector. Our results suggest that Ramirez-affiliated individuals lost complete access to government appointments, while affiliated firms lost about 50% of their access to government contracts. The observed effects on government appointments seem to concentrate on high-budget agencies. Moreover, we find evidence that firms affiliated with the military and with Nicolas

Maduro benefited from additional contracts upon Ramirez's purge.

The paper continues as follows: first, we discuss the theoretical framework and scope of our study. Second, we introduce Ramirez's rise and fall within the Chavista coalition. Third, we describe our data sources and measurements of elite networks. Fourth, we introduce our empirical methodology. Fifth, we present our empirical results for both government appointments and public contracts. Finally, we provide conclusions of our study.

2   Scope of study and theoretical framework

We examine the downstream consequences of purges as a maneuver leaders in hybrid and authoritarian settings make to retain power during economic downturns. The literature on authoritarian rule (Svolik, 2012) highlights two problems these regimes face: (1) power-sharing and (2) control over those who are ruled. With regards to the former, Bueno de Mesquita and Smith (2017) describe the conditions under which political threats are pertinent and counter maneuvers are possible. These include purges, which can be modeled as contractions to the winning coalition. Moreover, Acemoglu, Egorov and Sonin (2008) examine the formation of ruling coalitions in dictatorships, where institutions do not enable political commitments. They emphasize that coalitions: (1) have to contain enough powerful members to defeat any alternative coalition that may oppose it, and (2) need to be self-enforcing, meaning that none of the subcoalitions can secede and become the new ruling coalition. Their results can help explain the purges that occurred in Stalin's Politburo as ruling coalitions were reconfigured. Similarly, we believe Maduro's regime-shaping choices -such as that of purging Ramirez from Venezuela's cabinet- follow a similar rationale.

Once choices are made at the elite level, leaders need to decide what to do about purged elites' base of supporters. Papers on "coup-proofing" (Belkin and Schofer, 2003; Quinlivan, 1999; Roessler, 2011) argue that when facing mounting threats, autocratic rulers engage in actions to erode the capabilities of potential rival elites. One way to do this is by engaging

with subordinates affiliated to rival elites. Svolik (2009) develops a power-sharing model between the dictator and ruling coalition in authoritarian regimes. In this model, authoritarian leaders want to reduce the size of the ruling coalition, but subordinates use the threat of a coup to deter purges.

How should leaders treat these subordinates? Montagnes and Wolton (2019) present a formal theory on the rationale behind mass purges in autocratic regimes. They argue that purges are a tool for autocratic leaders to keep their subordinates in check. By removing swaths of officials, an autocrat can reinforce the credibility of their threats and maintain control over the remaining subordinates. This would suggest that once a faction leader is chosen to be sidelined from a government coalition, it also follows that their affiliates are cut from government benefits. Goldring and Matthews (2023) argue that dictators are more likely to purge "first-generation elites" who are part of the inner circle upon the regime's establishment, and who hold important linkages to other destabilizing elites. From this perspective, the choice of purging Ramirez should not necessarily extend to affiliated subordinates. Moreover, distributing benefits towards them might be a way to "pull the rug" of support under Ramirez at a time in which the move to sideline him might be highly destabilizing. Ultimately, we perform an empirical exercise to identify which of these two rationales dominated in the context of Venezuela in late 2014, which is characterized as a hybrid regime facing worsening economic conditions.

3   The rise and fall of Ramirez as Venezuela's Oil Czar

Rafael Ramírez was the longest-serving cabinet member during the government of Hugo Chávez. He was first appointed to the Ministry of Energy in 2002 and oversaw the oil sector during the opposition's oil strike against Chávez. Upon retaking control over the industry, Chávez appointed Ramirez as President of PDVSA, holding both ministerial and corporate roles for 10 years (2004-2014). From this position, he oversaw the accrual and disbursement

of hundreds of billions of dollars during a long boom in oil prices (Figueroa and Camacho, 2021). He was considered as a possible successor to Chávez during his illness (El Pais, 2011) although Nicolás Maduro prevailed. To understand better the power structure in Venezuela, Garay-Salamanca and Salcedo-Albarán (2021) mapped out the network of corruption in the Venezuelan regime and found that Ramirez was among the top ten agents with highest betweenness centrality in this network. His centrality was even larger than that of Diosdado Cabello, another key figure in Chavismo who was also considered as a possible successor to Chavez. The country's economy started to contract in late 2013, soon after Chavez's death. Nicolás Maduro appointed Ramírez as Economic Vice-President, and from this position, he pushed for a number of economic liberalization reforms (Reuters, 2014). These reforms, however, were met with the opposition of other regime insiders that rejected the reforms on ideological and political grounds (Scharfenberg, 2014). As the economic crisis worsened and oil prices started to dwindle, Maduro finally sided with the radicals. On September 02 of 2014, Ramírez was removed from his role as Minister of Energy, President of PDVSA and Economic Vice-President, and was placed as Minister of Foreign Affairs (Martí, 2014). Soon after, on December 26, Ramírez was removed from Venezuela's Cabinet, and was appointed as UN Ambassador in NYC (La Información, 2014). This choice did away with the possibility of deep economic reforms (AFP News, 2014). He was later scapegoated by the regime for the unraveling economic situation in the country (Transparencia Venezuela, 2018).

