Donor Preferences in Canadian Political Financing*

Understanding Donor Support for Ruling vs. Opposition Parties Between 2013 - 2024

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This study investigates how the ruling political parties in Canada's federal and Ontario provincial governments affect the donation behaviors of individual contributors. By analyzing donation records from 2013 to 2024, the research explores whether a party being in power influences the total amount of financial support it receives. The findings reveal that opposition parties often receive more donations than those in power, highlighting donor preferences to support challengers. This insight enhances our understanding of political financing and can help parties and policymakers develop more effective fundraising strategies.

1 Introduction

Political donations are an important part of democratic processes, providing essential financial support for political campaigns and influencing electoral competition. In Canada, both federal and provincial elections rely on contributions from individuals and organizations. This can shape the political landscape and reflect public support for different parties. Understanding the factors that drive donation patterns is crucial for ensuring transparency and fairness in the democratic process and for minimizing the risk of undue influence on policy-making.

A key question in political finance is whether a party's position in power affects the amount of financial support it receives. Studies in other countries, such as the United States, have shown that incumbents often benefit from more donations, particularly from interest groups seeking to maintain influence (Fouirnaies and Hall 2014). However, there has been less focus on whether this holds true in Canada, where the political system and donation regulations

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*Code and data are available at: https://github.com/MariaMangru/Ontario_Political_Donors.

differ significantly. This paper aims to fill that gap by analyzing how a party's power status influences donor behaviour in federal and Ontario provincial elections.

The primary estimand of this study is the effect of a political party's power status on the total amount of financial donations it receives from individual contributors. By comparing the financial support received by parties in power versus those in opposition, this research aims to understand whether being in power affects a party's fundraising success.

Using donation data from 2013 to 2024, this study examines total donations by year and party, accounting for factors such as election timing and party size (major party or not). The analysis employs linear regression models to quantify the relationship between power status and donation amounts, providing insights into donor motivations and the strategic considerations of political parties.

The results indicate that opposition parties tend to receive higher total donations than those in power, suggesting that donors often prioritize supporting challengers, possibly to influence political change. This information is valuable not only for political parties developing fundraising strategies but also for policymakers and researchers seeking to ensure fairness and accountability in political financing.

The paper is organized as follows: Section 2 discusses the data sources and methodology, including measurement and data cleaning processes. Section 3 presents the regression models used in the analysis, along with justification and validation. Section 4 outlines the results, and Section 5 discusses the implications, limitations, and suggestions for future research. Section A offers further detailed insights into the data, modeling approach, and methodology.

2 Data

2.1 Overview

The dataset analyzed in this study encompasses political donation records from 2006 to 2024, covering both the federal level and the province of Ontario in Canada. These records were sourced from the The Investigative Journalism Foundation (2024) Political Donors Dataset, which systematically collects and maintains comprehensive data on political donations across Canadian jurisdictions. The IJF updates this dataset daily by monitoring election agency websites at the federal level and within each province and territory, ensuring the data remains current and reliable. covering both the federal level and the province of Ontario in Canada.

The analysis was conducted using both R (R Core Team 2023) and Python (Python Software Foundation 2023), leveraging a range of libraries for data manipulation and visualization. In R, key packages included dplyr (Wickham, François, Henry, Müller, and Vaughan 2023), lubridate (Grolemund and Wickham 2011), tidyverse (Wickham et al. 2019), ggplot2 (Wickham 2016), readr (Wickham, François, Henry, and Müller 2023), tibble (Müller and Wickham 2023), and rstanarm (Goodrich et al. 2023) for statistical modeling. In Python, pandas (team 2023), requests (Reitz and Python Requests Development Team 2023), and matplotlib (Hunter and team 2023) were utilized for gathering the data.

Political donations in Canada are subject to legal disclosure requirements, promoting transparency and accountability within the democratic process. Both federal and provincial election finance laws mandate that political parties, candidates, and associated entities report donations exceeding specific thresholds. These disclosures vary by jurisdiction in terms of frequency and reporting formats. This regulatory framework ensures that significant contributions are systematically documented and publicly accessible, providing a reliable foundation for this analysis.

The period starting from 2006 is particularly significant because it marks the first federal election involving the newly formed Conservative Party of Canada. In 2003, the Canadian Alliance and the Progressive Conservative Party of Canada merged to create the modern Conservative Party. The 2006 election was the first in which this new entity participated, making it a pivotal point for analyzing donation patterns related to this party.

2.2 Measurement

The dataset originates from The Investigative Journalism Foundation (2024) compilation of political donation records, which includes donations made to registered political parties, party leadership contestants, riding associations, and individual candidates. Donations are tracked across different types of electoral events, including general elections, by-elections, and leadership races. The IJF collects this data by monitoring official elections agency websites at both the federal level and within each province and territory.

The target population for this analysis includes all political donations made to registered political parties, party leadership contestants, riding associations (also known as electoral district or constituency associations), and individual riding candidates during the specified time frame. This comprehensive coverage allows for an in-depth examination of donation patterns in various political contexts. The data collection methodology ensures that all significant financial contributions are captured, providing a robust foundation for analyzing the relationship between political power and financial support.

Data aggregation involves summing the total donations received by each political party annually, resulting in a dataset where each row represents the total donations for a specific party in a given year. Key variables include Political Party (categorizing major and minor parties), Donation Year (ranging from 2013 to 2024), and Amount Donated (the monetary value of each donation). Additional binary variables such as Recipient_in_Power (indicating whether the party was in power during the donation year), Party_Size (distinguishing major from minor parties based on legislative representation), and Election_Year (indicating whether the donation was made during an election year) are constructed to facilitate regression analyses.

