

## **AN EXAMINATION OF STUDENT LOANS, PARTISANSHIP, AND COMPLAINING BEHAVIOR: THE CONSUMER FINANCIAL PROTECTION BUREAU**

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### **ABSTRACT**

*This paper examines consumer complaints within a government-to-consumer context. Our study investigates whether the number of student loan complaints is impacted by partisanship. To do so, we utilize an econometric model that integrates four unique databases emanating from the U.S. Department of Education, the Consumer Financial Protection Bureau, the National Conference of State Legislatures (NCSL), and the Chronicle of Higher Education. Our findings show that partisanship has a significant effect on consumer complaints that are lodged at a government agency. This study demonstrates how a diverse, integrated database can be used to generate insights within an understudied area, the government-to-consumer context; and illuminates for policymakers the use of publicly available data that can be considered when developing future legislation.*

### **INTRODUCTION**

Understanding consumer complaining behavior is important to firms and institutions as it aids them in understanding consumer perceptions and firm performance (Dahl & Peltier, 2015). Further, complaining behavior suggests a lack of satisfaction, which is troubling considering that scholars purport that satisfaction is the ultimate purpose of marketing strategies and efforts (Larsen & Wright, 2020). Despite the recognized value of consumer satisfaction, scholars have noted the “limited research available” on satisfaction and consumer complaints, as it relates to government services (Russell-Bennet, Hartel, & Drennan, 2010, p. 65). Dahl & Peltier’s (2015) historical review of the *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior* demonstrated a strong need for research in the government-to-consumer (G2C) context. At the time of their study, less than three percent of all studies in the *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behaviors* used a government context, whether it was government-to-consumer or government-to-business (Dahl & Peltier, 2015). Hence, our study’s goal is to provide insight into complaint behavior, focusing on two high-profile topics within the government realm—student loans and partisanship.

Student loans have been a prominent part of post-secondary education in the United States since the Higher Education Act of 1965, with the initial aim of providing equal access to higher education and the resulting opportunity for social mobility (Simkovic, 2013). Today, approximately two-thirds of all undergraduate students use loans to attend school (Velez, Cominole, & Bentz 2019). However, these opportunities come with ongoing costs to consumers, lenders, and society. As of February 2019, outstanding student debt exceeded \$1.5 trillion, with an

average debt of \$28,650 over 44 million borrowers, with 11.4% of these loans being delinquent for more than 90 days (Friedman, 2019). In addition, the United States is increasingly partisan; and this partisanship affects a variety of attitudes and beliefs (Silver & van Kessel, 2021) as well as actions (McConnell et al., 2017) within these groups. Research finds that partisanship affects one's political values (Silver & van Kessel, 2021), evaluation of other individuals (Iyengar, Sood, & Lelkes, 2012), economic behaviors (McConnell et al., 2017), and even perception of their children's decision to marry an individual from another party (Iyengar et al., 2012).

Given the lack of research in the G2C context, our research investigates the extent to which partisanship impacts student loan borrowers' use of the agency (i.e., filing more or fewer complaints). The answer lies in understanding how partisanship impacts complaining behaviors, especially when those complaints are submitted to an agency that was initiated with clear partisan division. To investigate this research question, we use social identity theory (Tajfel, 1981) and assert that party identification (i.e., partisanship) impacts behaviors (Mason, 2013), including complaining behavior. Building on this theory, we develop an econometric model that incorporates partisanship as a potential driver in the filing of complaints by student loan holders, proposing that those more closely aligned to the party that created the government service are more likely to use the service than those less closely aligned.

We test the proposed model within the context of the Consumer Financial Protection Bureau (CFPB). The CFPB was authorized under the auspices of the Dodd-Frank Wall Street Reform and Consumer Protection Act in 2010, as a response to widespread calls for protecting consumers in the financial markets, including student loans. The Dodd-Frank Act passed with a high level of partisan division with 92% of House Democrats and 98% of Senate Democrats voting in favor, and 98% of House Republicans and 93% of Senate Republicans voting in opposition. The CFPB has handled over 44,000 student loan complaints (Consumer Financial Protection Bureau 2017) through the Consumer Complaint Database. With approximately 90% of all student loans distributed by the federal government (Dickson, 2021), the context of these complaints is both relevant and intriguing. In addition, we integrate three other sources of data from the U.S. Department of Education, the National Conference of State Legislatures (NCSL), and the Chronicle of Higher Education.

