

U.S. Campaign Finance and Institutional Corruption in Public Policy

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Abstract

Studies of a wide range of complex problems involving environmental, social, and economic factors often show a significant disconnect among expert's views, the wishes of the general public, and the legislation that is ultimately passed. The issue of climate change, for example, has clear policy recommendations from scientists and other experts, and acknowledgement by the public that some action must be taken. However, suitable legislation lags both the science and public support. The consequences of such disconnects are reflected in declining polls of trust in government, and in a recent study showing that average citizens now have little to no impact on government policy compared to economic elites and lobbying groups, which enjoy significant influence.

This paper explores how the structural relationships between campaign finance and economic elites produces an institutionalized form of corruption in the policy making process. The model demonstrates how public opinion impacts the cost of reaching voters, which in turn reinforces the corrupting influence of elite contributions. We then examine different reform policies that could affect the future of public policy making, and discuss the need for better research on the strategies proposed for mitigating the influence of money in politics.

Introduction

For the 1974 election cycle, the average winning U.S. House of Representatives campaign required just \$56,000 (Lessig, 2012). Since then expenditures have doubled on average every ten years, climbing to over one million dollars by 2014 (OpenSecrets, 2015A). Yet this only accounts for the money that is contributed directly to candidates.

In recent years the total contributions to campaigns, Super-PACs, and non-profit organizations (i.e. dark money) have risen to over \$3.5 billion per two year election cycle, with outside spending (i.e. spending not controlled by candidates themselves) representing over 13 percent of total spent in 2014 (OpenSecrets, 2014). The money contributed towards elections has also become more consolidated. During the same 2014 cycle, the top 1 percent of Super-PAC contributors delivered nearly 70 percent of the money (OpenSecrets, 2015B). In addition to campaign contributions, lobbying expenditures have undergone similar growth topping \$3.24 billion per year since 2013 (OpenSecrets, 2015C).

In response to this exponential growth in political spending, academics, such as Harvard Law professor Lawrence Lessig, have raised the alarm about the oversized influence of elite interests. Where, for the purpose of this paper, "elite interests" represent both wealthy contributors and corporations. Lessig argues that the significance of these large dollar contributions has created a special kind of dependency between Congressional representatives and the funders of campaigns. This dependency has bred a new

form that he defines as “institutional corruption,” which goes beyond the narrow quid pro quo legal interpretation used in the recent Supreme Court of the United States campaign finance decisions.

“Institutional corruption is manifest when there is a systemic and strategic influence which is legal, or even currently ethical, that undermines the institution’s effectiveness by diverting it from its purpose or weakening its ability to achieve its purpose, including, to the extent relevant to its purpose, weakening either the public’s trust in that institution or the institution’s inherent trustworthiness.” –Lessig (2014)

This definition of corruption is certainly more complex than one based on a simple direct exchange of money for favors, making it an important case for model-based study. To explore the notion of systemic institutional corruption in detail, we have developed a system dynamics model that represents the key structural relationships between the three sectors identified in Lessig’s definition of its political, economic, and social system:

1. **Campaign Finance and Lobbying:** This first sector defines the “systemic and strategic influence” produced by elite political investments in campaigns, PACs, and lobbyists and how they affect the writing of public policy in Congress
2. **Public Policy and Income Disparity:** The second sector describes the impact of this influence and how it has weakened the ability of Congress to produce policies that are not overly biased towards elite interests
3. **Voter Trust and Engagement:** The final sector uses voter participation and trust in government to close the loop by linking the impact of institutional corruption to the other model sectors

The model is based on a detailed review of campaign finance literature and the analysis of historical data spanning from 1960 to 2014. This data was also used to calibrate the model and verify its ability to reproduce historical behavior and most importantly, to respond properly to different policy inputs.

In our policy analysis, we evaluated four different reform strategies, including three that were recently proposed in a bill to Congress (Sarbanes, 2014). The results have provided several important insights into effectiveness of each proposed policy, as well as their sensitivity to the assumptions they rely upon.

To summarize our findings, the system appears least affected by efforts to amplify small dollar contributions, and most susceptible to policies that reduce elite leverage over members of Congress or that increase voter engagement in combination with public funding. We also present strong evidence that there is a systemic problem of institutional corruption in Congress that has severely diminished the ability of its members to develop sound, unbiased policy. This study provides both a stark warning and way forward towards the restoration of a more representative and more effective government by encouraging critical thought on the causes of institutional corruption and by using simulation to enable a rigorous and objective test of all the proposed policies for restoring citizen equality in the United States.

Background and Data

The problems between money, influence, and politics have a long history in the United States, going back to its very founding. As Teachout (2014) notes, much of the original concern was with the influence from foreign states. This was prompted in part by a string of gifts from French royalty to early U.S. diplomats, including a diamond crusted snuffbox given to Benjamin Franklin. The result was a clause in the Articles of Confederation, which later led to a similar one in Article One, Section 9 of the U.S. Constitution, which reads:

“No person holding any office of profit or trust under them, shall, without the consent of the Congress, accept of any present, emolument, office, or title, of any kind whatever, from any king, prince, or foreign state.”

The founder’s concerns with influence were not limited just to gifts, however, but also bribery and intimidation. In particular, when the rules and procedures for Congress were designed, the practice of anonymous voting in the Committee of the Whole was adopted from the British House of Commons. The reason for anonymity was because it provided the greatest protection for its members from the retaliation of the king (Robertson, 1998).

Since the Committee of the Whole plays a significant role in crafting spending and revenue bills (Oleszek, 2014), the original procedure in the House was for only the final total of votes to be recorded, making it impossible for individuals to be singled out as targets for bribery and, more importantly, intimidation. After 181 years, this practice fully ended with the passage of the 1970 Legislative Reorganization Act, which was at the time heralded as a major “sunshine” reform that would bring greater transparency to what was going on in government (Robertson, 1998). After our analysis, this seemingly innocuous change appears to be one of the more significant functional changes that has the unintended consequence of giving political elites, and the lobbyists they hire, a significantly greater amount of leverage over members of Congress and the final legislation.

In the following subsections, in the order of the three sectors laid out in our definition, we describe the data and theory behind the rise of institutional corruption in Congress. In the section immediately following, this data is used to provide the reference modes used to develop model structure and to calibrate the model. Please note that all of the data and charts represented here are also included in an Excel file in the conference supplementary materials for this paper.

Campaign Finance and Lobbying

The first sector of our model describes the factors contributing to the systematic and strategic influence on policy development in Congress. For this study we chose to focus exclusively on the winning campaigns for the U.S. House of Representatives. We made this distinction for two reasons. First, since in 93% House races, the candidate that spends the most wins (Biersack, 2012), it is important to examine only what is required to win at such rates. Second, the differences in the term length, size, and dynamics between House and Senate campaigns requires that they be addressed independently. For this model we have chosen the House because the campaigns conveniently tend to be less sensitive than those for the Senate, which tend to have large swells in contributions during presidential election years. In addition, since the House, and the Committee of the Whole in particular, play such a significant role in crafting spending and revenue bills, the implications of institutional corruption are much more serious.

The data in this section will describe the size and growth of expenditures, contributions, and lobbying over time, and was made possible by many different sources including, Congressional Quarterly reports (CQ Press 1950, 1951, & 1956), the joint Brookings and American Enterprise Institute report, Vital Statistics (2013), and a detailed analysis of the records submitted to the Federal Election Commission (FEC). The task of analyzing the FEC records was completed using data curated by OpenSecrets (2015A) and the Center for Responsive Politics, which has been imported by Solomon Kahn into a PostgreSQL database that is publicly available.

Please note that some of the data displayed in the charts are based on a 2 year election cycle (i.e., not annual per-year data). While the model data is mostly annual there are a few exceptions for some variables with a name ending in “Per Congress” that we use for calibration.

One of the first factors to consider in campaigns is the relative cost of winning. The graph in Figure 1 shows the total expenditures for all House Campaigns from 1974 to 2012, which doubles on average every ten years. This steady growth in the cost of running campaigns has created a significant and continuous pressure on candidates to raise money. In more concrete terms, in 1974, a candidate expecting to win needed to raise approximately \$200 per work day (with an average of 261 days per year). Over the last two election cycles, the same candidates would need to raise almost \$8,000 per work day. One example consequence of this pressure, can be seen in the recommendation given by party leadership to junior members that they plan on spending anywhere between 30 and 70 percent of their time in office raising money for their next campaign (Lessig, 2014). This distraction also has the consequence of taking away time from analyzing policy, writing legislation, and meeting with constituents.

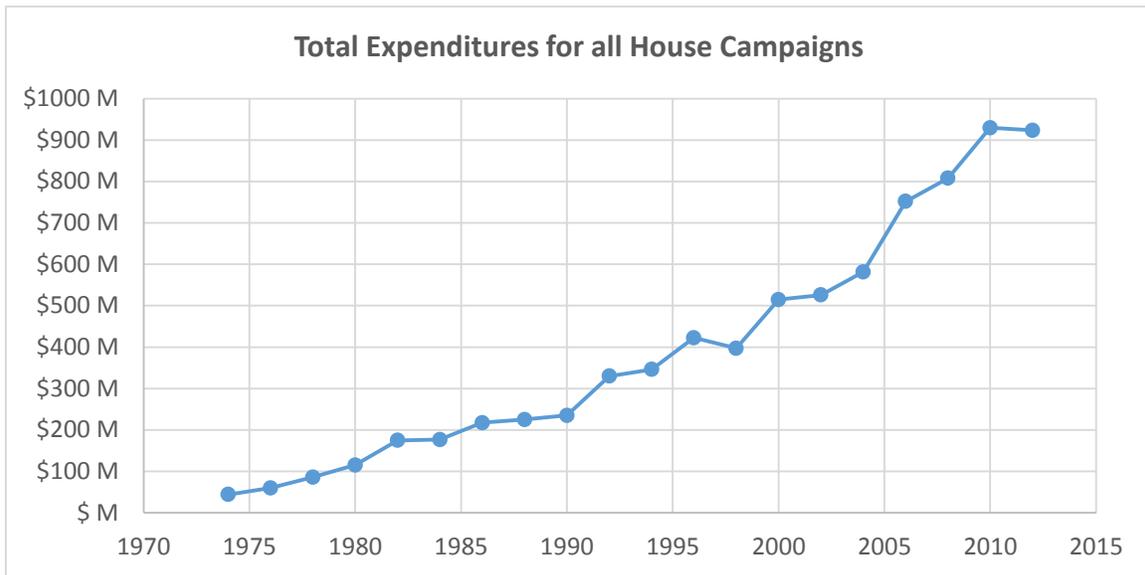


Figure 1: Total House campaign expenditures 1974-2012 (Lessig, 2012; Ornstein et al., 2013)

For the next dataset we queried the OpenSecrets FEC database (2015A) to extract the total contributions made to winning House campaigns by four different constituencies: (1) under \$200, (2) over \$2,700, (3) Remaining individual contributors, and (4) PACs. The graph in Figure 2 shows the distribution of funds from 1990 to 2014. It is worth noting that the under \$200 contributions are entirely insignificant compared to all other contributions. It is also worth noting that elite contributions over \$2,700 have recently surpassed all other individual contributions made to winning candidates, indicating the growing importance of elite contributions to fundraising efforts.