The data is organized into a structured format with each row detailing a specific donation event, including the party receiving the donation, the year it was made, the amount donated, and the constructed binary indicators. By aggregating donations at the party-year level and incorporating relevant variables, the dataset effectively translates real-world donation phenomena into analyzable data points, enabling the investigation of how political power status influences financial support in Canadian elections.

2.3 Data Cleaning

The raw donation records were carefully preprocessed to ensure data integrity before analysis. First, the data was imported using the read_csv function from the readr package. Records with missing or incomplete information in key variables were excluded to maintain quality. Political party names were standardized to address inconsistencies, such as consolidating variations like "Liberal Party of Ontario" and "Ontario Liberal Party" under a single name. Donations were then aggregated at the party-year level to analyze total annual contributions received by each party. Binary variables, including Recipient_in_Power, Party_Size, and Election_Year, were created to support regression analysis. To normalize the distribution and handle zero values, a new variable, Log_Total_Donations, was generated by applying a logarithmic transformation to Total_Donations + 1. Finally, the cleaned dataset was cross-validated against the original records to ensure accuracy. Additional details about the data cleaning process can be found in Appendix A.

2.4 Outcome Variables

The primary outcome variable is the Total Amount Donated, representing the total monetary value of donations received by each political party in a given year. This continuous variable is essential for assessing the level of financial support and understanding its relationship with factors such as power status and party size.

The distribution of total donation amounts varies between the federal and provincial levels. At the federal level, the average total donations are higher, reflecting broader donor bases and different legal contribution limits.
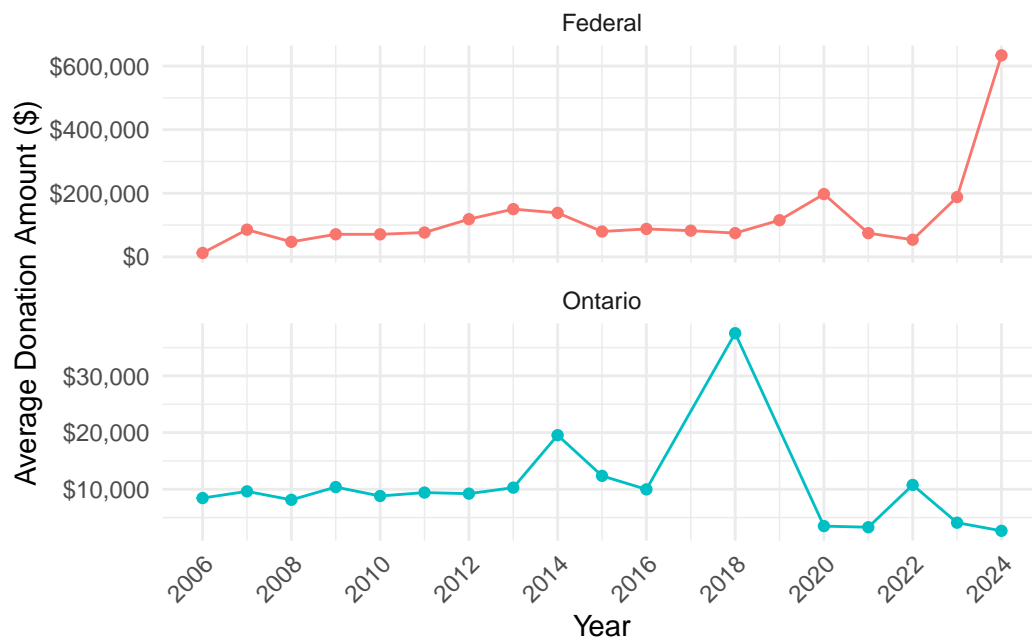

Figure 1

Figure 1 shows the trend of average donation amounts over the years for both Ontario and Federal levels. The x-axis represents the years from 2006 to 2024, while the y-axis shows the average donation amount in Canadian dollars. The data reveals fluctuations in donation amounts over time, with notable during 2018 for Ontario and 2024 for Federal.

2.5 Predictor Variables

Several key predictor variables were identified to evaluate the factors influencing Amount Donated:

- Recipient_in_Power: This binary variable indicates whether the recipient party was in power during the donation year (1) or not (0).

- Party_Size: Another binary variable which categorizes parties as major (1) or minor (0) based on their representation in the legislature. Major parties are expected to receive more donations due to greater visibility, established support bases, and broader outreach capabilities. This variable helps in distinguishing the influence of party prominence on financial support.

- Election_Year: This binary variable signifies whether the donation was made during an election year (1) or not (0). Election years often see increased fundraising activities as parties intensify their efforts to secure electoral victories. Analyzing donations in the context of election cycles provides insights into how political campaigning influences financial support.

- Log_Total_Donations: The logarithm of total donations received by a party in a given year, calculated as $\log(\text{Total\_Donations} + 1)$. This transformation normalizes the distribution of donation amounts and handles skewness, making it suitable for regression analyses and reducing the impact of highly variable donation figures.

Table 1: Table Showing Donations Based on Recipient Power Status at Federal Level

Recipient In Power	Total Donations	Total Amount	Average Donation Amount
0	1976	$165,897,653	$83,956.30
1	1657	$114,763,989	$69,260.10

Table 2: Table Showing Donations Based on Recipient Power Status at Ontario Level

Recipient In Power	Total Donations	Total Amount	Average Donation Amount
0	2959	$33,770,999	$11,412.98
1	2402	$20,351,423	$8,472.70

In Table 1, parties in power (indicated by 1) received both lower total donation amounts and lower average donation amounts compared to opposition parties. This pattern suggests that donors may prefer to support challengers over incumbents.