By doing so, our research provides several academic and institutional contributions. Although a large body of work has investigated consumer satisfaction, dissatisfaction, and complaining behavior (e.g., Singh, 1988), it mainly focuses on the business-to-consumer context (Dahl & Peltier 2015). Further, recent studies that attempted to examine the usage levels of a government service such as the CFPB (Blaseg, Schulze, & Skiera, 2020; Liu, Montgomery, & Srinivasan, 2018; Raval, 2020) provide limited information about consumers' motivation for expressing complaints in the G2C context. The present study thereby contributes to the growing number of G2C studies by identifying the partisan match between student loan borrowers and the government entity that created the service, or the ideals that the service embodies, as the key driver of consumer complaints. In addition, we address the noticeable dearth of consumer complaint research that utilizes secondary data and captures potential determinants of consumers' actual complaining behavior. This can be problematic for government institutions and policymakers who need more measurable and responsive consumer complaints metrics without incurring the high cost of collecting lab or survey data. Our merging of various forms of data addresses this issue by outlining a means to use large amounts of publicly available secondary data to better identify issues of consumer complaints associated with student loans.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### *Partisanship*

To better understand the effects of partisanship on the submission of consumer complaints, we ground our argument in social identity theory (Tajfel, 1981). Social identity theory focuses on the perceived membership or belonging to a group (Tajfel, 1981), and in what manner the individual's attitudes and behaviors align with the group (Tajfel & Turner, 2004).

We assert that social identity provides a foundation for understanding our research context. Social identity outlines a relationship between partisanship and economic and consumption actions, such as complaining behaviors. Research reaffirms social identity theory as a means to understand partisanship. Within social psychology, party identification is often viewed as social identity (Huddy, Mason, & Aarøe, 2015; Tajfel, 1981); and research indicates partisanship, as a form of social identity, can impact one's behavior (Mason, 2013). For instance, partisan identities influence both behaviors in the political domain (Mason, 2015) and the business context. Partisan identities appear to "exert behavioral consequences...including influencing choices and decisions in the economic realm" (McConnell et al., 2017, p. 7). Likewise, partisan identities can be a predictor of satisfaction and consumption preference across product classes and thus a basis for effectively segmenting markets (Larsen, Wright, & Busbin, 1996; Wright & Larsen, 1993).

Broadly, social identity theory outlines that individuals often categorize themselves within groups (Tajfel & Turner, 1986). The group with which one identifies is considered the in-group. In-groups are described as groups that the individual demonstrates affiliation or identification with (Turner, 2010). Conversely, the out-group is considered the "other group" or those individuals that are perceived as not being affiliated with the in-group (Tajfel & Turner 2004). The identification with an in-group is demonstrated through attitudes such as in-group bias and a belief in the delineation or distinction between the perceived in-group and other groups (Tajfel, 1981). As such, the individual's attitudes and behaviors toward a target or stimulus differ based on whether the target or stimulus is affiliated with the in-group or out-group (Tajfel & Turner, 1986). Similarly, this bias may be due, in part, to ensure that the individual has a positive self-concept (Tajfel and Turner 2004). Logically, the individual tends to be predisposed or demonstrates positively valenced perceptions focused on the in-group versus the out-groups (Tajfel & Turner, 2004). The notion of group membership (Tajfel, 1981) also indicates that there is an affect-based level of "emotional significance" tied to group membership affiliation and identification (Tajfel, 1981, p. 225). Scholars have noted that partisanship is based on an emotional bond rather than the utility of the premise or policy, or proximity to one's beliefs (Huddy, Mason, & Aarøe, 2010).

In our study, social identity theory suggests that belonging or membership to a political group (i.e., partisanship) is a source of identity. As such, the individual may be more predisposed to viewing their political party's actions and behaviors favorably. Conversely, the individual may view the alternative political party's actions and policies as unfavorable.

### *Student Loans: Definitions and Challenges*

Student loans refer to a loan category specifically designed to enable students to pay for post-secondary education and associated expenses like tuition, living expenses, books, and supplies. The U.S. student loan market is both large and, to some extent, controversial. Student debt is steadily increasing from already prominent levels. Student loans now rank as the second greatest source of consumer debt (Steenkamp, 2018). From 2003 to 2019, the compounded annual

growth rate for student loans was 12.5% (Dickson, 2021). In 2019, approximately 45 percent of borrowers with outstanding debt owed more than \$20,000 (College Board 2019). Further, the U.S. government issues much of the student lending, which has public policy implications. As of 2020, over \$1.2 trillion of U.S. Treasury debt is due, in part, to funding student loans (Dickson, 2021).

In addition to the number of loans outstanding and the default rates, the marketing of these loans directed toward students and their families is also facing increasing scrutiny. For example, several for-profit colleges have been accused of predatory lending practices that encourage students to take out substantial federal and higher-cost private loans, masking default rates of more than sixty percent (e.g., Consumer Financial Protection Bureau 2014a, 2014b). Further, from a sample of for-profit colleges, more than 20% of their revenues were found to be spent on marketing and recruitment, which surpassed their spending on instruction (Koff, 2015), with for-profit colleges among the biggest advertisers on Google (Ananthalakshmi, 2012).