4 Data sources and measures of political connections to Ramirez and Maduro

The Venezuelan *"Gaceta Oficial"* (GO) is the official publication of the Venezuelan government. It is used as a legal instrument to disseminate government official communications. Vendata, a Venezuelan NGO working on transparency and access to public information, digitized the decisions published in all the GO releases between 2007 and 2016. This dataset

has information on all official appointments to the national government, identifying the appointment date, the name and National Identification Number (NIN) of the appointee, and the appointment agency and position.[1]

The Venezuelan *"Registro Nacional de Contratistas"* (RNC) is an official database listing all entities and individuals legally authorized to engage in contractual relations with public sector agencies to provide goods, services, and works. The RNC system provides information on all firms engaging in public contracts with the government, including their fiscal code and the NIN of individual members of their boards. Moreover, the RNC system publishes government service contracts, specifying the providers' fiscal ID, procuring agency and contract start date. We were able to scrape both the firm level and contract level datasets from the website of the *Servicio Nacional de Contrataciones* (National Contracting System).[2]

We leverage the fact that both Rafael Ramirez and Nicolas Maduro were, respectively, Ministers of Energy and Foreign Affairs during the late 2000s to measure individuals and firms' affiliations to each of them. More specifically, we say that an individual (firm) was affiliated with Ramirez or Maduro if they were appointed to (received a service contract from) the Ministry of Energy or the Ministry of Foreign Affairs between 2007 and 2010. Moreover, we have digitized and cleaned data on all graduates of the military academies of Venezuela since the 1900s. The specific details on how we digitized and cleaned this data is on Appendix Section A. We are able to match military officials to the GO appointments and contracts by their individual NIN.

As a final step, we measure the relative importance of different agencies within the government by linking the appointment data to the share of the public government budget allocated to that agency. Importantly, we consider agencies to be "high-budget" if they individually account for over 3% of the public budget.[3] Appendix Tables B.1 and B.2

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[1]The text of these gazettes can be found here: Tribunal Supremo de Justicia (2024)

[2]The website of the national procurement agency can be found here: Gobierno Bolivariano de Venezuela (2024); however, the data is not publicly available anymore.

[3]This threshold marks the smallest set of agencies covering approximately 50% of the government budget. These government agencies are the ministries of (1) Education, (2) Higher Education, Science and Technology, (3) Defense, (4) Economy and Finance, (5) Labor and Social Security, (6) Planning, (7) Health, and (8)

provide key summary statistics between 2007 and 2016 for the GO appointments data and between 2000 to 2016 for the RNC contracts data.

5 Methodology

We start our analysis by describing the proportion of appointments and contracts accruing to Ramirez affiliates before and after his purge from Venezuela's cabinet. Panels A and B of Figure 1 show the proportion of government appointments affiliated with Ramirez's network. While Panel A provides yearly aggregates, Panel B provides a LOESS fit of the *Gaceta*-specific proportion of Ramirez-affiliated appointments around Ramirez's purge. Similarly, Panels C and D provide yearly values of the proportion of contracts given to Ramirez-affiliated firms and a LOESS fit of this same proportion.

These findings suggest that Ramirez-affiliated individuals and firms lost access to government appointments and public contracts upon his purge. To estimate this effect through formal statistical tests, we perform regression-discontinuity specifications to evaluate whether the proportion of government appointments or public contracts assigned to Ramirez-affiliated agents changes discretely after his purge from the Cabinet. As discussed above, there was a three-month period between the moment he was removed from economic and energy positions and when he was removed from the Cabinet altogether. To address this, we exclude the transition period from our analyses. Moreover, we're interested in access to benefits for Ramirez-affiliated agents outside of Ramirez's direct purview under the Energy or the Foreign Affairs portfolios. For this reason, we exclude appointments or contracts with the Ministry of Energy, PDVSA, and the Ministry of Foreign Affairs. We perform the following specification on the resulting dataset:

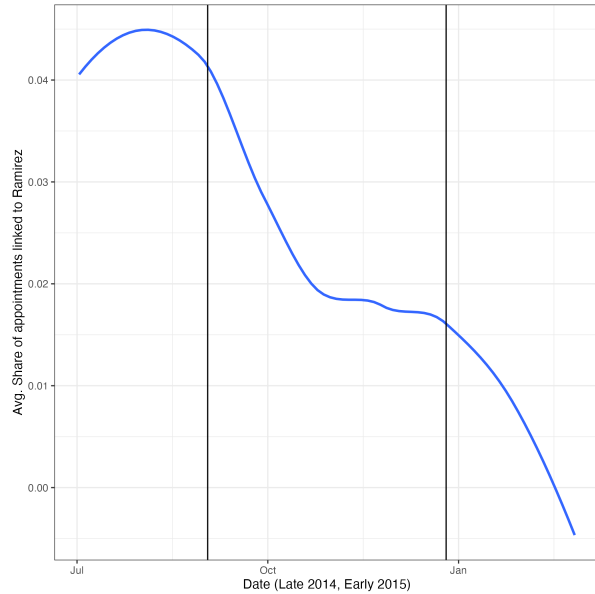$$R_i = \beta_0 + \beta_1 P_i + \beta_2 D_i + \beta_3 P_i * D_i + \epsilon_i \tag{1}$$

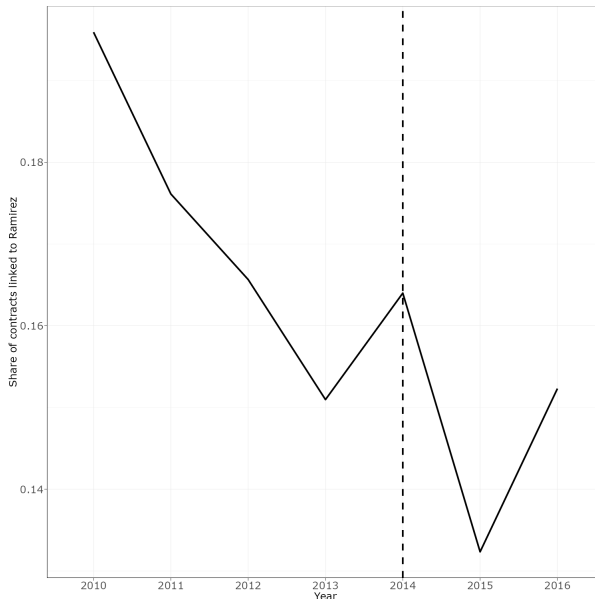Internal Relations, Justice and Peace.

Figure 1: Appointments and contracts for Ramirez-affiliated individuals and firms
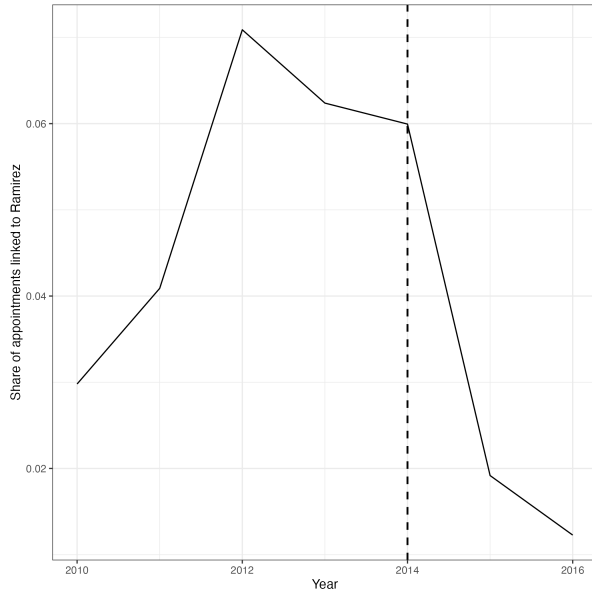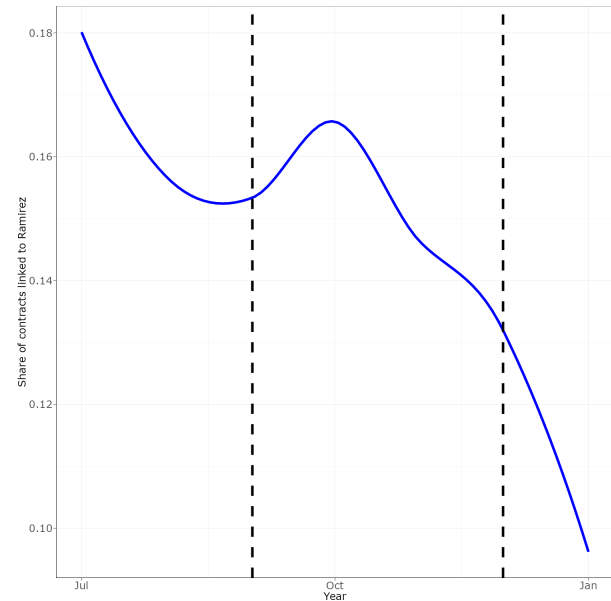