Table 2 also shows a similar trend of parties in power receiving lower total and average donations.

Figure 2 displays a tree map of total donations received by each political party in Ontario. The size of each rectangle corresponds to the total amount donated to that party. Major parties like the Progressive Conservative Party of Ontario and the Liberal Party of Ontario dominate the donation landscape, reflecting their significant fundraising capabilities.

Figure 3 presents a treemap for federal political parties. Similar to the provincial level, major parties such as the Conservative Party of Canada and the Liberal Party of Canada receive the largest amounts in donations. This visualization highlights the prominence of major parties in attracting financial support at the federal level.
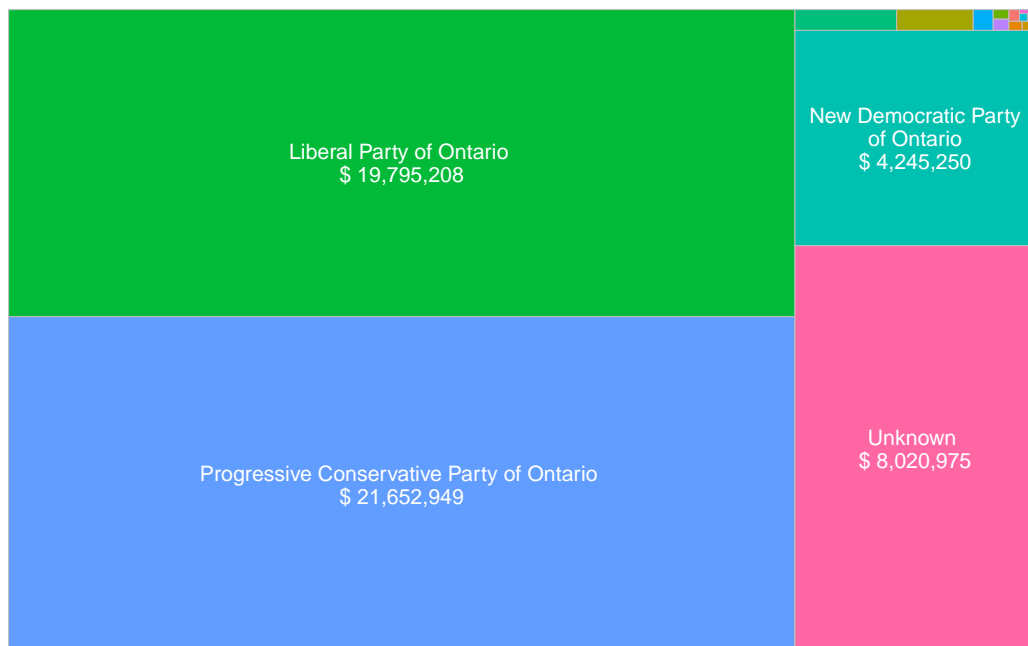
Figure 2: Figure Showing Total Donations by Political Party at Ontario Level

Figure 3: Figure Showing Total Donations by Political Party at Federal Level

3 Model

To analyze the impact of a political party's power status on donation patterns within Canadian federal and Ontario provincial elections, multiple linear regression models were developed. Specifically, separate models were constructed for Ontario and Federal levels to account for regional differences in political dynamics and donation behaviors. Additionally, a focused regression model was created for the Conservative and Liberal parties to explore the interaction between power status and party affiliation.

3.1 Model set-up

The models are specified as follows for the **Ontario and Federal Models**:

$$\log(\text{Total Donations}_i) = \beta_0 + \beta_1 \cdot \text{Recipient\_in\_Power}_i + \beta_2 \cdot \text{Party\_Size}_i + \beta_3 \cdot \text{Election\_Year}_i + \epsilon_i$$

Where:

- $\log(\text{Total Donations}_i)$: The logarithm of total donations received by party i in a given year.
- $\text{Recipient\_in\_Power}_i$: A binary variable indicating if party i was in power.
- Party_Size_i: A binary variable indicating if party i is a major party.
- Election_Year_i: A binary variable indicating if it was an election year.
- ϵ_i: The error term.

For the **Conservative and Liberal parties**, we included an interaction term:

$$\log(\text{Total Donations}) = \beta_0 + \beta_1 \cdot \text{Recipient in Power} + \beta_2 \cdot \text{Party}$$
$$+ \beta_3 \cdot (\text{Recipient in Power} \times \text{Party}) + \beta_4 \cdot \text{Election Year} + \epsilon$$

Where:

- Party_i: A binary variable indicating 1 for Conservative, 0 for Liberal.

The specialized model for Conservative and Liberal parties includes an additional binary variable (Party) and an interaction term (In_Power * Party) to capture the combined effect of power status and party type on donation amounts.

3.1.1 Model justification

Linear regression was chosen for its simplicity and interpretability. The log transformation of the dependent variable stabilizes variance and normalizes the distribution, making it suitable for linear modeling. The models account for key factors influencing donation amounts, allowing us to isolate the effect of a party being in power.

Alternative models, such as generalized linear models, were considered but deemed unnecessary due to the adequacy of linear regression for this analysis.

3.1.2 Assumptions and Limitations

The models assume a linear relationship between the predictors and the logarithm of total donations, ensuring that the effects of the predictors are additive and proportional. Additionally, they assume that the residuals are normally distributed and exhibit constant variance (homoscedasticity). The models also rely on the absence of multicollinearity, meaning that the predictors are not highly correlated, and they assume independence of observations.