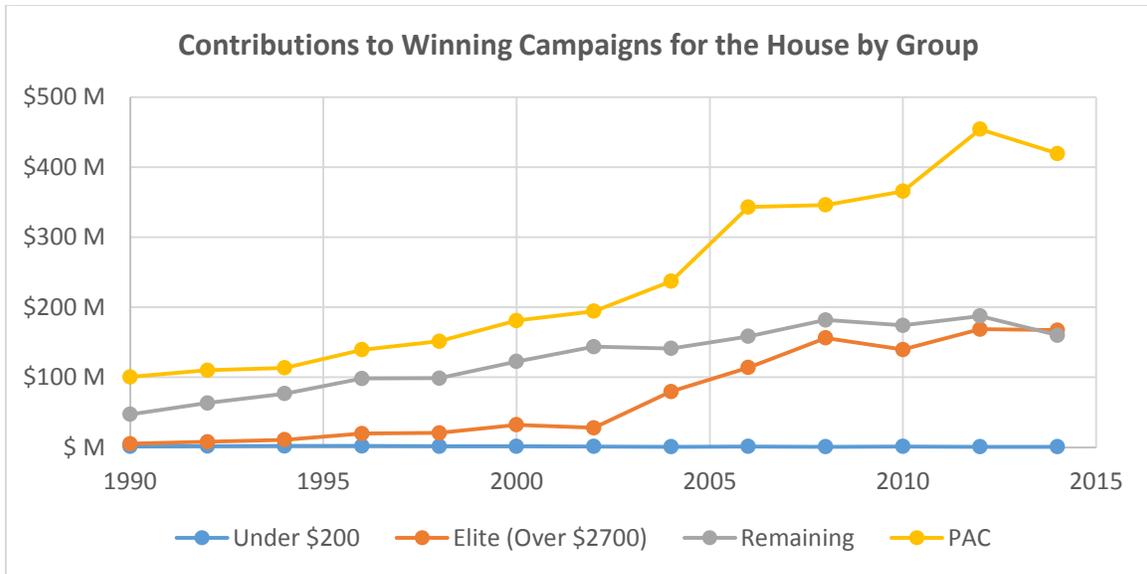


Figure 2: Total contributions to winning house campaigns by group 1990-2014 (OpenSecrets, 2014A)

In addition to the influence of campaign finance, we also collected data on the total number of lobbyists from 1960 to 2015, which has undergone growth similar to campaign finance (Figure 3). Investigations of the decline observed starting in 2008 have been attributed to the impacts of the recession, the high level of political deadlock, and the rise of a lobbying underground comprised of former representatives and staffers leaving Washington to join corporations directly instead of registering to lobby on their behalf (Fang, 2014). It is also plausible that lobbying has reached a level of market saturation, which would require that future increases in political investment be directed to other means of influence, such as SuperPACs and non-profit advocacy groups. The total lobbying expenditures from 1998 to 2014 also follows the now familiar pattern of growth (Figure 4).

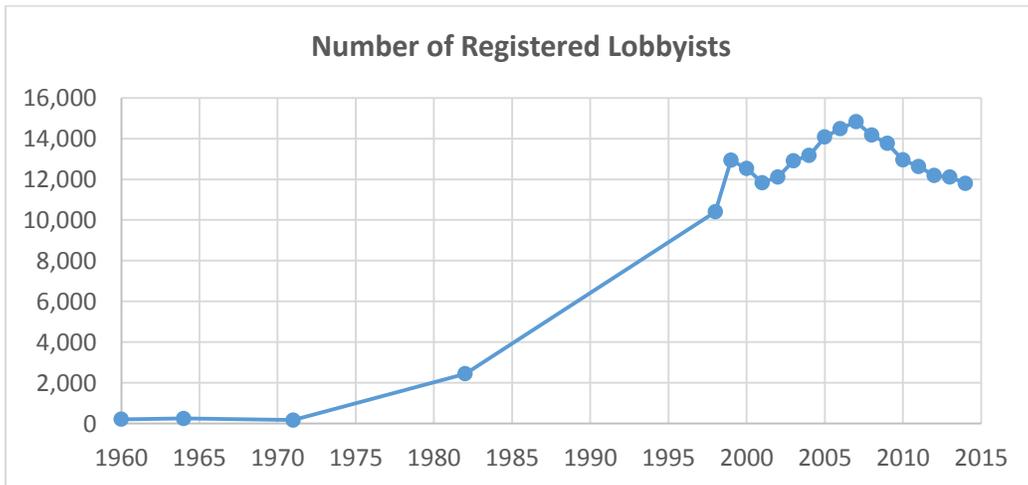


Figure 3: Number of registered lobbyists 1960-2014 (CQ Press, 1964, Contineti, 2013, & OpenSecrets, 2015C)

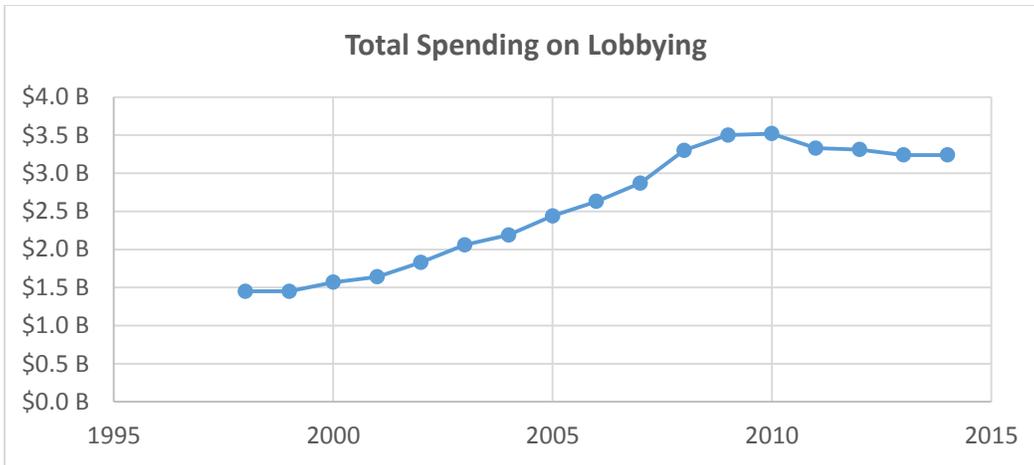


Figure 4: Total reported spending on lobbying 1998-2014 (OpenSecrets, 2015C)

Public Policy and Income Disparity

The next sector within our model examines the intended target of the influence that is produced from campaign contributions and lobbying efforts, which is the content of bills enacted by Congress. For this, we collected data on the length and number of bills enacted by the House from 1960 to 2012 (Figure 5), which shows that while the number of bills passed by each two-year Congressional session has steadily declined, the number of pages passed has consistently increased. As a result, the average number of pages per bill has gone from just 2.2 in 1960 to 19.9 in 2010, which represents a nine-fold increase in the volume and complexity of legislation a congressperson must consider. It is also worth noting that the sharp decline in 2012 has largely been attributed to the unprecedented level of gridlock in Washington that led to the government shutdown, which may be yet another consequence of the increased competition over funding.

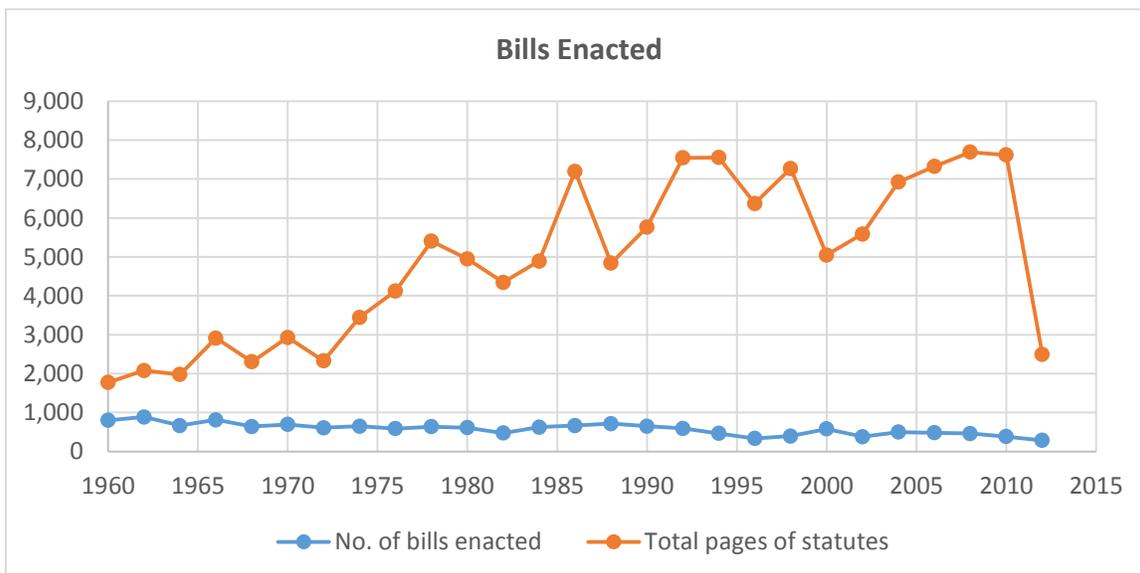


Figure 5: Number of bills and number of pages enacted in the House 1960-2012 (Ornstein et al., 2013)

In addition to the bills enacted by Congress, we also retrieved data on the total number of pages in the Federal Register, which represents all the existing government rules, regulations, and notices. As expected the register has also grown steadily from 1960 to 2014 (Figure 6).

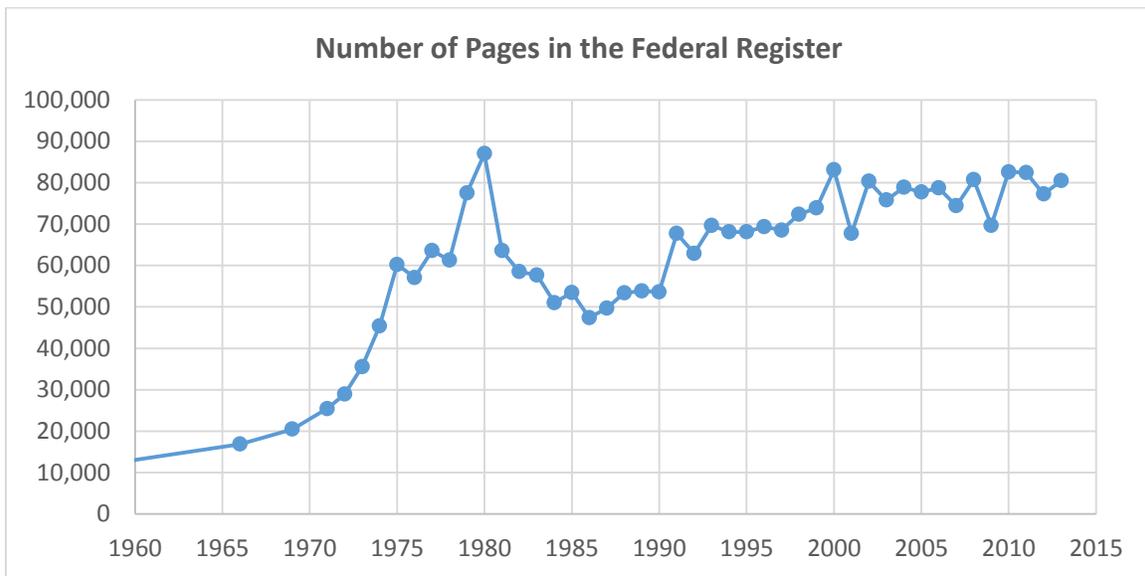


Figure 6: Number of pages in the Federal Register 1960-2014 (Ornstein et al., 2013)

The increase in size and complexity of bills by itself, however, does not indicate that the additional legislation is biased towards elites. It is therefore necessary to evaluate the content of legislation in order to determine if and how it is biased towards elite interests. In the largest study of its kind, researchers Gilens and Page (2014) assembled a “small army of research assistants” that gathered a large and diverse set of policy cases for which corresponding national surveys existed.

These cases were then analyzed to determine the predicted probability of a given policy change as it related to the percentage of individuals favoring the change. This analysis was completed for two income levels to determine the relative influence of both average citizens and economic elites. What they found they summarized as follows:

“When the preferences of economic elites and the stands of organized interest groups are controlled for, the preferences of the average American appear to have only a minuscule, near-zero, statistically non-significant impact upon public policy.” - Gilens & Page (2014)

The evidence for their conclusion can be clearly seen in Figure 7, which shows that for average citizens, regardless if they strongly support or oppose a policy, the probability of adoption is nearly unchanged at a value of 0.3. In contrast, when elites have a high preference for a policy, there is a greater probability for the legislation to be passed (value 0.6), and when they do not support a policy, the probability of it passing is close to zero. These findings provide strong evidence that the current public policy making process is indeed overly biased towards elites, and that a significant portion of the growth in the size of bills is representative of that influence. If correct, this kind of outcome is precisely the kind of result that one could expect in the presence of institutional corruption, as defined by Lessig.