(a) Appointments - Yearly proportions

(b) Appointments - Gacetas LOESS fit

(c) Contracts - Yearly proportions

(d) Contracts - Date LOESS fit

Note: Figure shows the proportion of Ramirez affiliated appointments and contracts at different points in time. Panel A provides the yearly proportion of appointments affiliated to Ramirez between 2010 and 2016. Panel B shows a LOESS fit of the Gaceta-specific proportions of Ramirez-affiliated individuals around the time of his purge from Venezuela's Cabinet. Panel C shows the yearly proportion of service contracts going to firms affiliated with Ramirez. Panel D shows a LOESS fit of whether a contract went to a firm affiliated with Ramirez during the period around his purge from Venezuela's Cabinet.

Where R_i is a binary marker of whether appointment or contract i is with an individual or a firm affiliated with Ramirez, D_i is the number of days between the appointment or contract i and the purge of Ramirez[4], and P_i indicates whether the appointment or contract was assigned after Ramirez's purge. β_1 is the estimate of interest.

In performing our regression discontinuity specifications, we determine the optimal bandwidth using the methodology of Calonico, Cattaneo and Farrell (2020). We show that our specifications are robust to using broader and narrower bandwidths than the optimal range selected by the methodology. Moreover, we show that conclusions are robust to using quadratic and cubic controls around the polynomial. Finally, we test whether results align with our hypothesis are replicated if we perform our regression discontinuity exercises outside the timing of Ramirez's purge. Finally, we perform manipulation tests to assess whether the number of appointments or contracts disbursed changes discretely at the discontinuity.

6   Results

Appointments

Figure B.1 provides visual evidence that there is no discontinuous change in the number of appointments made by the Venezuelan government right before or after Ramirez's purge. Figure 2 shows that the average GO before Ramirez's purge would assign about 3% of its appointments to individuals in his network. However, this number went essentially to 0% right after Ramirez was removed from the Cabinet. Column 1 of Table 1 confirms the statistical significance of these findings and their robustness to alternative specifications regarding bandwidths (Columns 2 and 3) and polynomial controls around the discontinuity (Columns 4 and 5).[5] Importantly, Columns 6 and 7 show that moving the discontinuity by

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[4]Since we are removing the transition period, D_i will be negative if the appointment or contract was signed before September 02 of 2014, and positive if it was signed after December 26 of 2014.

[5]A known feature of linear probability models on binary outcomes like the ones performed in this exercise is that they may produce projections outside the sensible 0-1 probability range. For instance, some of our estimates of the percentage point effect of Ramirez's purge are greater than the projected share of

a month and a half (one optimal bandwidth) in either direction fails to reproduce the same

negative effects observed specifically at the timing of Ramirez's purge.

Figure 2: Ramirez-affiliated appointments around purge
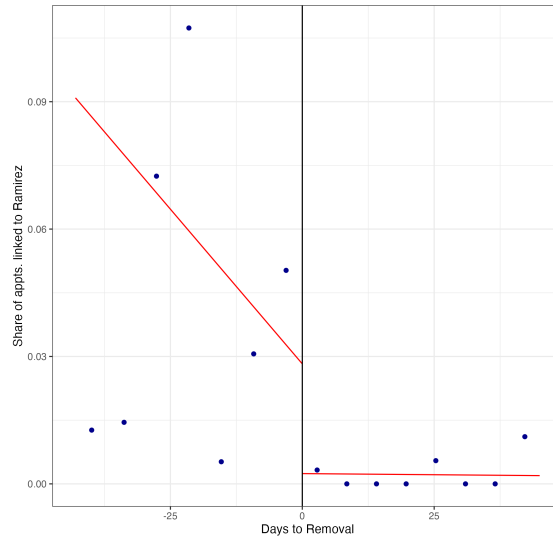
Note: Figure shows a binscatter the proportion of Ramirez affiliated appointments in Gacetas published days before his sidelining from energy responsibilities, and days after his purge from the Cabinet. Red lines capture linear predictions of the proportion of appointments affiliated with Ramirez around this transition.

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appointments right before the discontinuity. This means that projections right after the discontinuity signal values below 0. The main message of the result, however, is that appointments of Ramirez affiliates essentially disappeared with his purge.