Potential limitations include the possibility of unobserved variables influencing donation amounts and the inherent assumption that past trends can reliably predict future behavior. These factors could introduce bias or limit the generalizability of the findings.

3.1.3 Model Validation

Model validation was conducted to assess the predictive accuracy and generalizability of the regression models. This involved evaluating key metrics such as R-squared (R^2), Adjusted R-squared, and Root Mean Square Error (RMSE) to determine how well the models explain the variance in Log_Total_Donations and their predictive performance.

The Ontario model yielded an R^2 of 0.5496 and an Adjusted R^2 of 0.5267, indicating that approximately 54.96% of the variance in the log-transformed total donations is explained by the predictors. The RMSE was 2.5919, reflecting the average prediction error. The Variance Inflation Factor (VIF) values for all predictors were below 2, suggesting no significant multicollinearity.

The Federal model showed an R^2 of 0.6487 and an Adjusted R^2 of 0.6410, indicating that about 64.87% of the variance is explained by the model. The RMSE was 1.4909, and VIF values were again below 2, suggesting no significant multicollinearity.

The Conservative/Liberal model achieved an R^2 of 0.1091 and an Adjusted R^2 of 0.0431, indicating a lower explanatory power compared to the previous models. The RMSE was 1.2814. VIF values suggested moderate multicollinearity due to the interaction term, but they were within acceptable limits.

Overall, the validation process confirmed that the linear regression models are effective in predicting donation amounts based on the selected predictor variables. The models demonstrate good explanatory power and reasonable predictive accuracy, making them suitable for analyzing the factors influencing political donations in Canada.

4 Results

Table 3 presents the summary of key model estimates for the Ontario, Federal, and Conservative/Liberal models. These models predict the logarithm of total donations received by political parties based on whether the party was in power (In_Power), the size of the party (Party_Size), and whether the donation occurred during an election year (Election_Year). The Conservative/Liberal model includes an interaction term (In_Power × Party) to explore how the effect of being in power varies between these two major parties.

Table 3: Summary of Key Model Estimates for Ontario, Federal, and Conservative/Liberal Models

	Ontario	Federal	Conservative/Liberal
Intercept	9.558	11.397	13.506
	(0.439)	(0.151)	(0.400)
In Power	0.884	0.637	1.202
	(0.540)	(0.388)	(0.497)
Party Size	2.956	3.450	
	(0.485)	(0.258)	
Election Year	0.239	-0.075	-0.053
	(0.436)	(0.221)	(0.378)
Party (1=Conservative, 0=Liberal)			1.365
			(0.497)
In Power * Party			-1.717
			(0.711)
Num.Obs.	75	173	71

4.1 Ontario Results

In the Ontario model, Party_Size is a significant predictor of total donations, with a coefficient of 2.956 (standard error = 0.485, $p < 0.001$). This indicates that major parties in Ontario receive significantly higher total donations than minor parties, highlighting the influence of party prominence on fundraising success.

The In_Power variable has a coefficient of 0.884 (standard error = 0.540, $p = 0.106$), which is not statistically significant at the conventional 5% level. This suggests that being the ruling

party in Ontario does not have a significant direct effect on the total amount of donations received.

The Election_Year variable is also not significant in the Ontario model (coefficient = 0.239, standard error = 0.436, p = 0.586), indicating that donations are not substantially influenced by whether they occur during an election year.

4.2 Federal Results

In the Federal model, Party_Size remains a significant predictor, with a coefficient of 3.450 (standard error = 0.259, $p < 0.001$). This reinforces the importance of party size in attracting donations at the federal level.

The In_Power variable in the Federal model has a coefficient of 0.637 (standard error = 0.3882, p = 0.103), which is not statistically significant. Similar to the Ontario context, being in power at the federal level does not have a significant direct effect on the total donations received.

The Election_Year variable is not significant in the Federal model (coefficient = -0.0752, standard error = 0.2209, p = 0.734), suggesting no substantial impact of election years on donation amounts at the federal level.

4.3 Conservative/Liberal Results

In the Conservative/Liberal model, In_Power has a significant positive effect, with a coefficient of 1.202 (standard error = 0.497, p = 0.01827). Additionally, the interaction term In_Power $\times$ Party is significantly negative, with a coefficient of -1.718 (standard error = 0.711, p = 0.01845). This interaction indicates that the effect of being in power on total donations varies between the Conservative and Liberal parties.

For the Conservative Party (Party = 1), the combined effect of being in power is 1.2023 + (-1.7175) = -0.5152, suggesting that being in power is associated with lower total donations for the Conservative Party. For the Liberal Party (Party = 0), the effect of being in power remains 1.2023, indicating that being in power is associated with higher total donations for the Liberal Party.

The Party variable itself is significant (coefficient = 1.3648, standard error = 0.4968, p = 0.00774), suggesting that, overall, the Conservative Party tends to receive more donations than the Liberal Party when not considering the interaction effect.

The Election_Year variable is not significant in the Conservative/Liberal model (coefficient = -0.0527, standard error = 0.3777, p = 0.88946).