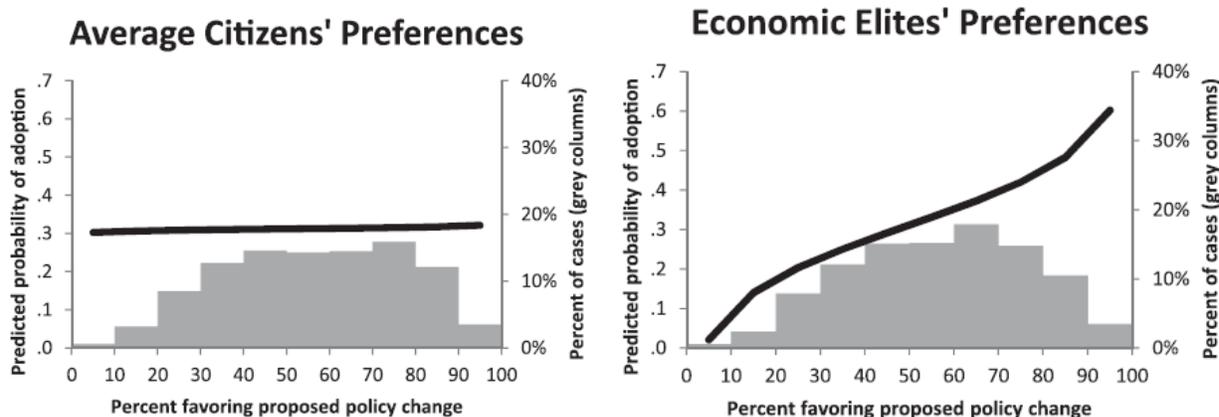


Figure 7: (a) Influence of average citizens

(b) Influence of economic elites (Gilens & Page, 2014)

If institutionalized corruption has indeed taken hold, as the Gilens and Page study suggests, then there remains the question of how elite political investments provide the leverage necessary to bend Congress in their favor. For this, Lessig has proposed that there exists now a systemic dependency between elected officials and the funders of campaigns (Lessig, 2014). Recalling the fact that representatives spend anywhere between 30 to 70 percent of their time raising money, Lessig argues that representatives have developed this significant bias towards the policy preferences of funders because the repetitive act of fundraising translates into a form of Operant Conditioning (Skinner, 1963). Lessig suggests that through this process of constant fundraising, the candidates automatically learn the policy positions required to receive the funding necessary for their campaigns, while growing ever more disconnected from the views of the middle class.

It is also worth noting that after a decade, when the appeal of “sunshine” reforms had faded, former proponents came to note that “bills were better when drafted away from lobbyists’ watchful eyes” (CQ Press, 1987). While attempting to estimate the amount of leverage that was gained from making the process more transparent, we found several very public examples that the amount can be quite large.

One of the starkest cases is the 2003 passage of Medicare Part D where Republican leaders, in an unprecedented move, held the vote open in the House for almost three hours while members were subjected to arm twisting so intense that many fled the capitol building while one member was brought to tears until the winning votes were secured (CBS News, 2007). Had the votes been anonymous it would have been impossible for members to be targeted in such a manner.

Another prime example occurred in 2013, when it was discovered that lobbyists were literally writing portions of a bill before Congress (Chang, 2013). If lobbyist input can be so clearly confirmed, it can also serve as proof to potential funders that specific legislation can be transacted through the act of lobbying.

In a final more recent example, we see signs of intimidation even within the same political party. In 2012, John Boehner was reported to have warned his conference “that leaders are ‘watching’ how the rank and file vote to determine committee assignments” (Hooper, 2012). Then in 2015, he was accused of harsh retaliations against a fellow party member that had voted against him as speaker (Sherman & Palmer, 2015). In both cases, the ability to monitor procedural votes provided unique leverage that would not have existed in the case of private voting.

To understand the significance of public policy that is biased towards elites, we now turn to the work of Thomas Piketty. In his landmark book *Capital in the 21st Century*, Piketty relies on an exhaustive study of well-developed capitalist economies to make the argument that wealth disparities have grown

substantially under government policies that have succumb to a political influence that overly favors elites (Piketty & Goldhammer, 2013). For the purposes of our study we chose to focus on this disparity as it exists between the median fifth percentile (the middle class) and the top five percent of household incomes (Figure 8).

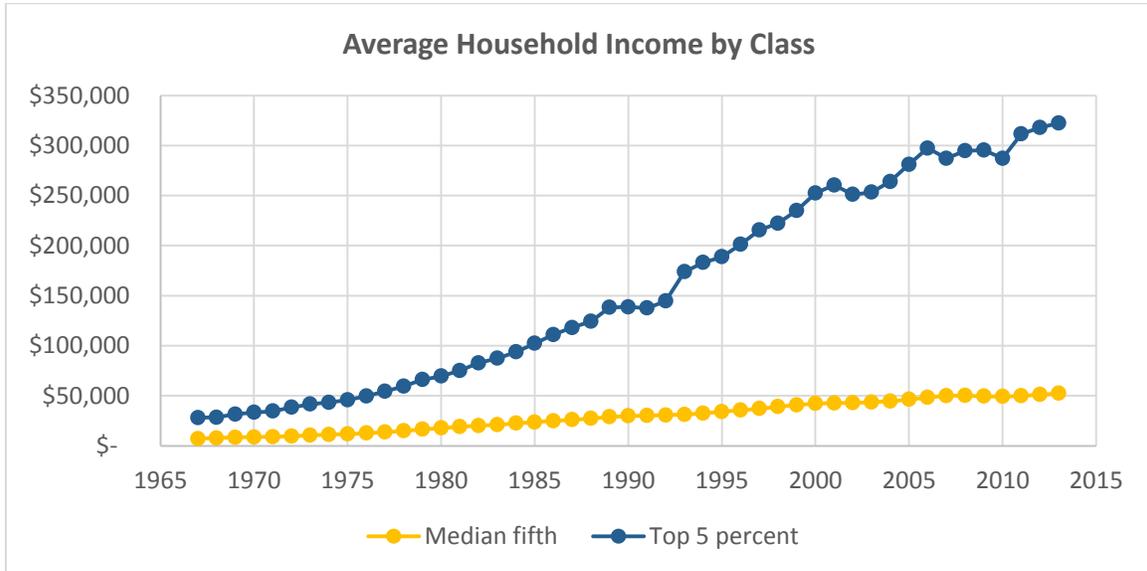


Figure 8: Average Income for median 5th and top 5% households 1967-2013 (US Census, 2014B & Stone, 2015)

In support of our argument that influence leads to a measureable financial gain for elites we turn to two studies that sought to provide a reasonable estimate of the return on investment from influencing Congress. In the first study by Alexander, et al. (2009), researchers found that firms who lobbied for the corporate tax holiday on repatriated earnings in the American Jobs Creation Act of 2004 received a return in excess of \$220 for every dollar they spent on lobbying.

In the second study by Allison and Harkins (2014) the focus was on the records of 200 for-profit corporations that had active political action committees and lobbyists in the 2008, 2010 and 2012 election cycles. Their research examined the sum total of campaign contributions, lobbying expenditures and compared them to the related federal budget allocations, tax breaks, and spending. They concluded that on average, corporations taking part in influence activities received \$760 for every dollar that was spent.

The range of the estimated return on investment between the two studies is fairly large in part because the Alexander study accounted for only the tax gains resulting from a single act, while the Allison and Harkins study included revenue that resulted from both tax benefits and government spending. Overall however, both studies indicate that there is a significant financial incentive for elite groups to engage in activities that influence public policy.

Voter Trust and Engagement

The last sector of our model is concerned with understanding the relationship between voters' trust in government and the number of people that register and then go on to vote. The graph in Figure 9 shows the trend of the public's trust in government, as measured by polls of voters answering "yes" to questions about trust. After a growth period through the 50s (not visible in graph), trust peaked at 77 percent in 1964. On the advent of the Vietnam war, trust began a steady decline, with some fluctuations that were likely driven by the state of the economy and other events, as well as some short spikes resulting from the first Gulf war in 1991 and the 9/11 terrorist attack in 2001. Since the end of 2007, however, fewer than 25% of respondents have continued to say that they trust the government. In the case of our model, the focus will be on the overall decline of trust, leaving out the dynamics of intermediate fluctuations and spikes.

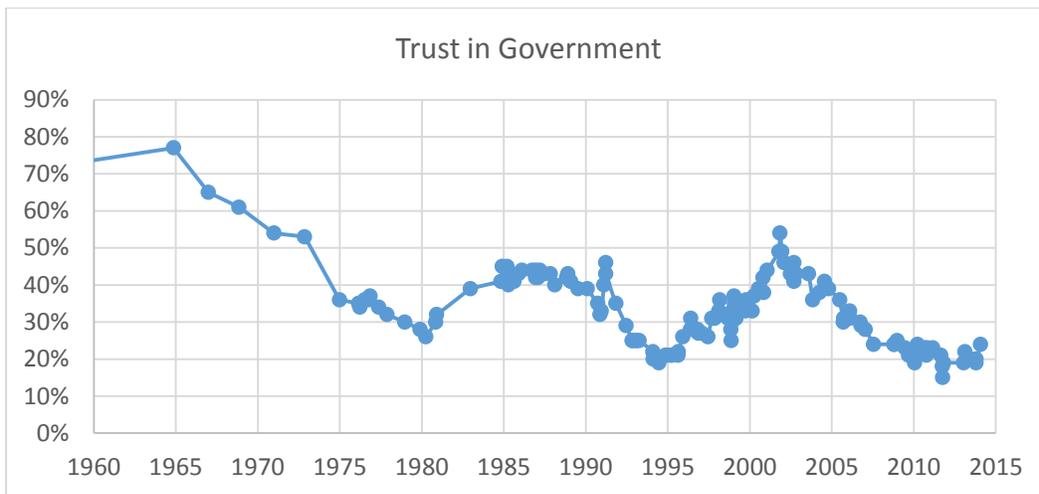


Figure 9: Trust in government polls 1960-2014 (Pew Research Center, 2014)

The last factor we considered in developing our model is the level of voter participation, which we measured by looking at the voting population, the number of people registered to vote, and the number of people that turn out to vote (Figure 10). It should be noted that we have chosen to only look at the mid-term election years in order to eliminate the effect that presidential elections have on both registration and turnout. This provides a better measurement of the baseline level of participation since during presidential election years there is an increase of over thirteen percent on average in the number of voters at the polls.

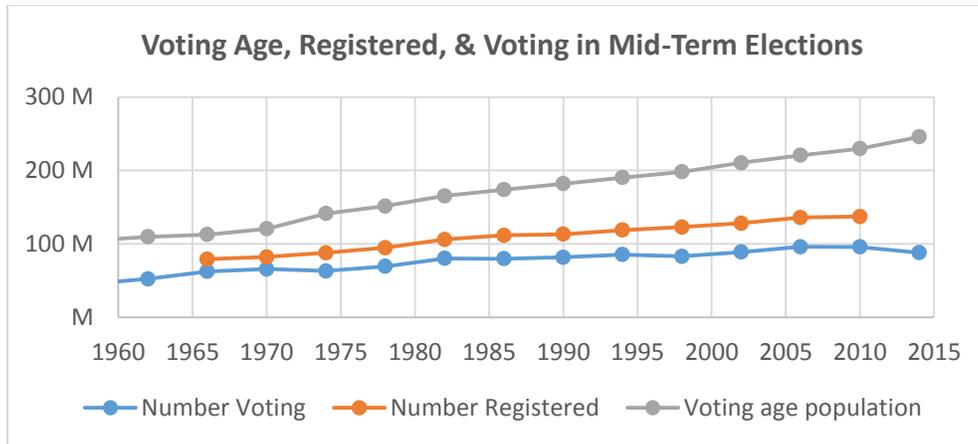


Figure 10: Voting age, registered, and voting in mid-term elections 1960-2014 (US Census, 1960, 1962, 2014A)

Institutional Corruption Model

We developed this model incrementally, iterating as our background literature research and data extraction revealed new insights about structural elements. The resulting model structure contains a total of fourteen stocks and nine major feedback loops. The model has been calibrated to approximately twenty different data variables, including all that were discussed in the background section. However this model should be considered a work-in-progress; suggestions and feedback are welcomed.