Within a consumer complaint context, the student loan market is unique in ways that can produce dissatisfaction in borrowers beyond those found in typical debt markets. Eligibility requirements for federal loans are minimal, consisting only of demonstrating financial need, proper citizenship status, and a high school diploma or GED (Federal Student Aid, 2015). Loan decisions are not generally based on the risk of default, and borrowing limits depend on grade level and dependent status, not accounting for the potential value of the degree being sought (Simkovic, 2013). These factors can lead to over-borrowing if students overestimate the return from what they will earn on their education given their chosen path (Avery & Turner 2012).

### *Complaints Within the Government Sector*

As the preceding discussion demonstrates, the conditions and context for student loan complaining behavior are well established. Day & Landon, (1977) classified consumer complaint behavior as a response to dissatisfaction, resulting in a public action (seek redress directly from the business, take legal action, or complain to a public or private agency) or a private action (boycott business or warn others). Singh, (1988) further investigated the validity of this model and proposed a revised taxonomy where dissatisfaction produces three types of responses: (1) voice (seek redress from business), (2) private (word-of-mouth), and (3) third-party complaints. Voicing complaints directly to a firm, boycotting, and third-party complaints about a firm are all more likely when a consumer believes that the firm has done something strikingly wrong or harmful to society. In these cases, the firm does not meet the consumer's moral standard and the firm's decision-making is morally unacceptable (Swimberghe, Flurry, & Parke, 2011).

In our study's context, consumers with student loan complaints may submit them to the Consumer Financial Protection Bureau (CFPB), a U.S. government agency responsible for consumer protection in the financial sector. The CFPB was authorized under the auspices of the Dodd-Frank Wall Street Reform and Consumer Protection Act, as a response to widespread calls for protecting consumers participating in the financial markets, including via student loans. As such, the CFPB has handled over 44,000 student loan complaints (Consumer Financial Protection Bureau, 2017) through the Consumer Complaint Database. The complaints data has been consistently updated and publicly available online at data.gov, "to provide consumers with timely and understandable information about financial products and services and improve the functioning, transparency, and efficiency of markets for such products and services" (Bureau of Consumer Financial Protection, 2014, p. 4). From an agency perspective, consumer complaints to third parties can serve to obtain redress and improve consumer satisfaction in that consumers who lodge complaints to third parties such as the Federal Reserve System are generally satisfied with the

complaint resolution process and its outcome (Hogarth & English, 1997). This is in line with previous research that has demonstrated complaint management as a tool of defensive marketing strategy to drive post-complaint satisfaction and loyalty (Fornell & Wernerfelt, 1987; Morgeson III et al., 2020). Likewise, the complaint behavior literature has shown that consumer satisfaction with complaint resolution results in significantly higher repurchase intentions (Halstead & Page Jr., 1992). Further, consumer satisfaction with third-party complaint resolution efforts is also associated with consumer- (e.g., socioeconomic factors and prior complaint behavior; Hogarth, English, & Sharma, 2001), industry- (Hogarth et al., 2001), and complaint-specific characteristics (e.g., quantitative vs. qualitative complaints; Hogarth & Hilgert, 2004). For example, lower-income students are more likely to rely heavily on student loans to fund their education and thus provide a strong motivation for complaining behavior, as compared to more affluent students (Long & Riley, 2017; Ozymy, 2012). Similarly, lower graduation rates can increase default rates, resulting in complaints associated with student loans (Volkwein & Cabrera, 1988; Steiner & Teszloer, 2005).

#### *Partisanship and complaining behavior*

In the context of the Dodd-Frank Act, members of the Democratic Party were in control of the House, Senate, and presidency, and the act passed with a high level of partisan division, with Democrats and Republicans staunchly divided in the U.S. House and U.S. Senate (i.e., 92% of House Democrats and 98% of Senate Democrats voted in favor, and 98% of House Republicans and 93% of Senate Republicans voted in opposition). Collectively, members of the Democratic Party determined that the behavior of financial service firms was concerning to society and therefore passed legislation to expand regulation of the financial industry. Given the highly partisan nature of the voting in both chambers of Congress, it is reasonable to assume that constituents of the Democratic party would be more likely to perceive the legislation of Dodd-Frank in a positive light than would their Republican counterparts. Hence, it leads us to examine whether the partisan nature of the divide affects consumer use of the agency's services based on partisan affiliations.

As the CFPB was initiated with a significant amount of partisan discord, the partisan match between the Democratic legislation that created the CFPB and Democratic partisan consumers would suggest a more positively valenced perception of the CFPB than their Republican consumer counterparts. This suggests that Democratic constituencies would be more likely to lodge complaints against financial service firms in general, including third-party complaints via the CFPB.

Conversely, we would submit that consumers that identify as Republicans would be more likely to have a negative perception of the CFPB. Scholars have found that "affect is a more appropriate indicator of mass polarization than ideology" and "the mere act of identifying with a political party is sufficient to trigger negative evaluations of the opposition" (Iyengar et al. 2012, p. 407). For instance, Rutjens et al. (2018) found that skepticism regarding climate change was best predicted by the level of an individual's political conservatism; and one's attitudes regarding a social policy are affected by the position communicated by the individual's political party (Cohen, 2003) rather than the policy itself.