Figure 4 highlights the consistently strong positive effect of Party_Size on total donations in both the Ontario and Federal models, emphasizing that major parties attract significantly more donations than minor parties. It also illustrates the significant interaction effect between
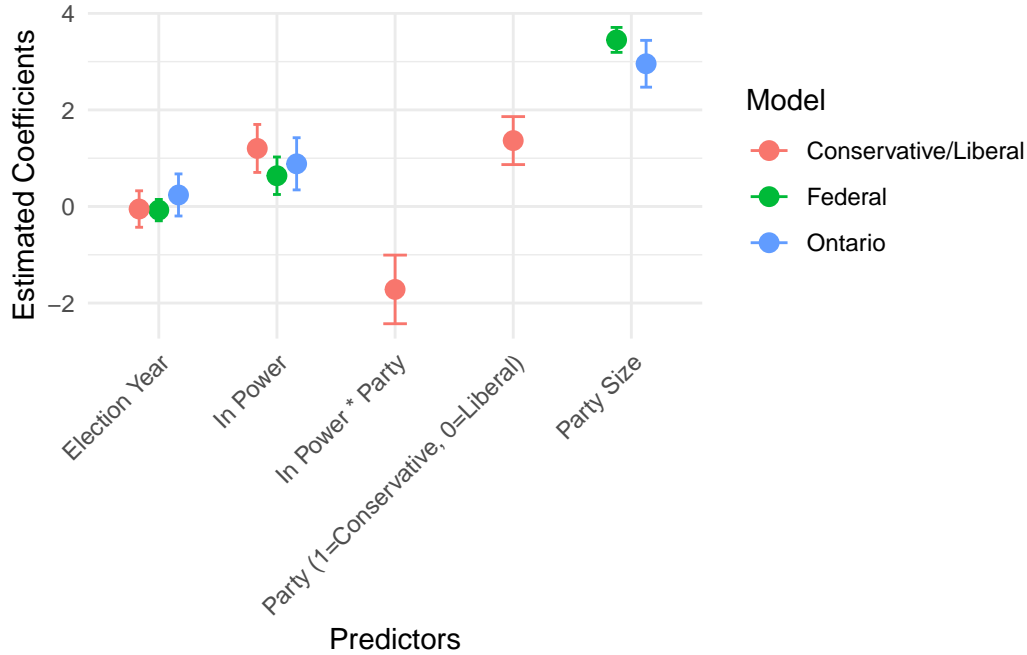
Figure 4: Coefficient Estimates for Ontario, Federal, and Conservative/Liberal Models

In_Power and Party in the Conservative/Liberal model, demonstrating the differing impact of being in power on donations for the two major parties.

In summary, the analyses reveal that party size is a significant determinant of total donations at both provincial and federal levels, while the effect of being in power on donations is contingent upon party affiliation, particularly between the Conservative and Liberal parties.

5 Discussion

5.1 Financial influence shapes political landscapes

At the heart of politics is finance, as revealed by Traag's research on the complex contagion of campaign donations in the United States (Traag 2016). Traag's study found that most campaign contributions come from a small number of wealthy donors linked by large social networks, demonstrating how a few individuals can shape political outcomes. Similar dynamics appear to be at play in Canada. Here, donors often prefer to support parties not currently in power. One reason might be the hope that challengers will bring needed policy changes. More realistically, as noted by Mollona (Mollona and Faldetta 2022), politicians, especially those out of power, often seek funding in exchange for promoting donors' interests. Over time, this can lead to a pattern where donors shift their support to whoever best serves their goals, fostering

continuous political competition. A key finding of this study is that at both the Ontario and federal levels, the Conservative Party generally attracts more financial backing than other parties. This steady flow of resources may help the Conservatives maintain a strong presence in the political arena, influencing agenda-setting and public debate. With more funds, they can more easily finance voter outreach, shape their messaging, and solidify their support networks. While this financial advantage may help sustain dynamic election contests, it also underscores concerns about whose interests gain the most traction. When one party consistently out-raises others, the policy conversation may lean toward those who provide the most money, potentially sidelining issues important to groups with fewer financial resources.

5.2 International Comparisons and the Importance of Regulation

These trends are not confined to Canada. In the United Kingdom, for example, large private donations, often from very wealthy "superdonors", widen the gap between major parties and smaller competitors (Draca, Green, and Homroy 2022). Such patterns highlight a broader democratic challenge, as money can concentrate power and influence political direction in ways that may not always reflect broad public preferences. Rather than serving purely as a resource that encourages healthy competition, political donations can also become a tool that benefits certain parties and voices more than others. Regulation and transparency are essential. Clearer rules and better public reporting help citizens understand who funds whom and why. Drawing lessons from other countries may guide reforms aimed at limiting undue influence. Stronger oversight, spending caps, and easy-to-access donor databases can empower voters to make informed choices. Without these safeguards, the already powerful, whether individuals, industries, or interest groups, can gain even more sway, risking an erosion of trust in democratic institutions.

5.3 Weaknesses and next steps

This study provides valuable insights into donation behaviours across Canada but it its limitations. First, the analysis is applied to only federal and provincial donation records, overlooking regional variations found in other provinces and territories. The geographical limitations of this study hinder its ability to generalize across the entire country. Moreover, the study only spans from 2006 to 2024 which economic or political events could have influence over the donation patterns that the models do not account for. Additionally qualitative factors such as personal beliefs, specific policy preferences and campaign effectiveness are not directly addressed in this study. Data quality issues such as potential missing values or inconsistencies could also have affected the accuracy of the findings here. Lastly, the linear regression models here assume a linear relationship between predictors and donations which can oversimplify the complexities.

Future research should not only aim to address these limitations, but expand the analysis to other provinces and territories across Canada. This would enhance the generalizability of

the results and provide a more nuanced understanding of regional differences. Furthermore, utilizing nonlinear modelling techniques or looking at a broader set of predictor variables such as donor demographics or economic indicators could better capture the nuances of donor behaviour and also mitigate the risk of omitted variable bias. Comparative studies with other democratic countries, beyond Canada, could provide more general perspectives on how other political systems and regulatory frameworks influence or are influenced by donation behaviours. Other valuable areas of future exploration include assessing the impact of media coverage on donation trends. Finally, by addressing these areas, research can build on the current study's findings and contribute to a greater understanding of political donations.