In the model we represent two different income groups that we refer to as elites and the middle class, where elites are the top 5 percent of income earners and the “middle class” are the middle fifth. These income groups essentially compete for congressional attention through political contributions and other mechanisms. To help summarize the model’s structure, we provide a causal overview of the major feedback loops, seven of which that are reinforcing and two that are balancing (Figure 11). The two outer-most sets of loops we chose to name *Elitism Loops* and *Crony Capitalism Loops*.

Elitism Loops is a set of reinforcing feedback loops that drive the overall response of middle class voters as a result of the favoritism that is taking place in Congress. The first in the set is a reinforcing loop that we labeled *Voter Participation*, since it defines how much the middle class participates in the funding of campaigns as it relates to the trust they hold in government. The next is another reinforcing loop that we named *Voter Influence*, which determines how much economic gain ordinary voters see in return for their political investment.

The third loop in the *Elitism Loops* set we have titled *Voter Engagement* because it represents the relationship between people’s trust in government and the cost of reaching voters. As voter dissatisfaction grows and people disengage, the cost of reaching voters increases. This causes the importance of elite’s contributions to grow, along with their influence over policy. The result is another reinforcing loop that amplifies the overall response to elitism. The final loop in the set is the *Desired Campaign Budget*, which is a small balancing loop that increases fundraising during shortfalls and decreases activities when candidates have sufficient funds.

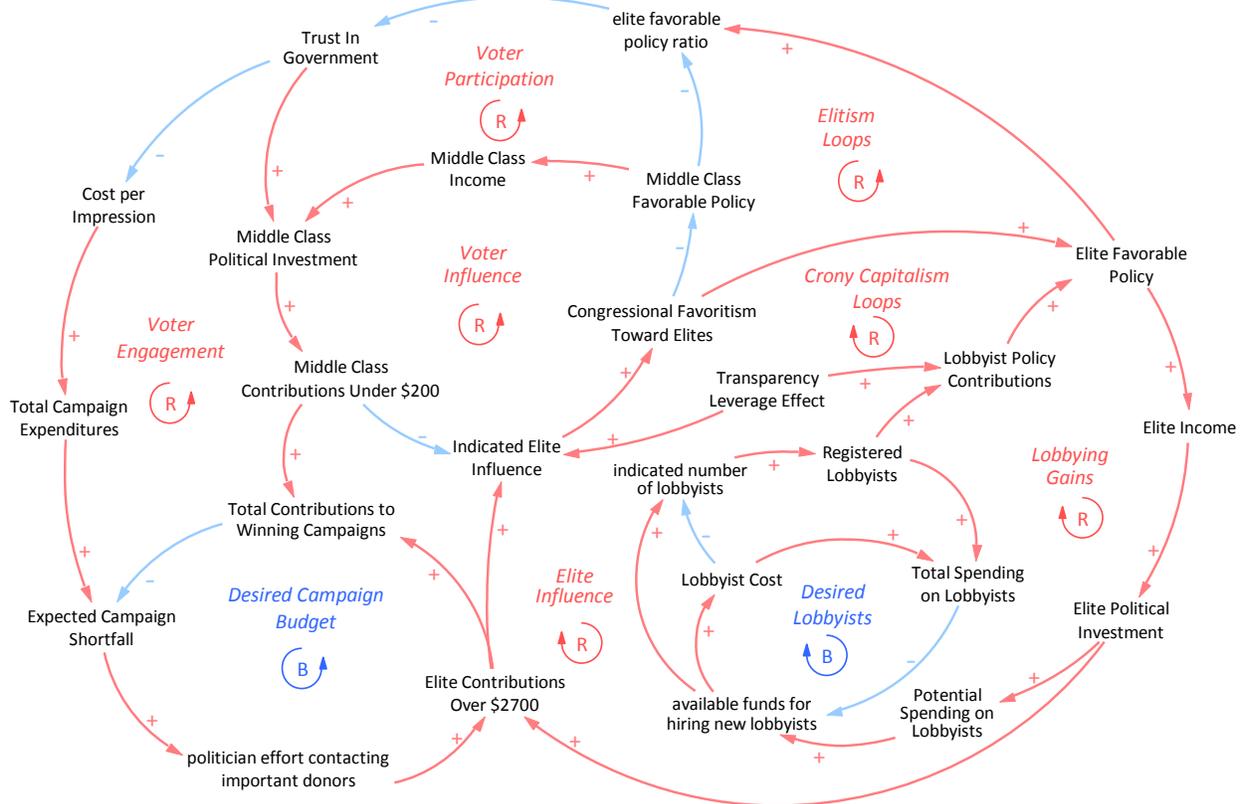


Figure 11: Causal diagram of the major feedback loops in the campaign finance & institutional corruption model

The second set of outer-most loops we titled *Crony Capitalism Loops* because they represent the overall reinforcing behavior of elites growing their influence through investments in campaigns, PACs, and lobbyists, which in turn provides them with economic gains that encourage further investment. Within this set there are three sub-loops. The first is another reinforcing loop that we call *Elite Influence*, since it determines the leverage that is gained by contributing directly to candidates (similar to voter influence). The second is named *Lobbying Gains*, because it is a reinforcing loop that is driven by the return from investing in more lobbying. The final loop is another small balancing loop that we call *Desired Lobbyists*, which balances the lobbyist cost against the availability of funds in order to determine how many lobbyists there should be and at what cost per lobbyist. In the model this loop is also governed by a saturation effect based on a maximum number of lobbyists per member of Congress.

Together these major loops help to explain the past forty years of changes in campaign finance and lobbying and the resulting Congressional bias and voter disenfranchisement. It is also worth noting that we have included a *transparency leverage effect*, which is based on the changes that took place with the 1970 Legislative Reorganization Act that was discussed in the background. One of the unintended consequences of this “sunshine” reform was to provide perfect transparency to lobbyist and other elite interests. This gave them significant leverage in ensuring that policy was developed to suite their preferences, which we shall discuss in greater detail in the corresponding model sector below.

In the following subsections we explain the model structure that was used to represent each of the three primary sectors based on our definition of institutional corruption. Note that for clarity, the structural diagrams presented have been simplified, by hiding constants, lookups, and policy variables. The complete model is available in Vensim format along with the historical calibration data in the file

containing the supplementary materials for this conference paper. Lastly, for all graphs in this section, the baseline run is demarked with the number “0” and the historical data with the letter “h”.

Finance and Lobbying Sector

In this first sector, we represent the cost of campaigns, the distribution of campaign contributions, and the lobbying industry. Figure 12 shows the structure that was used to determine the expenditures for all of the campaigns for the House. The cost is in part determined by the number of *Impressions per Person*. This stock is intended to reflect the changes in the number of mediums for reaching voters. In the 1960s the available mediums included print ads, mailings, and a growing television market (McChesney & Nichols, 2012). By 2004, the internet had added another medium for influencing voters and since 2008, social media has added yet another. This growth is exogenously determined using a linear constant and is then multiplied by the *Voting Age Population* to provide the *Total Impressions* for the market.

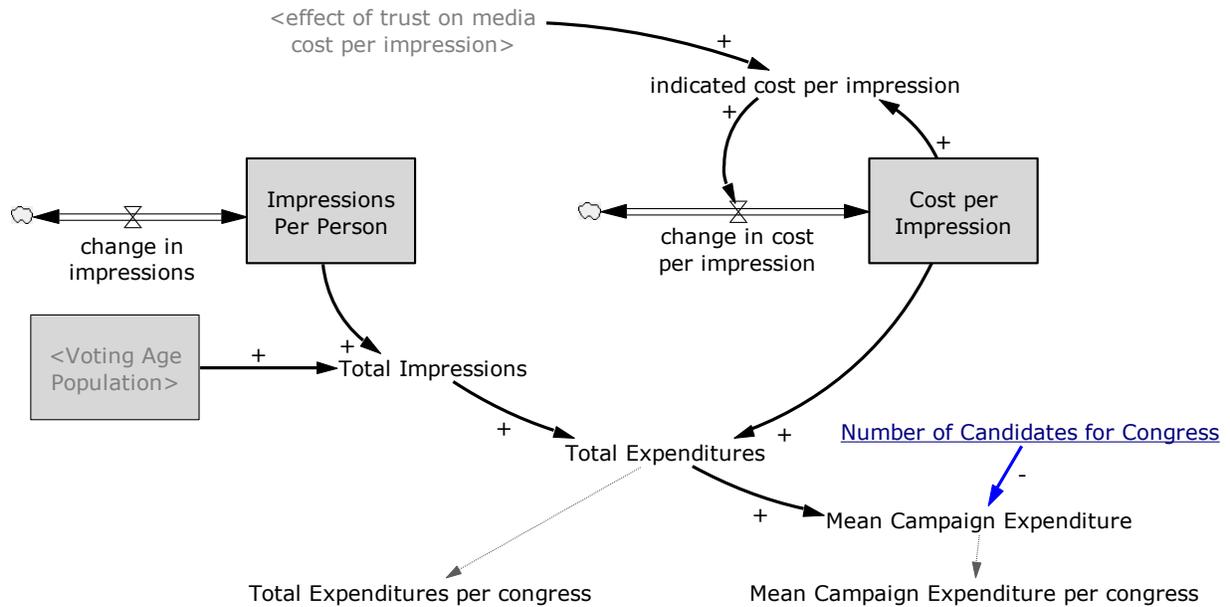


Figure 12: Campaign cost and expenditure structure

In addition to the number of impressions, there is a *Cost per Impression*, which grows at rate that is affected by a lookup relating the strength of growth to the current level of trust in government. This structure is intended to represent the fact that as voters become disenfranchised, they tend to tune out political advertising by doing things like throwing mailers away without reading them and changing the channel when political advertisements are played. The calibrated output for *Total Expenditures per Congress* can be seen in Figure 13.

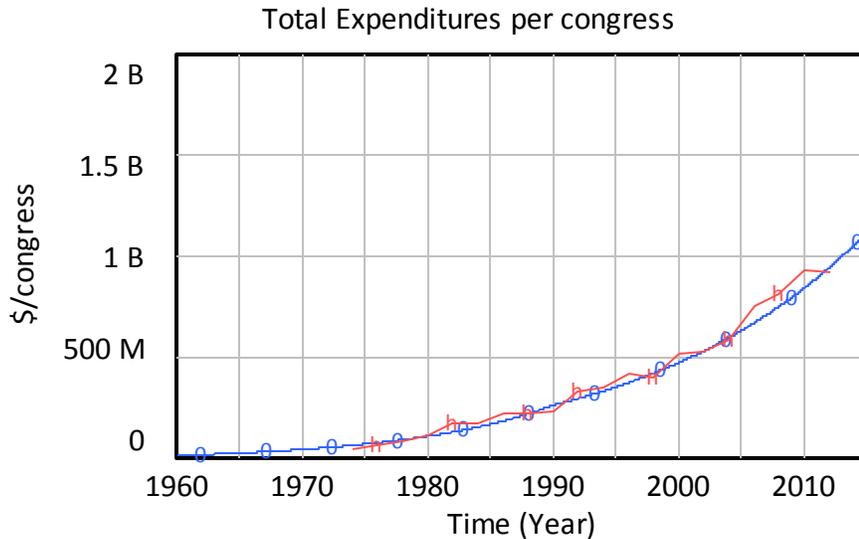


Figure 13: Graph of total expenditures for baseline calibration

The next structure in this sector determines campaign contributions. Both elites and middle class take a fraction of their income and use it for political investment. For the middle class, this is only used in *Middle Class Contributions Under \$200*, which go directly to candidates. Elites, however take their *Elite Political Investment* and use it in three ways: *Elite Contributions Over \$2700*, *PAC Contributions*, and *Total Spending on Lobbyists*. Additionally, elites can drive up their political investment fraction if they recognize that they are getting a decent return on investment, which is captured in the stock *Elite Recognition of Investment Returns*.