Table 1: Discontinuity in Ramirez-affiliated appointments

	Appointment of Ramirez affiliates						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Purge	-0.029***	-0.026*	-0.040***	-0.036***	-0.103***	0.050***	0.000
	(0.011)	(0.014)	(0.009)	(0.013)	(0.013)	(0.010)	(0.007)
Obs (before)	1603	937	2437	2663	4795	2161	1574
Obs (after)	1638	845	2113	2295	3921	1763	1163
Cutoff	0	0	0	0	0	-45	45
Polynomial	1	1	1	2	3	1	1
Bandwidth	45	25	65	71	127	45	45
Value at Threshold	0.025	0.061	0.034	0.045	0.116	0.050	0.006
% Effect	-116.89	-41.62	-118.84	-80.55	-89.13	98.51	1.25

Note: Table shows regression discontinuity estimates of the effect of Ramirez's purge on the proportion of Ramirez-affiliated appointments. Column 1 provides a linear RDD specification using the bandwidth proposed in Calonico, Cattaneo and Farrell (2020). Columns 2 and 3 reduce and expand that bandwidth by 20 days, respectively. Columns 4 and 5 provide RDD specifications with quadratic an cubic polynomial controls, respectively. Columns 6 and 7 provide placebo linear RDD specifications in which the cutoff period is moved one bandwidth before or after the transition period, respectively. * p < 0.1, ** p < 0.05, *** p < 0.01

Table 2 explores whether there are differences in the observed effects for high-budget government agencies or high-level positions within those agencies. Column 1 replicates the main specification in Table 1, while Columns 2 and 3 separate the data sample between "high-budget" and "low-budget" agencies, finding larger effects for high-budget agencies. Finally, Columns 4 and 5 separate high-level and low-level positions within agencies. While abolute effects are greater for low-level positions, the relative size of both effects is similar.

Table 2: Effects of purge by type of appointment

	Appointment of Ramirez affiliates				
	All	High Imp.	Low Imp.	High Pos.	Low Pos.
Purge	-0.029***	-0.117***	-0.021***	-0.008*	-0.063***
	(0.011)	(0.014)	(0.008)	(0.005)	(0.023)
Obs (before)	1603	378	2301	2477	829
Obs (after)	1638	328	2009	2734	716
Cutoff	0	0	0	0	0
Polynomial	1	1	1	1	1
Bandwidth	45	68	74	145	41
Value at Threshold	0.025	0.114	0.026	0.010	0.074
% Effect	-116.89	-102.99	-80.93	-80.15	-85.07

Note: Table shows linear regression discontinuity estimates of the effect of Ramirez's purge on the proportion of Ramirez-affiliated appointments for different sub-samples of the data. Column 1 provides a linear RDD specification using the bandwidth proposed in Calonico, Cattaneo and Farrell (2020). Columns 2 and 3 provide the same specification for the sample of high-importance and low-importance agencies, respectively. Columns 4 and 5 provide the same specification for the sample of high level and low level positions, respectively. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Finally, Table 3 compares the observed effects of Ramirez's purge on his affiliates (Column 1) to the observed effects on Military affiliates (Column 2) and Maduro affiliates (Column 3). The analysis, however, does not provide evidence that Military or Maduro individuals gained appointments from Ramirez's purge.

Table 3: Effects of purge by elite group

|	Network of affiliates		
	Ramirez	Military	Maduro
Post	-0.029**	-0.041	-0.005
	(0.011)	(0.028)	(0.012)
Obs (before)	1603	1603	1603
Obs (after)	1638	1638	1638
Cutoff	0	0	0
Polynomial	1	1	1
Bandwidth	45	45	45
Value at Threshold	0.025	0.153	0.002
% Effect	-116.89	-27.15	-222.91

Note: Table shows linear regression discontinuity estimates of the effect of Ramirez's purge on the proportion of affiliates to different elite groups. Column 1 provides a linear RDD specification using the bandwidth proposed in Calonico, Cattaneo and Farrell (2020) for Ramirez affiliates. Columns 2 and 3 provide the same specification for individuals affiliated with the military or with Nicolas Maduro, respectively. * p < 0.1, ** p < 0.05, *** p < 0.01

Service contracts

Panel A of Figure B.2 shows that the number of public service contracts increases right after Ramirez's purge. This is because he was sidelined from the Cabinet right before the New Year, when many contracts formally start. Panel B of the same figure replicates this pattern towards the end of 2013, confirming the imbalance outside the context of his purge.

Figure 3 shows a discrete drop in the proportion of contracts received by Ramirez-affiliated firms. Column 1 shows that this proportion went from 16% to about 8% around his purge. Indeed, these results are confirmed to be statistically significant in Column 1 of Table 4. Columns 2 and 3 show that these results are robust to expanding and narrowing the bandwidth around the optimal level, and Columns 4 and 5 show robustness to alternative polynomial control structures around the discontinuity. Finally, Columns 6 and 7 fail to replicate the negative effects on Ramirez-affiliated contracts after moving the threshold before and after the timing of his purge.