A Appendix

A.1 Appendix A: Data Cleaning Notes

Rigorous data cleaning was done to the dataset used in this investigation to assure correctness and dependability. The raw donation records were sourced from the Investigative Journalism Foundation (IJF) which include political donations at both federal and provincial levels, specifically Ontario, from 2013 to 2024. The details of the data cleaning processed are described below.

First, missing and incomplete values were searched for in key variables such as Amount Donated, Donation Year, Political Party and Region. Excluding any records with missing values in these crucial fields to minimise biases created from incomplete data entries and to maintain data integrity.

Inconsistencies in reporting caused political party names to appear in different formats. To fix this, party names were given constant and standardized names across all the records. For example, if there was a variation such as "Liberal Party of Ontario" and "Ontario Liberal Party" these were combined into a single name "Ontario Liberal Party" to ensure accurate attribution of donations to parties.

Fields that were also standardized were the donor information which includes names and locations. Any typographical errors were corrected, and formatting was made consistent, for example the structure "First Name Last Name" instead of "Last Name, First Name". But, in cases where standardization could introduce inaccuracies, original donor names were kept to avoid dealing with individuals with similar names.

Two columns, (amount_monetary) and (amount_non_monetary) which correspond to monetary and non-monetary contributes are included in the data set. Using these a new variable was created that sums these two fields together for every record. In doing this, the dataset now provides a comprehensive measure of the total value of donations received by a party. Moreover, monetary values were converted into a consistent currency format to disregard any discrepancies in the currency symbols or formatting and to ensure accurate aggregation and proper comparison.

Individual donation records were aggregated in order to perform proper analysis at the party-year level. For each political party within each year donations were summed yielding a dataset where each entry represented the total donations received by a party for a specific year. Aggregating the data like this enabled the examination of trends over time and impact assessment factors like power status and election years on donation amounts.

Several binary variables were introduced to capture key aspects of the data:

Recipient_in_Power: Indicates whether the recipient party was in power during the donation year (1 for in power, 0 for not in power). Party_Size: Categorizes parties as major (1) or minor (0) based on legislative representation and historical influence. Election_Year: Indicates

whether the donation was made during an election year (1 for election year, 0 for non-election year). These variables were imperative for the regression analysis and allowed the assessment of the influence of these on total donations.

The distribution of total donation amounts was highly skewed, with a small number of large donations and many smaller ones. In order to address this, a logarithmic transformation was applied to the Total_Donations variable creating a new variable called Log_Total_Donations. This transformation also helped with handling zero values by adding a small constant before taking the logarithm.

Cross-validation was used against original records and official financial statements to ensure accuracy of the cleaned dataset. This step required spot-checking aggregated totals and individuals records to confirm that the cleaning and aggregation process did not create more errors.

There were challenges that occurred due to inconsistencies in the raw data, these included typographical errors, reporting format errors and missing donor types. Some limitations remained despite the effort to standardize and correct these issues, due to the quality of the original data source. When donor type information was missing and legal restrictions indicated that only individuals could donate, the donor type was inferred as "Individual". Despite this assumption being legally reasonable in the context of the paper, it may not capture all nuances in the data.

A.2 Appendix B: IJF Data Collection Methodology

The Investigative Journalism Foundation (IJF) employs a comprehensive approach to collect and compile political donation data across Canada. Understanding the IJF's data collection methodology is crucial for assessing the reliability and scope of the data used in this analysis.

Data Sources and Acquisition

Every day, the IJF checks election agency websites at the federal level and in each province and territory for new political donations data. Historical data is obtained from a variety of government sources, including provincial archives, legislative libraries, and elections agencies, covering the period from 1993 to the present day, though this time range varies by jurisdiction.

Political parties and candidates are legally required to submit records of donations, which are maintained and made publicly accessible by election agencies. The frequency and format of these disclosures differ among jurisdictions; some require quarterly returns, while others mandate annual reports. The IJF systematically gathers these records to create a unified database of political donations.

Scope of Data Collected

The IJF's dataset encompasses donations to various political entities, including:

- Parties: Federal and provincial registered political parties.

- Candidates: Individual candidates running for office.

- Riding Associations: Also known as electoral district or constituency associations.

- Leadership and Nomination Contestants: Individuals participating in party leadership races or seeking nomination as candidates.

The dataset includes records from all 13 provinces and territories, as well as city-specific donations from municipalities like Victoria and Vancouver.

Donation Laws and Contribution Limits

Jurisdictions have varying limits on the donation amount and types of entities allowed to donate. For example, in the federal level, only individuals who are Canadian citizens or permanent residents can donate, with a maximum annual contribution amount. Comparatively, there are some provinces that allow donations from corporations, organizations and unions and may have different or no contribution limits.

Data Formats and Conversion

The source data is available in multiple formats, including downloadable spreadsheets, PDFs, and HTML files. For jurisdictions where data is only available in PDF format, the IJF employs Optical Character Recognition (OCR) technology to convert the documents into

machine-readable CSV files. OCR tools such as Adobe Export PDF, Cometdocs, and AB-BYY FineReader are used for this purpose.