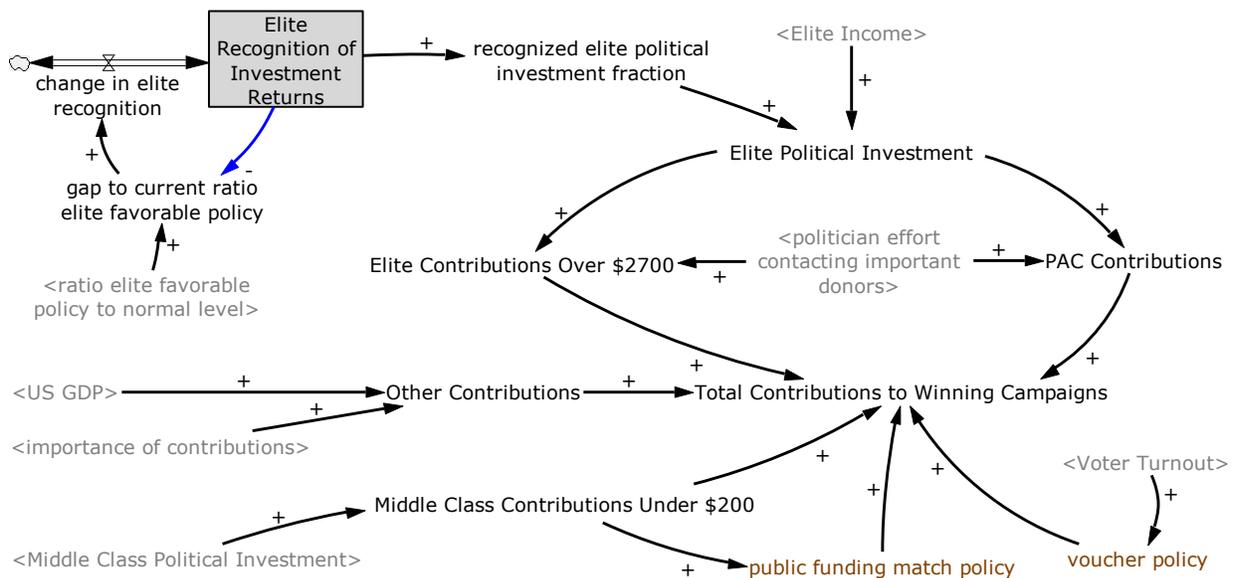


Figure 14: Campaign contribution structure

The amount contributed by elites to campaigns is also determined by the effort put into raising money, which is determined by the gap between current total contributions and a campaign goal that is based on the recent cost of campaigns. If the perceived gap is high then candidates spend more time calling

wealthy donors. If the campaign goals are met, they do not need to pick up the phone and fewer contributions come in. The calibration run plots for *Elite Political Investment* and *Total Contributions to Winning Campaigns per Congress* are shown in Figure 15. The amount contributed by the middle class is based on their income and affected by their current trust in government.

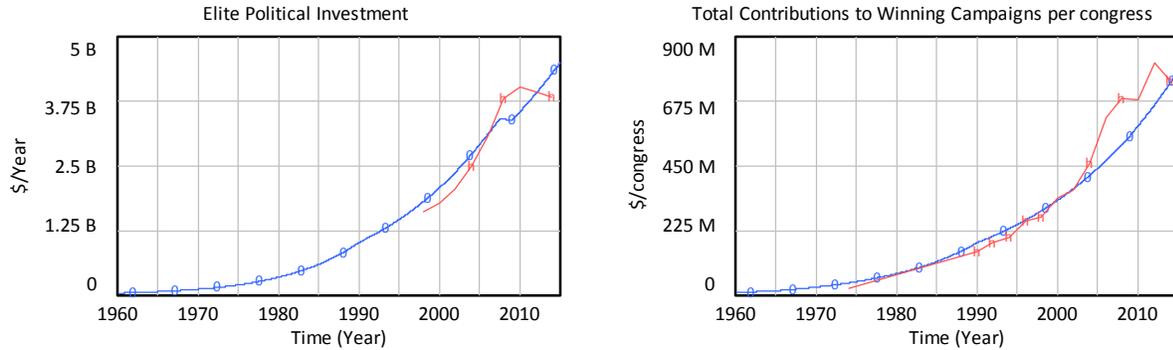


Figure 15: (a) Elite political investment for baseline (b) Total contributions for baseline

The final structure in this sector is for determining the number of lobbyists (Figure 16). The number is calculated by dividing the *available funds for hiring new lobbyists* by the *Lobbyist Cost*. This cost grows at a normal rate, but is accelerated or slowed depending on the level of funding available. Over time, the *indicated number of lobbyists* is constrained by a maximum number of *lobbyists per congressperson*. Graphs of *Registered Lobbyists* and *Total Spending on Lobbyists* for the calibration run are shown in Figure 17 below.

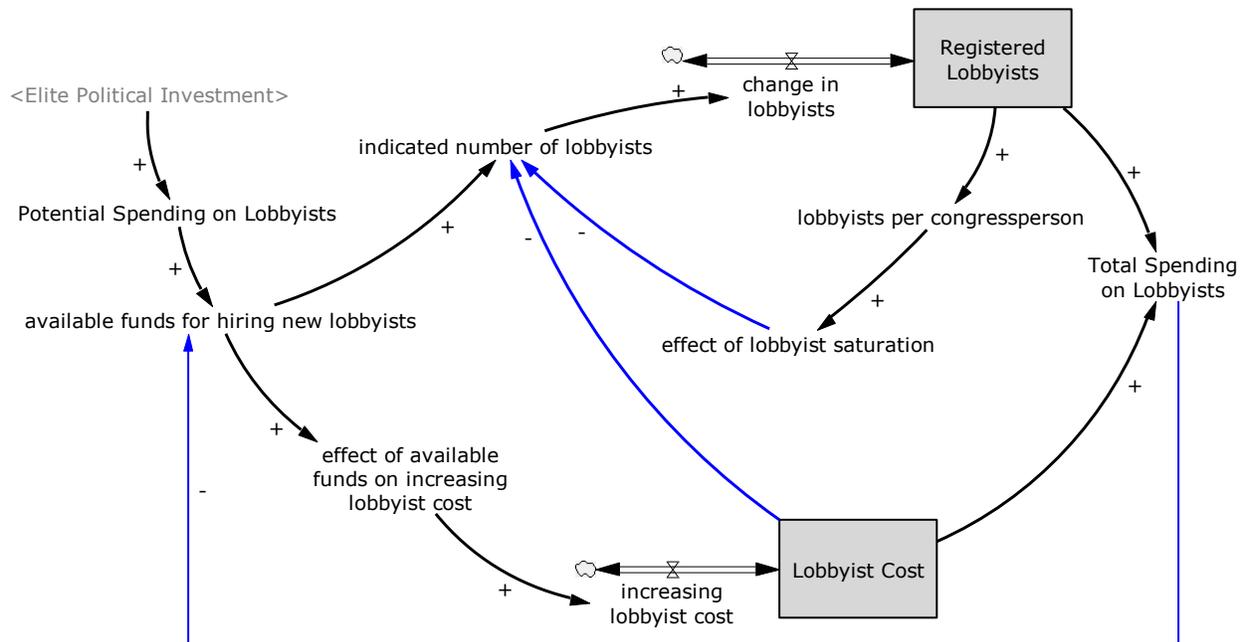


Figure 16: Lobbying structure

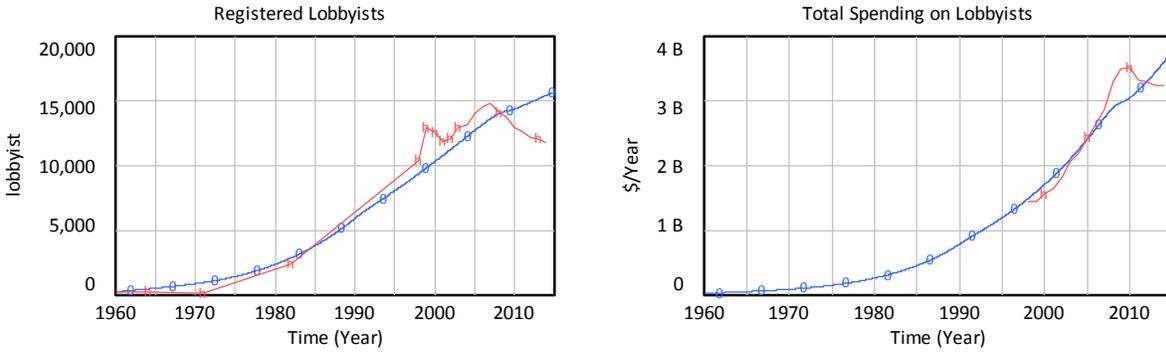


Figure 17: (a) Registered lobbyists for baseline (b) Total Spending on lobbyists for baseline

Policy and Income Sector

In the next sector we represent the accumulation of elite influence and the impact that it has on public policy, which in turn affects how income is distributed. The structure in Figure 18 describes how the level of *Congressional Favoritism Toward Elites* is determined. The first component contributing to influence is the amount of leverage exerted by the *Transparency Leverage Effect*, which, as we have discussed previously, gave elites and lobbyists the ability to carefully monitor how policy was being written. In simulations this begins at a value of one, then doubles in 1970. The next factor considered is the ratio of elite contributions to those of the middle class. When elites give significantly larger amounts than middle class contributors, they will carry more favor with a congressperson. It is worth noting that by the 2014 election cycle, individuals contributing over \$2,700 per cycle gave 233 times as much money directly to candidates as did those giving \$200 or less (OpenSecrets, 2014).

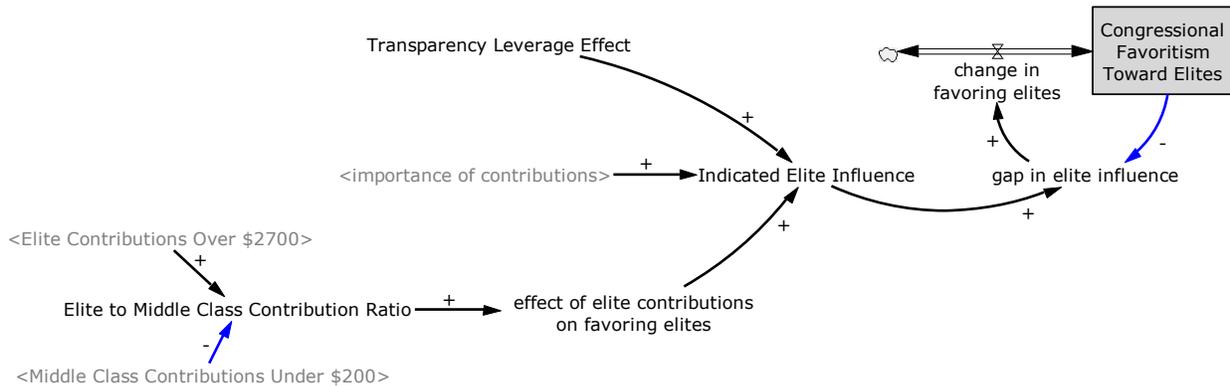


Figure 18: Institutional corruption structure

The final component that members of congress are influenced by is the *importance of contributions*, which is derived from the expected shortfall between contributions and a campaign goal that is based on recent campaign expenditures (Figure 19). If the expected shortfall is high, the importance of high-value campaign contributions increases, which leads to more solicitation of important donors by politicians, leading to more elite influence.