Figure 3: Ramirez-affiliated contracts around purge
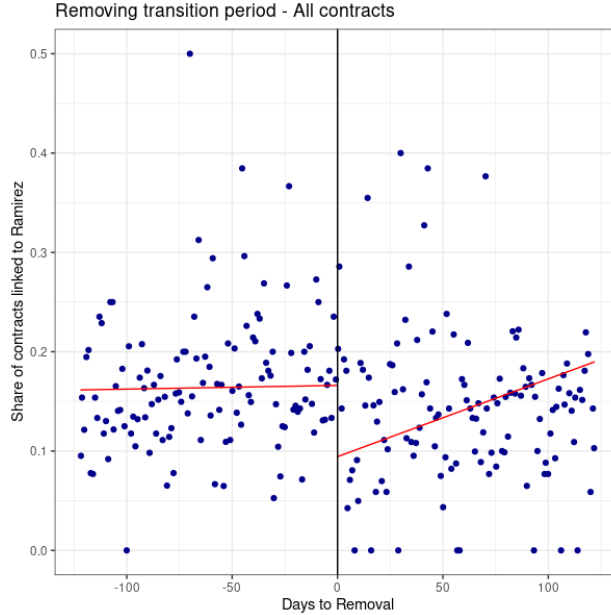
Note: Figure shows a binscatter the proportion of Ramirez affiliated contracts in the RNC assigned days before his sidelining from energy responsibilities, and days after his purge from the Cabinet. Red lines capture linear predictions of the proportion of appointments affiliated with Ramirez around this transition.

Table 4: Effects of purge on service contracts

	Contract with Ramirez affiliates						
Post	-0.076***	-0.084***	-0.074***	-0.084***	-0.086***	0.042**	-0.016
	(0.010)	(0.012)	(0.009)	(0.013)	(0.013)	(0.013)	(0.014)
Obs (before)	7604	5540	9858	10496	15723	7097	8087
Obs (after)	8170	6547	9441	10101	14297	7811	5499
Cutoff	0	0	0	0	0	-75	75
Polynomial	1	1	1	2	3	1	1
Bandwidth	75	55	95	103	157	75	75
Value at threshold	0.158	0.172	0.160	0.159	0.158	0.130	0.126
% Effect	-48.00	-48.65	-46.07	-52.88	-54.30	32.20	-12.82

Note: Table shows regression discontinuity estimates of the effect of Ramirez's purge on the proportion of Ramirez-affiliated contracts. Column 1 provides a linear RDD specification using the bandwidth proposed in Calonico, Cattaneo and Farrell (2020). Columns 2 and 3 reduce and expand that bandwidth by 20 days, respectively. Columns 4 and 5 provide RDD specifications with quadratic an cubic polynomial controls, respectively. Columns 6 and 7 provide placebo linear RDD specifications in which the cutoff period is moved one bandwidth before or after the transition period, respectively. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

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Finally, Table 5 shows that contracts for Military-affiliated and Maduro-affiliated firms grew around the discontinuity at the time of Ramirez's purge.

Table 5: Effects of purge by elite group

	Network of affiliates		
	Ramirez	Military	Maduro
Post	−0.076***	0.007**	0.001*
	(0.010)	(0.004)	(0.000)
Obs (before)	7604	7604	7604
Obs (after)	8170	8170	8170
Polynomial	1	1	1
Bandwidth	75	75	75
Value at Threshold	0.158	0.018	0.000
% Effect	-48.00	41.64	Inf

Note: Table shows regression discontinuity estimates of the effect of Ramirez's purge on the proportion of Ramirez-affiliated contracts. Column 1 provides a linear RDD specification using the bandwidth proposed in Calonico, Cattaneo and Farrell (2020). Columns 2 and 3 reduce and expand that bandwidth by 20 days, respectively. Columns 4 and 5 provide RDD specifications with quadratic an cubic polynomial controls, respectively. Columns 6 and 7 provide placebo linear RDD specifications in which the cutoff period is moved one bandwidth before or after the transition period, respectively. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Conclusion

Our findings show a clear and immediate reduction in access to government appointments and contracts for Ramirez-affiliated individuals and firms following his purge from Venezuela's cabinet. These results exhibit how a hybrid regime sidelining an important faction within its ruling coalition in response to an economic crisis strategically restricted access to benefits for the subordinates of that faction. We provide evidence that Maduro favored subordinates aligned with the factions he sought to consolidate. This points to a calculated approach to coalition maintenance (Acemoglu, Egorov and Sonin, 2008; De Mesquita et al., 2005, 1999; Montagnes and Wolton, 2019; Svolik, 2009, 2012).