In a somewhat related vein, trust was found to be a key antecedent in the adoption of government electronic services. As similarity enables trust (Palmatier et al., 2006), the partisan match between Democratic constituents and the CFPB suggests a greater level of trust in the CFPB as a third-party complaint outlet for Democrats than for Republicans. This impact of trust would

be consistent with the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003), where “performance expectancy” is the key driver of technology use behavior (Williams, Rana, & Dwivedi, 2015).

In sum, we suggest that partisanship affects the likelihood of lodging a complaint via the CFPB. Due to the Democratic initiation of the legislation which created the CFPB, we would hypothesize that consumers who consider themselves affiliated with the Democratic party will be more likely to lodge a complaint to the CFPB than their Republican counterparts.

**Hypothesis:** *The level of Democratic partisanship has a positive effect on the number of student loan complaints filed with the CFPB.*

## EMPIRICAL ANALYSIS

### *Institutional Setting*

To analyze our research question, we integrate data from four sources. We submit that this approach demonstrates the value of big data for marketing research. The first database is the Financial Services Consumer Complaint Database, provided by the CFPB<sup>1</sup>. The database generally updates daily and contains detailed information such as the source of the complaint, the date of submission, and the company the complaint was sent for the response. Each week the CFPB sends thousands of consumer complaints about financial products and services to companies. Those complaints are published after the company responds or after 15 days, whichever comes first. By submitting a complaint, consumers can help themselves resolve their issues and others avoid similar ones.

The use of secondary data rather than self-report scale measures to operationalize conceptual constructs is “widely accepted and strongly preferred” in a variety of disciplines, including finance, economics, and health care administration (Houston 2004, p. 154). Critics, in fields such as marketing, suggest that secondary data provides only a proxy for a construct, leading to potential construct validity issues (Rindfleisch & Heide, 1997) and even reliability problems as single-item measures (Houston, 2004). However, secondary data provides many benefits when compared to self-report scale data. Secondary data can enhance external validity by capturing actual decision-making, rather than lab or survey responses (Winer, 1999), and is generally less likely to be subject to self-report biases and sampling issues (Houston, 2004). Of particular importance in this study, secondary data provides a cost and time-efficient approach to applying large amounts of data to assess the research objectives, providing a multimethod triangulation to other research on complaining behavior.

The CFPB database includes 939,149 complaints from January 2012 through December 2017 in 11 categories: bank account or service, checking or savings account, consumer loan, credit card, credit reporting, debt collection, money transfers, mortgage, payday loan, prepaid card, vehicle loan or lease, virtual currency, and student loan. Among those 11 categories, this paper focuses on complaints associated with student loans, aggregated at the state- and quarter-level. Our focus on student loans reduces the entire sample to 1,200 observations, consisting of over 96% of consumer complaints about loan repayment. Complaints related to issues other than repayments, such as getting a new loan or credit reports, are only 3.2% of the total.

Figure 1 presents the distributions of the complaint frequency across states and year/quarter during the sample period. As shown, the distributions illustrate a large variation of the complaint

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<sup>1</sup> <https://www.consumerfinance.gov/data-research/consumer-complaints/>

frequency across states, as well as an overall increasing pattern over time. Overall, the number of complaints increased with the state population, and one-third of the total complaints (32.9%) were filed from the five most populated states, including California, Texas, Florida, New York, and Pennsylvania. Meanwhile, the District of Columbia had the most complaints per capita primarily due to the concentration of legal specialties and the high average law school debt. In addition, a considerable increase in complaints was observed in the first quarter of 2017 when the Trump administration issued its first policy on student loans. The action allowed loan guarantee agencies to charge borrowers who defaulted on their federal student loans up to 16% on their student loan balances. We control for state-specific idiosyncratic characteristics and potential exogenous shock with state- and time-specific fixed effects in our model specification.

The second database is the Title IV Program Volume Reports<sup>2</sup>, published by Federal Student Aid (FSA), a U.S. Department of Education office that delivers aid to students through loan, grant, and work-study programs. These reports provide quarterly information on the dollar volume of student loan originations and disbursements, as well as the number of recipients from each school participating in the Title IV programs. In our empirical analysis, these quarterly data are aggregated at the zip code area level, based on the location of the schools in the database. Figure 2 reports the total number of consumer complaints across states, using a median split on the total number of student loan recipients at each state level. As shown, states with a higher volume of student loans have more complaints, as compared to states that provided fewer student loans, on average.