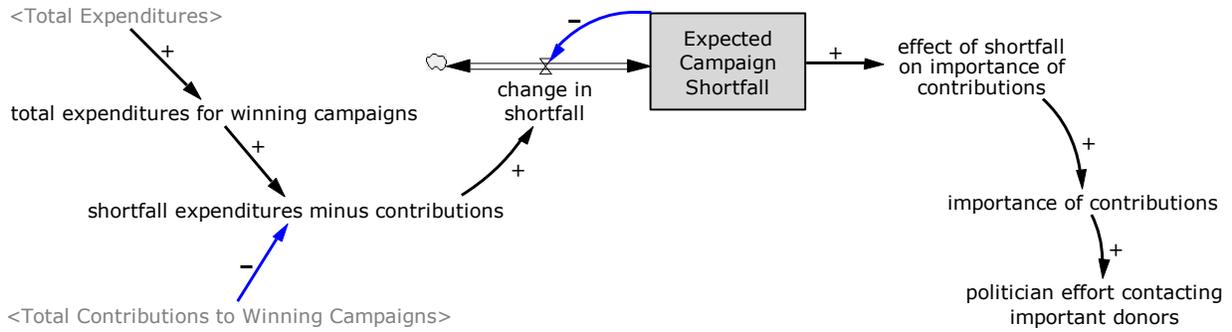


Figure 19: Campaign expenditures and contributions create a shortfall in campaign finance

The stock of congressional favoritism is used to drive the distribution of public policy written in Congress (Figure 20). In this structure, the amount of *Elite Favorable Policy* is determined by the *lobbyist addition of elite policy* and the *ratio of favoritism to normal*. The ratio also affects *Middle Class Policy* in the opposite direction, leading to a decline of middle class policies when the favoritism towards elites is higher than normal.

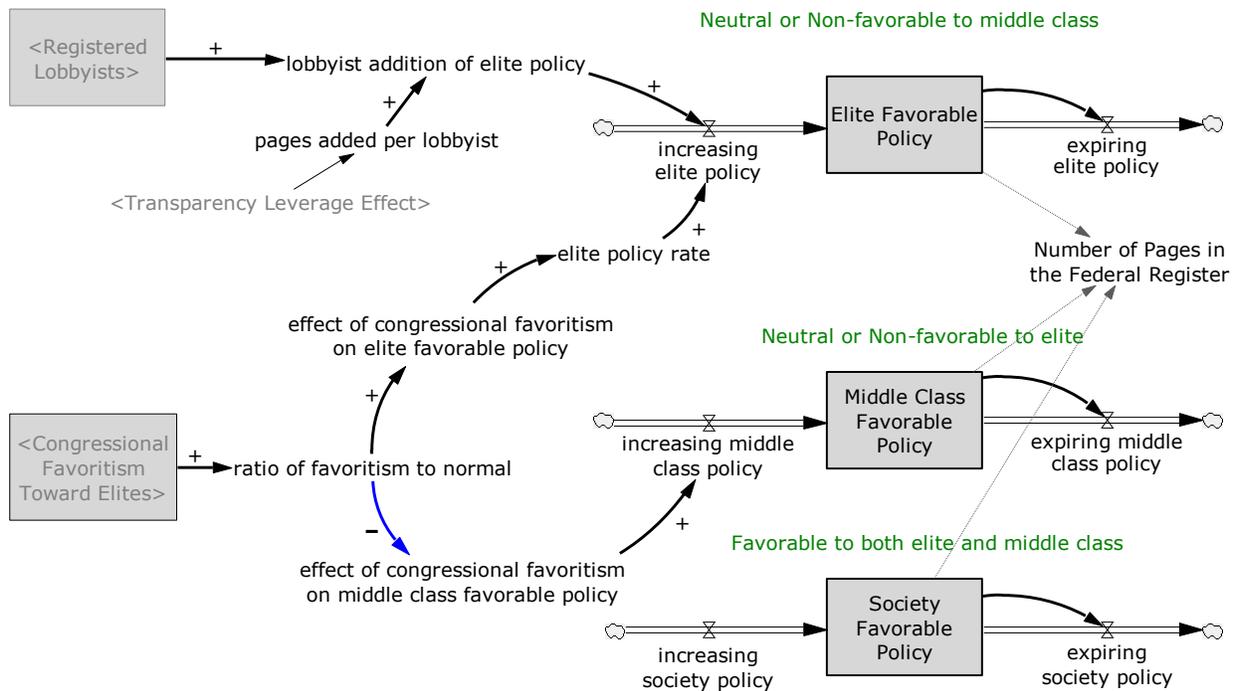


Figure 20: Influence and policy making structure

Congressional favoritism biases policy making towards elites, partly by writing more policy specifically to support their interests, leading to increases in the number of pages written and passed per Congress, resulting in growth of the Federal Register.

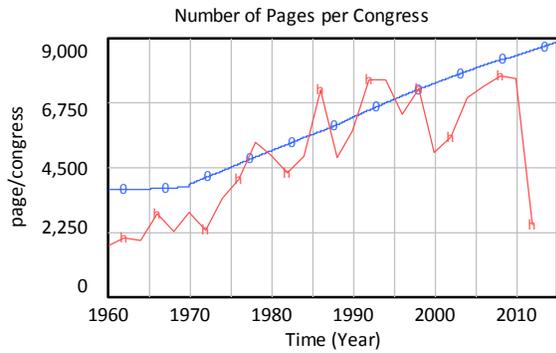
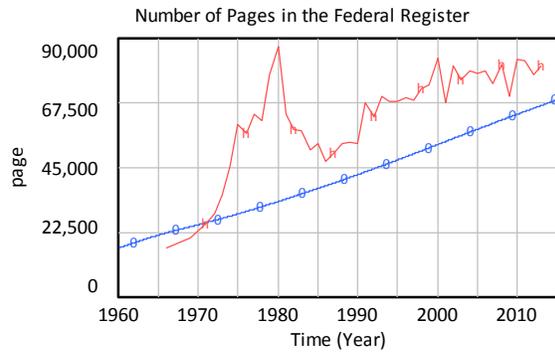


Figure 21: (a) Pages enacted by the House



(b) Pages in the Federal Register

These policies directly affect the income earning ability of each class (Figure 22). To estimate income, we used a simple model of the U.S. National Income that includes all of the relevant higher and lower periods of growth, including the 2008 recession. By using this exogenous driver, we were able to more accurately reflect the changing economic environment. Much of the fundamental dynamic behavior in this model is driven from the differences between *Elite Favorable Policy* and *Middle Class Favorable Policy*.

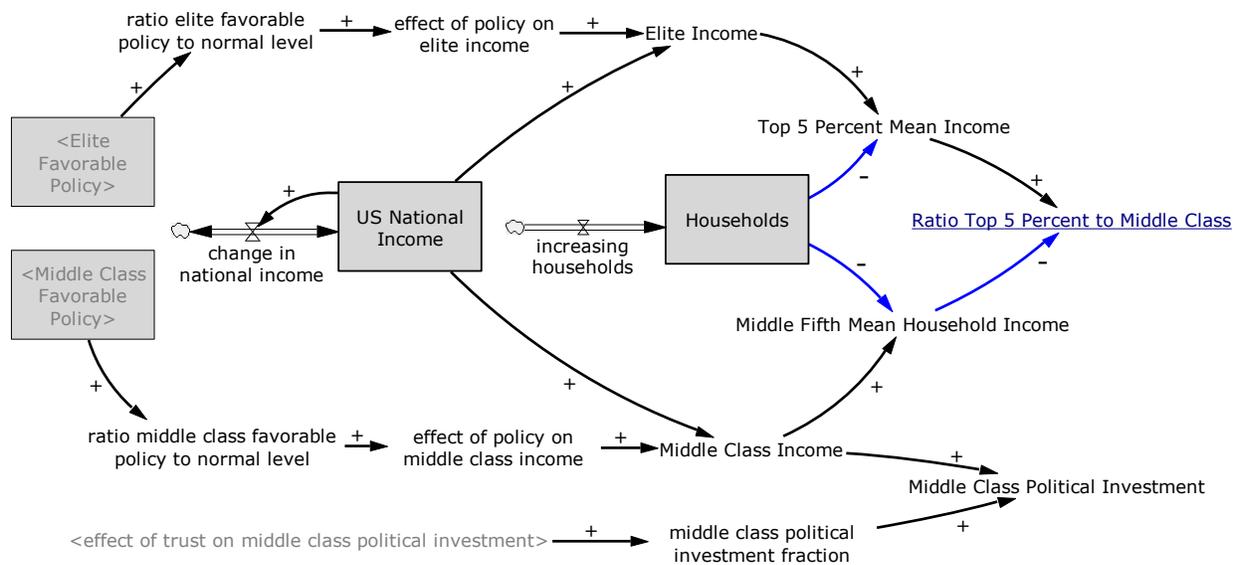


Figure 22: Policy effects on elite (top 5 percent) and middle class (median 20 percent) income structure

After calibrating the changes to both the elite and middle class incomes, we were able to achieve a good fit of the ratio of the top 5 percent income to the median decile as shown in Figure 23.

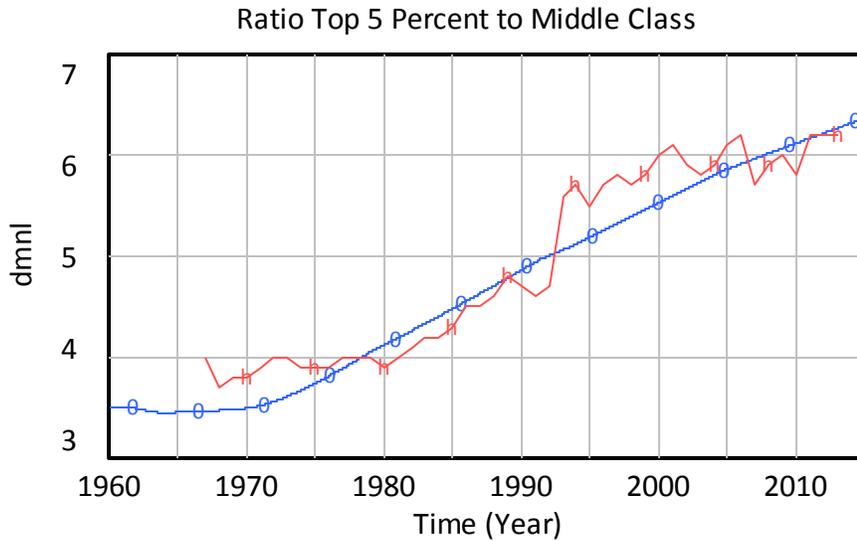


Figure 23: Historical and simulated ratio of the top 5 percent to the middle class for the baseline run

Voter Trust and Engagement Sector

In the final sector of our model we include structures for representing the level of trust in government and voter engagement, which affects a number of other components. In Figure 24 we show how *elite favorable policy ratio* changes the *Trust In Government*, and how that in turn affects middle class political investment, voter registration and turnout, and the cost of media.

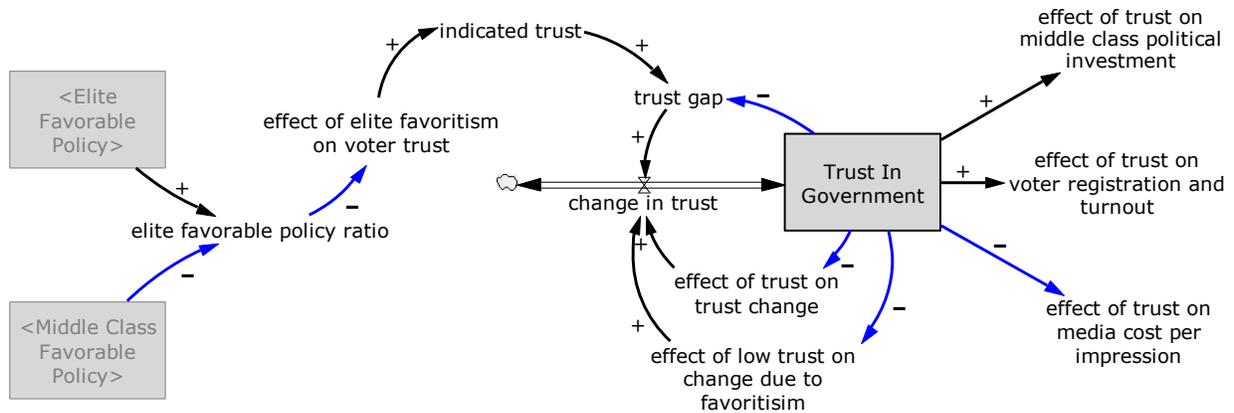


Figure 24: Structure for modeling the effects of policy on trust in government

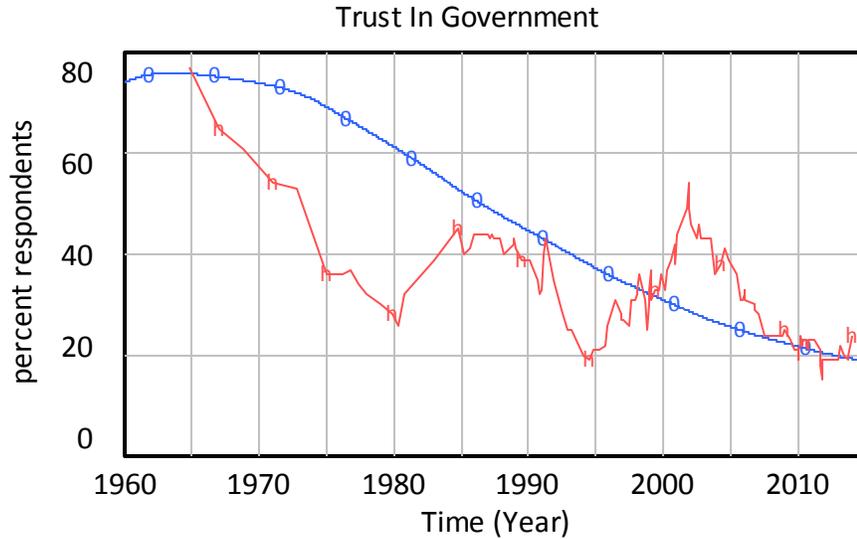


Figure 25: Historical and simulated trust in government for the baseline simulation

Lastly, we again use an exogenous driver to model the growing voting age population, which is then used to determine the number of people registering to vote and showing up for elections (Figure 26).