Data Cleaning and Standardization

Manual cleaning is extensively done to correct errors that arise from OCR conversion and to standardize the data. The key steps are:

Correcting OCR Errors: Manual verification and correction of misread characters (e.g., misinterpreted currency symbols or letters). Standardizing Donor and Party Names: Ensuring consistency in naming conventions for donors and political parties (e.g., standardizing "Progressive Conservative Party of Ontario" across all records). Formatting Dates and Amounts: Standardizing date formats to YYYY-MM-DD and ensuring monetary values are consistently formatted. The IJF also amalgamates similar categories in variables such as donor types to improve data legibility (e.g., merging "Business" and "Corporation" into a single "Corporation" category). In cases where donor type information is missing and laws specify that only individuals can donate (e.g., Ontario after 2017), the IJF adds "Individual" to the donor type column.

Limitations and Challenges

Records submitted by political entities can contain typographical errors or inaccuracies which are seen in the dataset. Inconsistent or incomplete data can occur in reporting practices across different jurisdictions. Moreover, OCR technology is imperfect at capturing handwritings or poorly scanned documents introducing errors despite manual correction.

##Idealized Methodology

The idealized methodology for analyzing how a political party's power status affects the total donations it receives in Canada involves conducting a comprehensive survey targeting individual political donors across the country. This methodology aims to gather detailed data on donor behaviours, motivations, and perceptions, providing deeper insights into the factors influencing political donations at both federal and Ontario provincial levels.

Target Population

The target population consists of individuals who have made financial contributions to Canadian federal or provincial political parties, candidates, riding associations, or leadership contestants between 2013 and 2024. This includes donors from all provinces and territories, ensuring representation across different regions and political contexts.

Sampling Method

A stratified random sampling technique will be utilized to ensure proportional representation from various demographics and regions. The sample will be stratified according to:

- Region: All provinces and territories.
- Donor Type: Donors to parties in power versus opposition parties.

- Demographics: Age, gender, income level, education level, and political affiliation.

In Ontario and other populous provinces, oversampling will be conducted to capture more granular data and reduce the margin of error. This approach ensures that key voter segments are adequately represented, particularly those in regions with significant political activity.

Sample Size and Response Rate

To maintain a national margin of error of plus or minus 3% at a 95% confidence level, a total sample size of approximately 1,500 respondents is required. This sample size allows for meaningful analysis of subgroups within the data. Given an estimated response rate of 10%, outreach efforts will target approximately 15,000 potential respondents across Canada.

Recruitment Methods

Respondents will be recruited using a combination of methods to maximize reach and diversity:

- Online Panel Providers: Collaborate with established online panel providers such as Ipsos, Leger, or Angus Reid to access a pool of verified respondents who have consented to participate in surveys.

- Email Invitations: Where legally permissible and ethically acceptable, utilize contact information from public donor records to send email invitations directly to known political donors.

- Social Media Advertising: Use targeted advertisements on platforms like Facebook, Twitter, and LinkedIn to reach potential respondents interested in political activities.

- Telephone Outreach: Conduct telephone surveys using interactive voice response (IVR) systems and live calls to reach donors who may not be active online, particularly older individuals or those in rural areas.

To incentivize participation, all respondents will be entered into a national sweepstakes with a chance to win one of ten $500 cash prizes.

Data Collection Methods

Data collection will be conducted via:

- Online Surveys utilizing platforms like Qualtrics or SurveyMonkey to administer the survey electronically. The survey will be designed to be mobile-friendly and accessible to individuals with disabilities.

- Telephone Surveys for respondents preferring or requiring this method, trained interviewers will administer the survey, ensuring consistency with the online questionnaire.

The survey is designed to take approximately 10 to 15 minutes to complete, minimizing drop-off rates while collecting comprehensive data.

Data Validation Measures

Several measures will be implemented to ensure data quality and integrity:

- Completion time checks will be used monitor the time respondents take to complete the survey to identify and exclude those who rush through it (speeding).

- Implement reCAPTCHA technology to guard against bots and automated responses.

- Include attention-check questions to identify inattentive or fraudulent responses.

- After data collection, apply statistical weighting to adjust for any demographic discrepancies, ensuring the sample accurately reflects the population of political donors in Canada.

Budget Allocation

The budget for this study is allocated as follows:

- Survey Development: $8,000

  - This covers costs associated with designing the survey, including question formulation, structuring for clarity and flow, pilot testing, and ensuring compliance with ethical standards. Additionally, funds account for bilingual translation services (English and French). This also covers the cost of the potential monetary gifts given after completing the survey.

- Sampling and Recruitment: $15,000

- Details: Expenses related to accessing online panel respondents, purchasing targeted advertising on social media, and collaborating with panel providers. Funds also cover the services of statisticians to ensure the sampling aligns with the population distribution.

- Respondent Incentives: $20,000

- Details: Allocated for compensating participants with $10 electronic gift cards or funding the national sweepstakes prizes. Incentives are crucial for improving response rates and attracting a diverse respondent pool.

- Data Collection: $25,000

- Details: Operational costs for administering the survey, including online platform fees, telephone survey expenses, interviewer training, and call center operations. This ensures data collection is efficient and reaches a broad audience.

- Data Analysis and Reporting: $12,000

- Details: Funds dedicated to analyzing the collected data, including hiring data analysts proficient in statistical software, conducting comprehensive analyses, and preparing detailed reports and visualizations to communicate findings effectively.

- Ethical Compliance and Data Security: $5,000

- Details: Covers the costs of obtaining ethical approvals, ensuring compliance with privacy legislation (e.g., Personal Information Protection and Electronic Documents Act), and implementing robust data security measures to protect respondent information.