The third database is the state partisan composition, published by the National Conference of State Legislatures (NCSL)<sup>3</sup>. During the sample period, three different congresses were observed: 112th (2011 - 2013), 113th (2013 - 2015), and 114th (2015 - 2017). In this research, we focus on the variations of the percentage of Democratic members of the state senates at the individual year level, not the congress level. We thus account for the changes in the number of senators (or the representatives representing a particular party due to the death or resignation of a senator) during a congress.

The fourth database is the graduation rates report, published by the Chronicle of Higher Education (CHE). The institution examines data and trends at 3,800 degree-granting schools in the U.S. that reported a first-time, full-time degree-seeking undergraduate cohort, had a total of at least 100 students at the undergraduate level in 2013 and were awarded undergraduate degrees between 2008 and 2013.

### *Variable Operationalization*

Table 1 summarizes our variable operationalization. Our key dependent variable, the number of consumer complaints associated with student loans (*Complaints*), is aggregated at the zip code and year-quarter level. We operationalize our key independent variable, partisan match (*Partisanship*), as the percentage of Democratic senate or house representatives for each state each year. Partisanship is measured from the Democratic perspective to interpret the results by regarding a partisan match with the legislation.

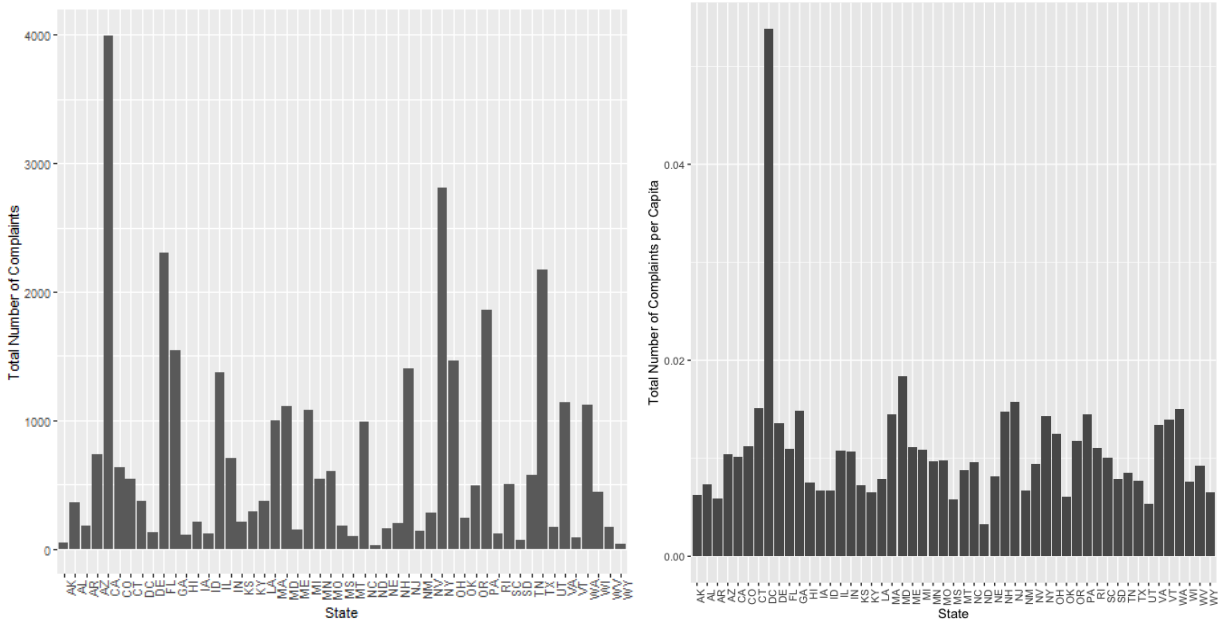
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<sup>2</sup> <https://studentaid.ed.gov/sa/about/data-center/student/title-iv>

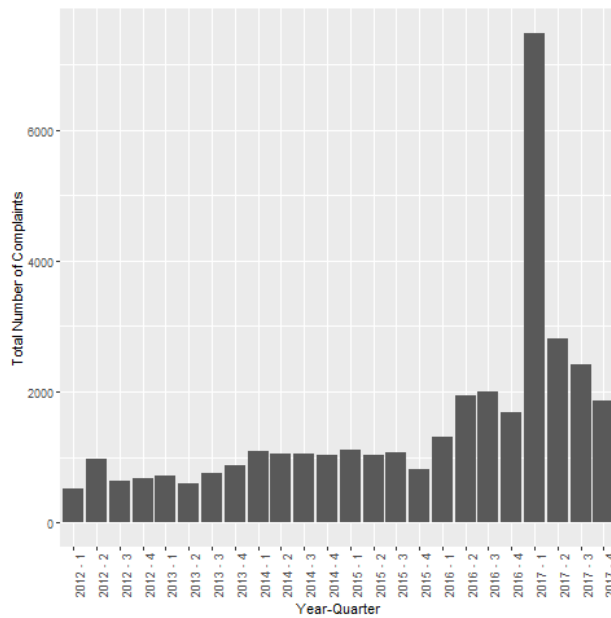
<sup>3</sup> <http://www.ncsl.org/research/about-state-legislatures/partisan-composition.aspx>