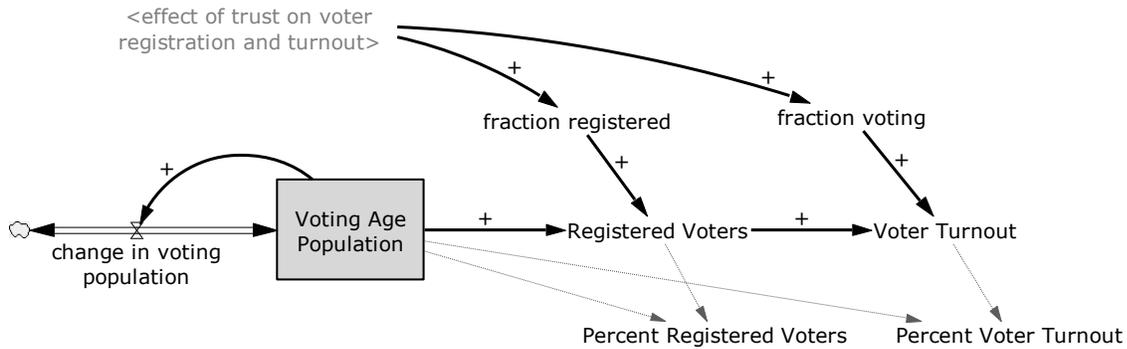


Figure 26: Voter registration and turnout structure

Model Analysis

With the model calibrated to historical data, we considered a variety of policy changes that have been proposed in legislation and by leading reformers. These policies range from legislative statutes that create tax rebates or tax credits along with generous matching schemes to promote small dollar engagement with voters, to a constitutional amendment that distinguishes money from speech and corporations from people.

For this study, we focus primarily on policies that have the greatest chance of becoming law in the near future. The first three options are therefore based on the Government by the People Act of 2014 (Sarbanes, 2014). The first policy experiment represents the proposed “My Voice Voucher,” which is a \$50 tax rebate per election cycle (\$25 per year) that is given to eligible citizens for dispersal in \$5 increments to official candidates for the House. To implement this in the model, we added a variable

that provides a step change in the contributions to candidates that is calculated by multiplying the \$25 per year amount by a given percentage of the voters that participate in elections (i.e. the model variable: *Voter Turnout*).

The second policy experiment based on the Government by the People Act is the small dollar financing of campaigns, which is a program for matching small dollar contributions of \$150 or less by a factor of 6 to 1. Candidates that voluntarily agree to not use PACs will also be eligible for a 50% bonus match, for a total matching factor of 9 to 1 (Sarbanes, 2014). This policy was implemented in the model by allowing all contributions currently under \$200 to be multiplied by a factor of six or nine.

The third policy experiment based on the act is aimed at expanding candidate access to advertising by setting the lowest unit charge that broadcasters are to provide candidates for Congress (Sarbanes, 2014). This policy was implemented by allowing the rate of growth for the *Cost per Impression* stock in the model to be set to a new value that either slows, stops, or reverses the growth in cost over time.

In addition to the three policy experiments derived from the act, we also explored a fourth policy based on the *Transparency Leverage Effect* variable. Even though the impact of leverage is currently unrecognized by proposed acts in Congress, by academics, or by leading reformers, its potential significance makes it deserving of consideration. As discussed earlier, the ability for elites to monitor votes during the policy making process provides strong evidence that leverage has been increased by enabling acts of intimidation and bribery.

Individual Policies

After establishing a baseline run (business as usual), we evaluated each policy experiment separately for its effectiveness. We then explored two different combinations of policies that were based on the insights gained from the previous experiments. To evaluate the different policies, we started all of the simulations in 1960 and ran them through the calibration period before enabling the various policies in 2017, which is the earliest time that a new Congress could enact the proposed reforms.

To compare the different runs we selected three variables that we found to be good indicators of the overall dynamics. The first variable is the ratio of the incomes for the top five percent compared to the middle fifth percentile (*Ratio Top 5 Percent to Middle Fifth*). In the first set of experiments where the policies are evaluated independently we found that for the business as usual case (line "0") the top five percent went from earning approximately four times the median income in 1960 to six times in 2017 to well over seven times by 2060 (Figure 27).

For the first policy experiment (vouchers, line "1"), we initiated the program by having 25% of the voting population use the \$25 per year provided by the act. This amount was more than adequate to pay for all House campaigns in 2018, thus making elections almost entirely publicly funded. In examining the results we find that by implementing the voucher policy there is an initial period where the income ratio drops (good result) before it returns to approximately the same value (poor result).

For the second policy experiment, the small dollar match (line "2"), we set the match to use the more generous nine dollars for every one small dollar contribution. As shown in the graph, there is no perceptible difference between the match policy and the baseline. For the third policy experiment, cost controls (line "3"), we set the rate of increase for *Cost per Impression* to 0.1 percent (the prior rate was approximately 1.5%). As a result of restricting the growth in media price rates, we see that income disparity is slowly reduced over time and eventually begins to decline (good result). In the final policy test, leverage (line "4"), we repeal the sunshine laws and add other measures to reduce the 1970s level of leverage by 20%, which represents a 120% drop from 2017 levels. With reduced leverage, we see a small initial decline, but income disparity then appears to hold steady.

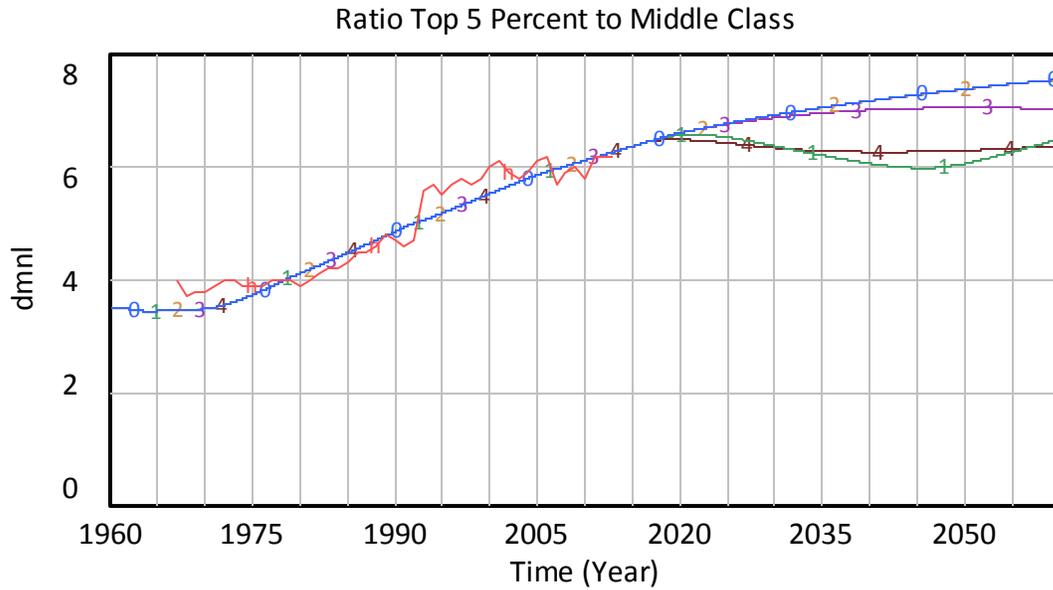


Figure 27: Ratio of incomes for all independent policies

People’s *Trust in Government* is the second summary variable we chose (Figure 28). For the baseline case (line “0”) we see that the declining trend continues, although at a slower rate as opinions reach the minimum possible opinion. We also see that only vouchers (line “1”) and leverage (line “4”) are able to have a minimal effect, with the effect of vouchers looking to be only temporary.

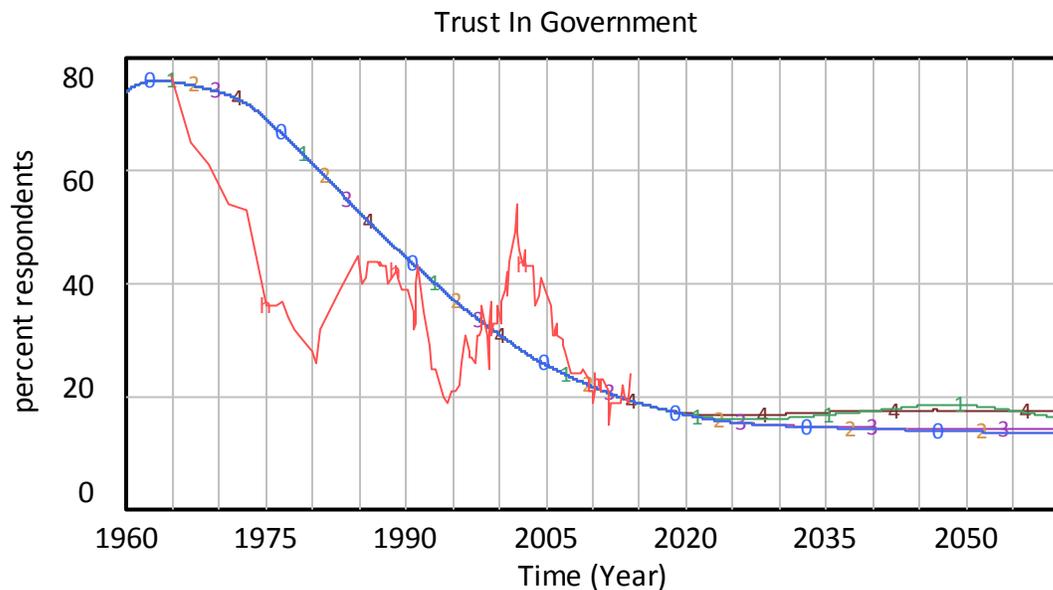


Figure 28: Trust in government for all independent policies

The final variable we selected to compare policy alternatives is the *Elite to Middle Class Contribution Ratio* (Figure 29). Even though the calibration falls a bit short, we still see that for the baseline case, the elite contribution amount goes from being approximately 125 times the amount of small dollar contributions to nearly 500 times. For the voucher policy (line “1”), we see a sharp decline in the ratio

since the campaigns become almost entirely publicly funded. Yet over time, as the cost of campaigns continues to grow, the elite contributions return and then follow a similar growth trend. To understand this more clearly, we refer back to the feedback loops in Figure 11. With the initiation of the program, the *Desired Campaign Budget* loop acts to balance the elite contributions and voucher-based funds against the campaign goal. With the new influx of funds, candidates *could* cancel nearly all fundraisers and spend less time soliciting contributions and more time focusing on policy. Yet, the change in elite influence is not instantaneous, so the *Voter Engagement* loop continues to reinforce the growth in costs, until the voucher program is overcome and elite contributions regain their importance.