Our analysis contributes to the understanding of how hybrid and autocratic leaders nav-

igate the complex terrain of power consolidation and elite management during crises. By reallocating resources away from a once-powerful insider to other key supporters and potential challengers, Maduro's actions exemplify the balancing act that autocrats perform to survive politically during economic crises. The targeting of the most important ministries further underscores the strategic nature of these purges, ensuring that the most valuable resources were kept within the reach of the most crucial factions. While our study focuses on the case of Venezuela, it offers broader implications for the study of autocratic stability and the dynamics of rent distribution in hybrid regimes. Future research could expand upon our findings by exploring similar patterns of elite purges and rent distribution in other modern autocratic and hybrid regime settings such as Turkey in 2016-2017 (Hansen, 2017), China's ongoing anti-corruption purges (Hawkins, 2023; McDonell, 2024), or the ongoing purges within the Russian government (Chotiner, 2022; Kolesnikov, 2019), as well as examining the long-term impacts of such actions on regime stability.

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Online Appendix

A   Data construction details

To identify military officials we scraped the whole book of military cohorts of the Venezuelan military academies, which was published in 2017.[1] To scrape this data we used the Tabula software.[2] We cleaned this data through multiple steps. First, we removed military ranks from names such as "Alfz" (short for *alferez*, second lieutenant in English). Second, we also removed foreign graduates of the Venezuelan military academies who went back to their countries (which were identifiable through their country of origin written in parentheses after their surnames). Third, given that our focus is on recent appointments (starting from the mid-2000s) in the Venezuelan public sector, we only keep data on the graduates from cohorts starting in 1955.[3] Finally, we fill in names that only include a middle name or second surname initials by searching for likely matches in the Venezuelan national electoral register and through the Dateas website (Dateas, 2024).[4] We also use the same datasets to find typographical errors on some of the names written in the book of military academy cohorts.

After we have cleaned the names of the military academy officials, we can merge them with different electoral register datasets we have obtained from various sources to obtain the national ID numbers of these individuals. In particular, we are using the electoral registers from 2004, 2007, 2012, 2017, and 2021, which allows us to ensure we do not miss any military officials who register to vote later, as well as those who may have passed away during our period of study and thus do not appear in the more recent electoral registers. Therefore, we

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[1]Rodriguez Cabello (2017)

[2]Tabula (2024)

[3]The book of military cohorts is missing data on the cohorts from 1980 to 2003 of the National Guard of Venezuela. Therefore, we complement our data on the National Guard cohorts with several additional sources. First, we obtained data on their members from the National Guard's website: http://www.guardia.mil.ve/#. Second, we obtained data on military members according to data from the gazettes, which also contain members of the National Guard. Next, we found additional members of the National Guard cohorts through data on sanctioned Venezuelan individuals that Vendata published: Vendata (2024).

[4]We are thankful to Jose Huerta, who kindly shared cleaned electoral registry data from different moments in time with us.

merge our military academy cohorts data with these national electoral register data by full name (first name, middle name, first surname, and second surname).

If we find duplicate matches by full name, we take two steps to determine the most likely match. First, we take the individual's birth date in the electoral register and compare it with the military academy graduate cohort year to calculate an estimated age at graduation. Virtually all military academy officials graduate between the ages of 20 and 29, as the 1st percentile is 19 while the 99th percentile is 29. Hence, we only keep matches with an estimated graduation age between 20 and 29. In addition, the median graduation age is 23, so we also only keep the plausible matches closest to 23 within the age range of 20 and 29. If only one match has a graduation age of 23, that is the match selected from the electoral register. If there are two or more matches with a similar age distance to 23 (for example, one match with a graduation age of 22 and another of 24), we follow a second procedure to determine the best match among these duplicate matches. We geolocated the GPS coordinates of each polling station in Venezuela and computed their distances to military establishments throughout the country to determine the minimum distance each polling station has from a military establishment. Then, to determine the right match among the duplicate matches, we select the individual registered to vote at the polling station closest to a military establishment. If we have one individual that is closest to a military establishment, this is the match chosen from the electoral register. As a result, we are able to match military officials to the GO appointments by their individual NIN. We complement this with additional information on military rank promotions, which is also available in the GO registries.
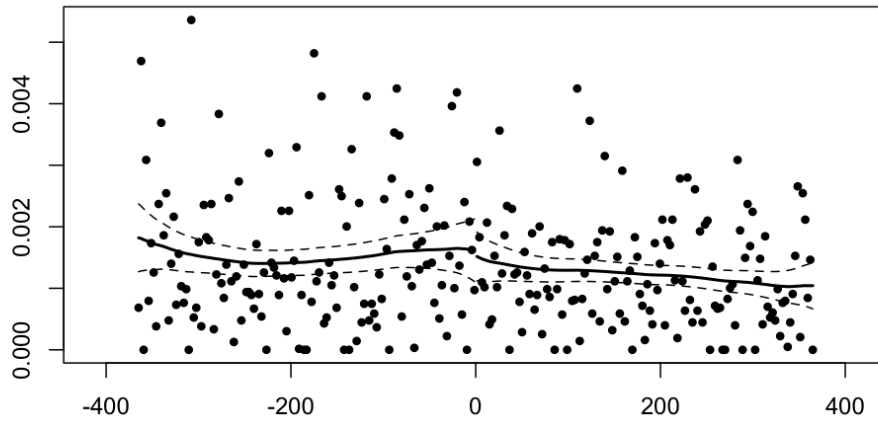
B Additional tables and figures