**Figure 1** Distributions of Consumer Complaints

(a) Complaints (per capita) across States



(b) Complaints across Year-Quarters





**Table 1:**  
Variable Operationalization

Variable	Operationalization	Aggregation Level	Source*
<i>Complaints</i>	Total number of consumer complaints associated with student loans	Zip code, quarter	CFPB
<i>Partisanship</i>	Percentage of Democratic senate or house representatives	State, Year	NCSL
<i>Debt</i>	Total number of student loan recipients (thousands) and amounts (million dollars)	Zip code, quarter	FSA
<i>Completion</i>	Average of completions per 100 full-time undergraduate students	State	CHE
<i>Income</i>	Median income per household	State, Year	Census

\* CFPB: Consumer Financial Protection Bureau, FSA: Federal Student Aid, NCSL: National Conference of State Legislatures, CHE: Chronicle of Higher Education

We also include three control variables in the model as they are likely to impact the number of complaints. First, we measure the size of student loan debt (*Debt*) as the number (thousands) of student loan recipients, given the zip code area (based on the first three digits) and year-quarter. The more borrowers, the greater the opportunity for complaints. To examine the robustness of this measure of student loan debt, we alternatively operationalize it as the total amount (million dollars) of student loans. Second, we operationalize the 6-year graduation rate (*Completion*) as the average completion rate for full-time undergraduate students at each state level. Third, demographic characteristics of students could also inform complaint behavior. We thus include the state-level household median income from Census data (*Income*) each year, as fewer resources available to manage debt issues may result in more complaints.

Table 2 reports the descriptive statistics of the key variables of our interest. The table illustrates that each state receives 3.6 consumer complaints on average in each quarter. These complaints are placed against student loans provided to 3,340 households, which total up to \$11.3 million each quarter. The percentage of Democratic members of the state senates is 45% on average, while that of the Democratic house representatives is slightly higher. Further, the graduation data from 3,786 institutions indicate that the undergraduate-level completion rate is 24.2%.

**Table 2:**  
Descriptive Statistics

	Mean	SD	Med.	Min.	Max.
<i>Complaints</i>	3.60	5.61	2	1	137
<i>Partisanship (%)</i>					
Senate Democrats	0.45	0.16	0.42	0.10	1.00
House Democrats	0.47	0.15	0.42	0.13	0.92
<i>Debt</i>					
Recipient Count (thousands)	3.34	5.88	1.27	0	125.9
Loan Amount (\$ millions)	11.3	20.7	3.88	0	445.0
<i>Completion (%)</i>	24.2	2.52	24.1	17.0	34.0
<i>Income (\$ thousands)</i>	59.0	8.47	58.4	34.1	81.1

*Econometric Model*

We model the number of consumer complaints about student loans as a function of the independent variables mentioned in the previous section. As the consumer complaint counts are discrete, not continuous, observations are limited to non-negative values. Therefore, we use a log-log model (e.g., Montgomery 1997), which has the added advantage of producing parameter estimates that can be interpreted directly as elasticities (van Heerde, Mela, and Manchanda 2004).<sup>4</sup> For zip code area *i*, state *j*, and year-quarter *t*, our proposed model is thus specified as follows:

$$\log(Complaints_{ijt}) = \beta_0 + \beta_1 \log(Partisanship_{jt}) + \beta_2 \log(Debt_{ijt}) + \beta_3 \log(Completion_j) + \beta_4 \log(Income_{jt}) + \gamma_j + \xi_t + \varepsilon_{ijt}$$

where the variables are as noted previously. We control for unobserved characteristics of each state and year-quarter with the fixed effects,  $\gamma_j$  and  $\xi_t$ . Specifically,  $\gamma_j$  controls for the state-level omitted factors which are potentially correlated with measures of partisanship. For example, for-profit colleges in urban areas may exploit students with more lax regulation of higher education, thus isolating the effect of political affiliation on complaints.  $\xi_t$  addresses concerns associated with temporal changes in governmental regulations, as shown in Table 1. The error term in the equation  $\varepsilon_{ijt} \sim N(0,1)$  captures unobservable idiosyncratic characteristics.

<sup>4</sup> An alternative is to use a Poisson regression model which assumes that the mean and variance of the errors are equal. To redress this consideration, although it is not our case (see Table 2 for the details), we ran the Poisson model to check robustness and the results are qualitatively consistent with those based on our proposed log-log model. The details are available from the authors on request.

## RESULTS

Table 3 reports the empirical results for our proposed model. The results reveal that consumer complaints are significantly affected by partisanship. We illustrate these findings by comparing several model specifications: (1) the proposed model, (2) an alternative model with partisanship operationalized as the percentage of Democratic house representatives instead of senators, and (3) a third model with student loan debts operationalized as the dollar amount of student loans.