- Total Estimated Budget: $85,000

Timeline

- Months 1-2: Survey design, ethical approval processes, and pilot testing to refine the questionnaire.

- Months 3-4: Sampling frame development and recruitment of respondents through various channels.

- Months 5-6: Data collection via online and telephone surveys.

- Month 7: Data cleaning, validation, and preliminary analysis.

- Months 8-9: Comprehensive data analysis and report preparation.

- Month 10: Dissemination of findings through academic publications and presentations.

A.2.0.1 Idealized Survey Design

This survey helps to gather data about those who donate to political parties and acquire more qualitative details about a sample of the population.

The survey can be accessed using this link.

Survey Structure

Section 1: Demographics

State of Residence:

- Dropdown list of all provinces and territories.

Age: Multiple-choice options

- 18-24

- 25-34

- 35-44

- 45-54
- 55-64

Gender:

- Male
- Female
- Non-binary/Other
- Prefer not to say.

Income Level:

- Less than $25,000
- $25,000-$49,999
- $50,000 - $74,999
- $75,000 - $99,000
- $100,000 - $149,000
- $150,000 or more

Education Level: Highest degree obtained

- Less than high school
- High school diploma or equivalent
- Some college, no degree
- Associate degree
- Bachelor's degree
- Graduate or professional degree

Political Affiliation:

- Conservative
- Liberal
- NDP
- Other (please specify)

Section 2: Donation Behavior

Are you currently registered to donate to political parties?

- Yes

- No

How frequently do you donate to political parties?

- Never

- Rarely (once a year or less)

- Occasionally (a few times a year)

- Regularly (monthly or more)

Average Donation Amount:

- Less than $200

- $200 - $1,000

- $1,001 - $5,000

- $5,001 - $10,000

- More than $10,000

Preferred Donation Channels:

- Online platforms

- Mail-in donations

- In-person events

Section 3: Motivations for Donating

What motivates you to donate to a political party? (Select all that apply)

- Support for specific policies or issues

- Desire to influence election outcomes

- Loyalty to the party or its leaders

- Social pressure or community influence

- Tax benefits

- Other (please specify)

Which factors most influence your decision to donate? (Select all that apply)

- Candidate's leadership qualities

- Party's stance on key issues

- Party's past performance

- Recommendations from peers or influencers

- Media coverage

- Other (please specify)

Section 4: Impact of Campaigns and Events

Have recent political events influenced your donation behavior?

- Yes

- No

If yes, please specify the events and how they influenced your donations. (Open-ended)

How do you perceive the effectiveness of political campaigns in encouraging donations?

- Very ineffective

- Ineffective

- Neutral

- Effective

- Very effective

Section 5: Feedback and Suggestions

What could political parties do to encourage more donations from supporters? (Open-ended)
-

Any additional comments or suggestions regarding political donations? (Open-ended)

References

Draca, Mirko, Colin Green, and Swarnodeep Homroy. 2022. "Financing UK Democracy: A Stocktake of 20 Years of Political Donations." Working Paper 642/2022. Coventry, United Kingdom: CAGE Research Centre, Department of Economics, University of Warwick. https://warwick.ac.uk/fac/soc/economics/research/centres/cage/publications/642-2022.

Fouirnaies, Alexander, and Andrew B. Hall. 2014. "The Financial Incumbency Advantage: Causes and Consequences." *The Journal of Politics* 76 (3): 1–14. https://doi.org/10.1017/S0022381614000139.

Goodrich, Ben, Jonah Gabry, Imad Ali, Sam Brilleman, and RStan Development Team. 2023. *Rstanarm: Bayesian Applied Regression Modeling via Stan.*

Grolemund, Garrett, and Hadley Wickham. 2011. *Lubridate: Make Dealing with Dates a Little Easier.*

Hunter, John D., and the matplotlib development team. 2023. *Matplotlib: Visualization with Python.*

Mollona, Edoardo, and Guglielmo Faldetta. 2022. "Ethics in Corporate Political Action: Can Lobbying Be Just?" *Journal of Management and Governance* 26: 1245–76. https://doi.org/10.1007/s10997-021-09583-9.

Müller, Kirill, and Hadley Wickham. 2023. *Tibble: Simple Data Frames.*

Python Software Foundation. 2023. *Python.*

R Core Team. 2023. *R: A Language and Environment for Statistical Computing.* Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/.

Reitz, Kenneth, and the Python Requests Development Team. 2023. *Requests: HTTP for Humans.*

team, The pandas development. 2023. *Pandas: Python Data Analysis Library.*

The Investigative Journalism Foundation. 2024. "Political Donors Dataset." https://theijf.org/donations.

Traag, Vincent A. 2016. "Complex Contagion of Campaign Donations." *PLoS ONE* 11 (4): e0153539. https://doi.org/10.1371/journal.pone.0153539.

Wickham, Hadley. 2016. *Ggplot2: Elegant Graphics for Data Analysis.* Springer-Verlag New York. https://ggplot2.tidyverse.org.

Wickham, Hadley, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D'Agostino McGowan, Romain François, Garrett Grolemund, et al. 2019. "Welcome to the tidyverse." *Journal of Open Source Software* 4 (43): 1686. https://doi.org/10.21105/joss.01686.

Wickham, Hadley, Romain François, Lionel Henry, and Kirill Müller. 2023. *Readr: Read Rectangular Text Data.*

Wickham, Hadley, Romain François, Lionel Henry, Kirill Müller, and Davis Vaughan. 2023. *Dplyr: A Grammar of Data Manipulation.* https://CRAN.R-project.org/package=dplyr.