Figure B.1: McCrary Density Test

Variable	Min	Mean	Median	Max	SD
Ramirez Affiliate	0	0.04	0	1	0.19
Chavista Supporter	0	0.21	0	1	0.41
Military Officer	0	0.14	0	1	0.34
Maduro Affiliate	0	0.04	0	1	0.20
Days to Dismissal	-2800	-1038.83	-1015	735	1021.75

Table B.1: Summary Statistics - Gacetas Oficiales

Variable	Min	Mean	Median	Max	SD
Ramirez Affiliate	0	0.15	0	1	0.36
Military Officer	0	0.01	0	1	0.12
Maduro Affiliate	0	0.00	0	1	0.02
Days to Dismissal	-609	-199.42	-244	370	278.19

Table B.2: Summary Statistics - Public Contracts
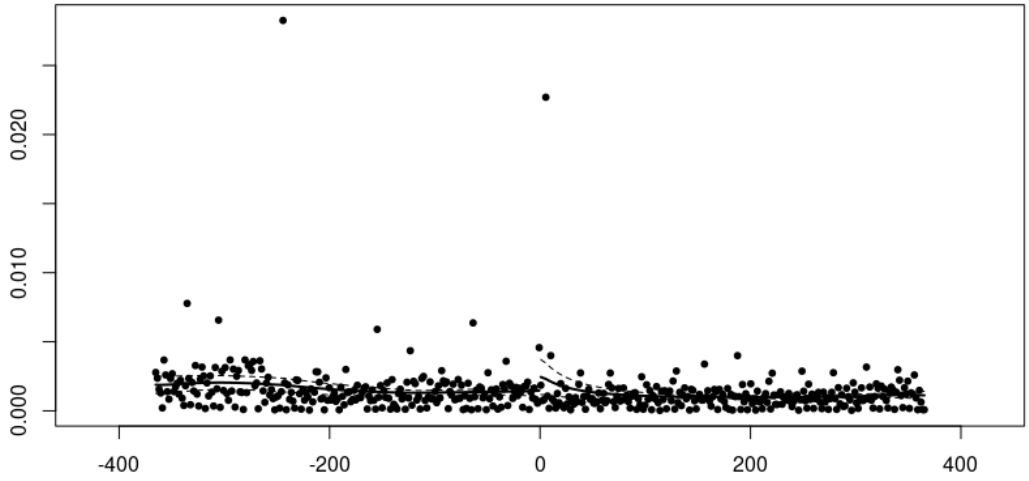
(a) The Year Under Study
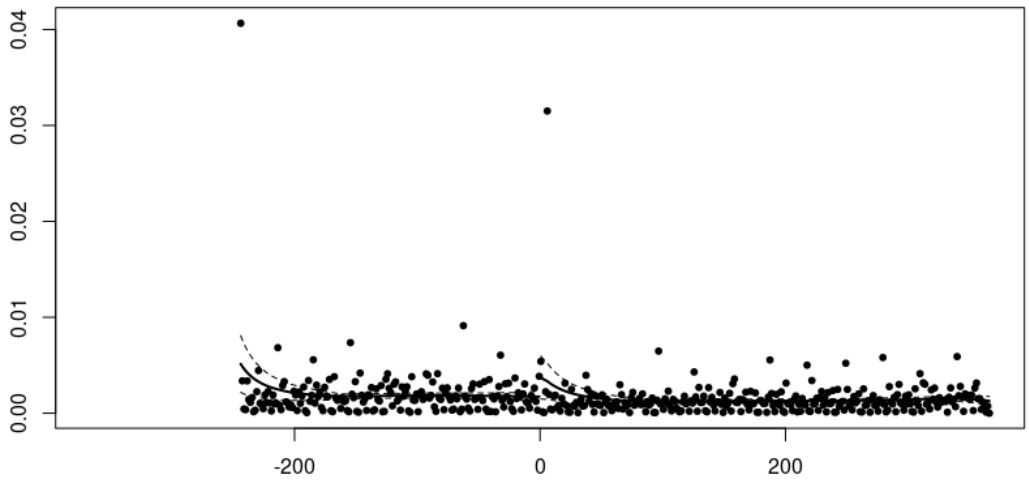
(b) Contracts - One Year Before

Figure B.2: McCrary Density Test