<b>Table 3:</b>			
Parameter Estimates: Proposed Model			
	(1)	(2)	(3)
<i>Intercept</i>	-2.5479 (1.4895)	-2.7403 (1.4838)	-2.0853 (1.5043)
<i>Partisanship</i>			
% Senate Democrats	0.3451*** (0.0563)	0.3176*** (0.0560)	
% House Democrats			0.2234*** (0.0593)
<i>Control Variables</i>			
Debt: Student Loan Recipients	0.5633*** (0.0055)		0.5628*** (0.0055)
Debt: Student Loan Amount		0.4355*** (0.0042)	
Completion	0.1444 (0.1384)	0.1512 (0.1379)	0.1595 (0.1384)
Income	0.7023 (0.4107)	0.7041 (0.4091)	0.4674 (0.4155)
Fixed Effect: State ( $\gamma_j$ )	Y	Y	Y
Fixed Effect: Year-Quarter ( $\xi_t$ )	Y	Y	Y
Adjusted R-Squared	0.5709	0.5742	0.5706
Number of Observations	32,495	32,495	32,495
Note: Standard errors in parentheses; *** p < 0.01			

We find that partisanship has a significant effect on consumer complaints. As the percentages of Democratic senators and house representatives increase by 10%, we expect a 3.5% and 2.2% increase in consumer complaints, respectively (Columns (1) and (3)). This finding supports our hypothesis that higher levels of Democratic partisanship increase the number of complaints.

We also examine the results of our analysis for the three control variables. Regarding the effect of student debt on complaints, we find that higher levels of student loans result in more complaints. As shown, the results pertaining to our proposed model (Column (1)) show that for any 10% increase in student loan recipients, we expect about a 5.6% increase in the number of

consumer complaints. This significant positive effect of student debt is consistent with our expectation that making loans more available to students would incur complaints about loan repayment, the biggest concern of student loan borrowers. The result is robust when we use the dollar amount of student loans as a proxy for the level of student debt (Column (2)).

Considering state-level factors such as graduation rates and income, neither significantly affects the number of complaints. One may argue that state graduation rates are likely to be negatively correlated to the number of complaints, as students who earned a marketable degree put them in a superior position to manage their debt than those who failed to graduate. Likewise, household income that presumably provides resources available to manage debt could decrease complaints. However, our proposed model controls for these factors with the actual loan provided (*Debt*), and thus the remaining unobserved institution-specific characteristics are not necessarily related to students' complaining behavior. We also control for the unobserved state- and time-specific characteristics with the state- and quarter-based fixed effects in our model specifications. Further, there is no evidence that multicollinearity is an issue across our model specifications, with all variance inflation factors being less than 1.5.

One potential concern is that our state-level factors, such as graduation rates and median household income, correlate with our state-level partisanship measure. For example, more educated residents might have more knowledge or awareness of the CFPB complaint programs. To address this concern, we run a model without state-level institutional data and find that the results are consistent with those based on our proposed model (see Table 4).

## DISCUSSION AND IMPLICATIONS

Our research addresses an important topic that lies at the intersection of consumer feedback and complaints within government services. Not only have student loans increasingly represented a financial challenge for existing students and graduates, but it also enhances stress for many of its consumers (Zhang, Wilcox, & Cheema, 2022). As such, scholars have noted that student loans are an important marketing, public policy, and consumer protection issue (Andrews et al., 2022). Similarly, partisanship continues to affect attitudes and beliefs (Silver & van Kessel, 2021) throughout the U.S. Using this government-to-consumer context, we find a partisan match between the party that produced legislation and policy and the consumers who utilize it, even if this behavior is complaining.

### *Academic Contributions*

We submit that our study provides several academic contributions. First, our study's context lies within the government-to-consumer realm (i.e., G2C). The majority of student loans are initiated by the federal government and consumer complaints are submitted to the CFPB. Hence, the market participants are government-to-consumer, with the third party to which complaints are lodged being a government agency. As noted in the literature, the use of a G2C or G2B context within the satisfaction, dissatisfaction, and complaining behavior is sparse (Dahl & Peltier, 2015); and the government has usually been the third party that has been "external to the original marketing exchange" (McAlister & Erffmeyer, 2003). As such, our research provides a greater understanding of complaining behaviors, as "the data is thinner - mainly because consumers are less likely to complain to third parties" (Hogarth & English, 1997). In addition, our research provides unique insights into the government context and a government-to-consumer marketing exchange; and aligns with leading journals in the consumer satisfaction domain that seek a "new perspective for advancing the CS field" (Dahl & Peltier, 2015, p. 14).

Second, our research, in part, addresses a topical issue, that of student loans and partisanship. We develop a model that incorporates the extent to which the potential complainants are a partisan match with the drivers of the policy process. Our empirical findings reveal that partisanship, as well as the amount of student loans, significantly increases consumer complaints, suggesting that the effectiveness of the procedure used to achieve the policy objective is disproportionately skewed towards those that are a partisan match.

	(1)	(2)
<i>Intercept</i>	-2.5479 (1.4895)	0.1858 (0.1318)
<i>Partisanship</i>		
% Senate Democrats	0.3451*** (0.0563)	0.3462*** (0.0563)
<i>Control Variables</i>		
Debt: Student Loan Recipients	0.5633*** (0.0055)	0.5633*** (0.0055)
Completion	0.1444 (0.1384)	
Income	0.7023 (0.4107)	
Fixed Effect: State ( $\gamma_i$ )	Y	Y
Fixed Effect: Year-Quarter ( $\xi_t$ )	Y	Y
Adjusted R-Squared	0.5710	0.5709
Number of Observations	32,495	32,495

Note: Standard errors in parentheses; \*\*\*  $p < 0.01$

Third, our study contributes to social identity theory by integrating research on partisanship and complaining behavior, revealing an intriguing perspective of in-group favoritism. The desire to identify with and be a part of a specific in-group drive complaining behavior with the objective of making attitudes consistent with that desired in-group. That is, the partisan identity may positively affect the use of an agency, even if it is for the use of complaints.

Fourth, our study contributes through our distinct data collection approach, integrating four different datasets to provide a unique perspective on consumer complaints within a student loan and government context. Specifically, we incorporate data from the 1) Financial Services Consumer Complaint Database, provided by the Consumer Financial Protection Bureau; 2) Title IV Program Volume Reports, published by Federal Student Aid, a U.S. Department of Education office; 3) state partisan composition, published by the National Conference of State Legislatures; and 4) graduation rates report, published by the Chronicle of Higher Education. Dahl & Peltier (2015) note that survey data, literature reviews, and experiments are more common approaches to understanding areas of satisfaction, dissatisfaction, and complaining behavior. In contrast, our

approach offers an example of incorporating big data, generated by actual complaining behavior, to provide insights and advance the literature.

### *Managerial Implications*

This study produces valuable guidance for managers and policymakers. Due to the nature of our context, G2C, our findings may aid those in the public arena as they use available data to craft policy measures and market their adoption to consumers.

We demonstrate the application of developing an integrated, diverse “big data” database and use it to explore relevant, timely questions. Our research applies big data and analytics to the intersection of two debated topics, partisanship, and student loans, to better understand complaining behavior. Big data commonly refers to the “collection, management and analysis of massive amounts of data” (McNeely & Hahm, 2014, p. 305). Public policymakers can undoubtedly see the advantages of integrating big data within regulatory and public policy discussions with key stakeholders. For instance, large-scale data allows the generation of new insights not available with smaller-scale data, such as surveys; and in doing so, creates value in “ways that change markets, organizations, and the relationships between citizens and governments” (Mayer-Schonberger & Cukier, 2013 p. 6). As such, we produce a rich context for examining the impact of the partisan match on consumer complaints. Further, given that the data is collected and distributed by a government agency, it is reasonable to assume that findings will be considered in future regulation decisions.

Second, our results suggest that the effectiveness of the procedure, i.e., the CFPB database, in helping to achieve the policy objectives of the CFPB is conditional on partisanship.

As measured by complaints logged in the database, Democratic constituencies are more likely to use the database as a third-party outlet for complaints than Republican constituencies. The legislation that led to the CFPB complaint database was highly partisan and driven by the Democratic Party. As a result, the more partisan the constituency favoring the Democratic Party, the greater the partisan match with the process that drove the policy, and the greater the use of the CFPB database as an outlet for complaints. This finding addresses the call for the study of heterogeneous responses in political contexts (Gordon et al., 2012). The future impact of that imbalance may be important, assuming that monitoring of procedures eventually drives protocols. By entering a disproportionate amount of data per capita into the database than Republican constituencies, Democratic constituencies will have a disproportionate impact on any protocols related to student loans.

## **LIMITATIONS AND FUTURE RESEARCH**

The research is limited in several ways. First, due to constraints driven by the data sources, the analyzed data were aggregated at the state level. As a result, the partisan match of a particular complainant is latent and therefore probabilistically assumed given the voting preferences of each state. Second, the operationalized antecedents of the complaints in the model are only proxies of the conceptual drivers. A partisan match is not at the policy issue level but the party level. Even though the antecedents were only proxies, and all data were aggregated to the state level, the model was able to explain a high percentage of the variance in complaints. An alternative explanation for the findings would be if Democratic constituencies face more problems per capita with student loan lenders than Republican constituencies do.

Several opportunities exist for future research in this area. Datasets that allow for a disaggregate view, or different levels of aggregation (e.g., by school), may provide additional

insights. A disaggregate dataset would allow for the inclusion of individual characteristics of the borrowers, although the current CFPB database does not offer this type of data.

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