The small dollar matching program (line “2”) again results in no perceptible change. With elites giving somewhere between 100 and 500 times as much money, even the seemingly generous match of 9:1 results in an amount that is negligible compared to elite contributions.

For the media cost control policy (line “3”), we see that the ratio is actually able to decline over time. Since growth in cost is significantly reduced, the large dollar contributions slowly become less important to a campaign (as long as small dollar contributions continue to grow at a rate higher than media costs). With the shift in loop dominance from *Voter Engagement* to *Voter Participation*, and the reinforcing dynamic reversed by the declining need for elite contributions, small dollar contributions begin to grow as trust in government improves. This allows for the middle class share to account for a larger portion of the total contributions needed for campaigns, and thus engages the *Voter Influence* loop.

For the final policy, leverage (line “4”), we see that the ratio continues to grow, though at a slower rate. This is because even though the strength of elite influence is greatly reduced along with the effectiveness of lobbying within the set of *Crony Capitalism Loops*, there is no policy mechanism for reversing the direction of the overall system like there is with vouchers and cost controls.

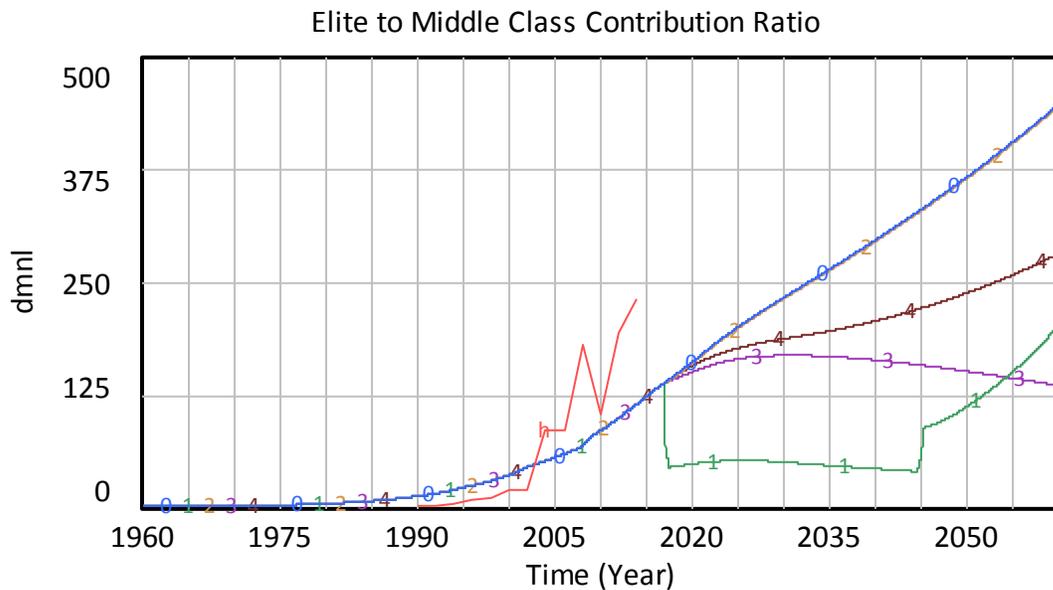


Figure 29: Ratio of contributions for all independent policies

From the analysis of the different independent policy options we learned several important aspects regarding the assumptions behind each policy. For the voucher policy, we see that even with only 25% of voters participating in the voucher program (just over 10% of the voting age population), campaigns are able to become almost entirely publicly funded for over two decades. However, since the cost of a

campaign continues to grow and the fraction of participating voters stays fixed, it is eventually overrun and elite contributions once again become dominant.

For the matching policy experiment, we learned that if implemented today, it would likely be completely ineffective given the proportionally small amount of current contributions under \$200 (which was more generous than the act's \$150). While the incentive might encourage more individuals to contribute, it would require a very significant change in the status quo for it to be effective. This policy may still be useful for helping political outsiders build enough "seed money" to attract money from vouchers, but the policy alone is likely to be insufficient on its own.

We also learned that the policy designed to control the cost of media for political campaigns is the only independent policy capable of reversing the direction of the system, so long as the gain for the *Voter Participation* loop is larger. Yet, the small difference in gains means that improvements will be slow, which is why trust in government stayed low and the change in the income ratio continued to gain slightly before beginning a decline. It is possible that a voucher system could achieve a similar effect with other more immediate benefits, so long as increases in voter participation and or increases to the amounts being given to voters are greater than or equal to the increases in costs.

Lastly, we learned that the last policy experiment aimed at reducing leverage by providing greater secrecy during the policy development stage (e.g. in the Committee of the Whole) does provide immediate improvements, by lowering the overall strength of the set of *Crony Capitalism Loops*. Yet at the given leverage reduction, the strength is not reduced enough to reverse the direction that the system has been heading. If the leverage is reduced substantially however (e.g. to 0.1), then the relative loop gains are such that all conditions can improve. Such an extreme reduction, however is highly improbable considering the long history of political investments (Ferguson, 1995).

Policy Combinations

In our final experiments, we discarded the largely ineffective matching program and explored two different policy combinations. The first combination included both the voucher and cost control programs (line "5"). The second combination added the policy for addressing elite leverage to the voucher and cost control policies (line "6"). Using the same values described earlier for each individual policy, we see that the vouchers and cost controls together create a strong enough gain to reverse the loop directions for the long term, which leads to a moderate reduction to the ratio of elite to middle class income (Figure 30). With the addition of the policy reducing elite leverage, we see that by weakening the *Crony Capitalism Loops*, it is finally possible to regain income disparity levels similar to those in the 1960s, but not until 40 years into the future.

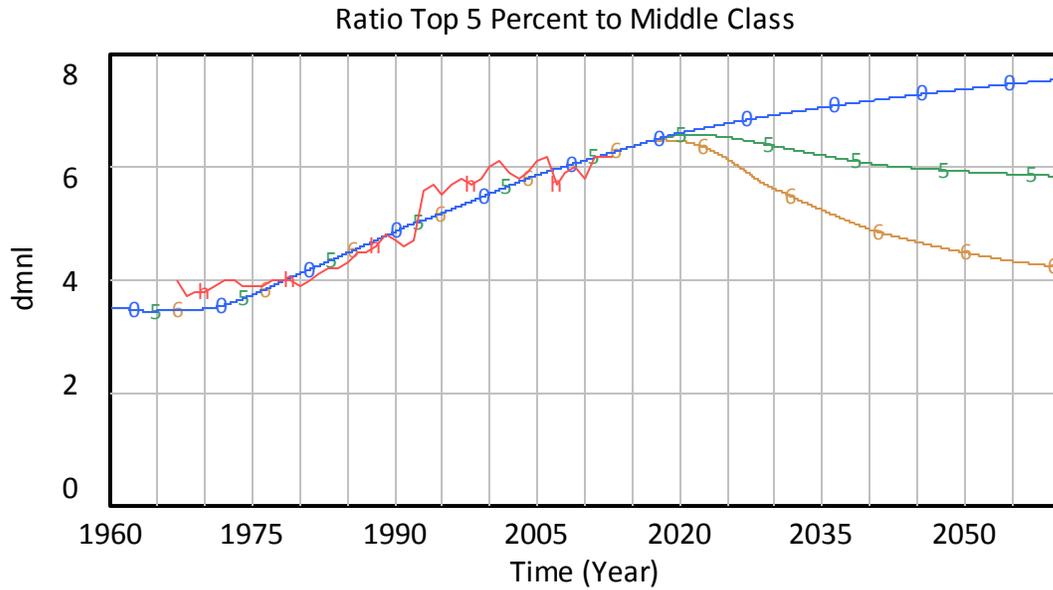


Figure 30: Ratio of incomes for combined policies

When we look at the level of trust in government (Figure 31), we find that still high levels of elite influence, prevent a more rapid recovery of trust. With the addition of the leverage reduction policy, however, we again see more rapid improvements.

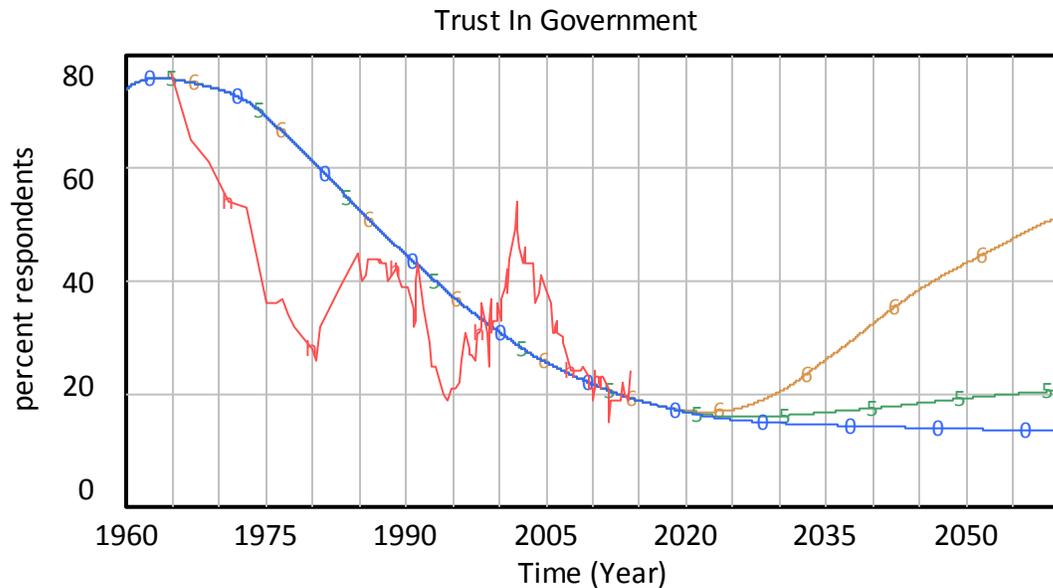


Figure 31: Trust in government for combined policies

Looking at our last summary variable, the ratio of elite to middle class contributions, we see the same accelerated improvements in the combination that includes all three policies (Figure 32).

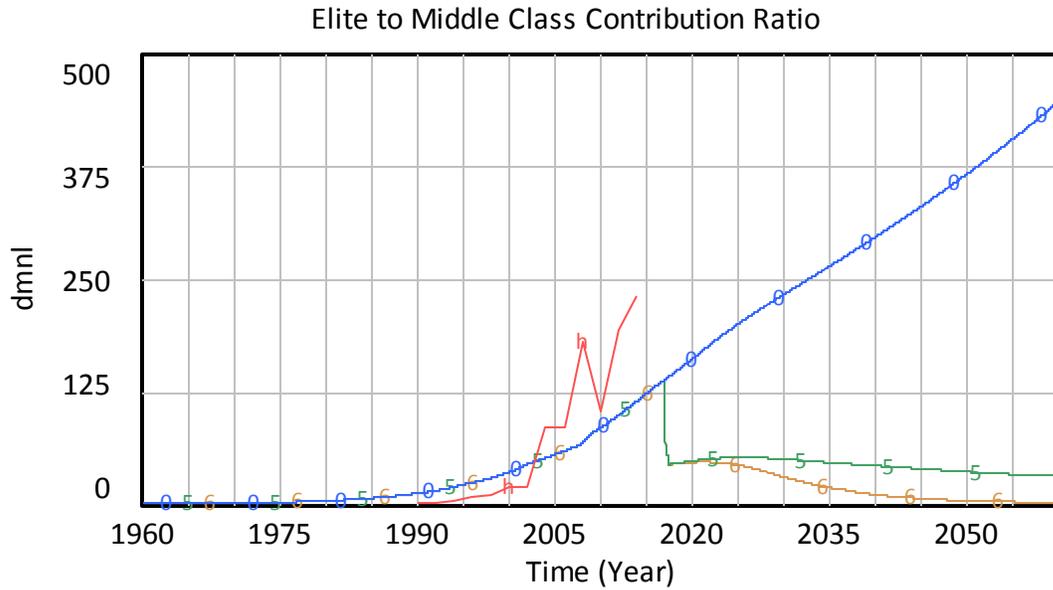


Figure 32: Ratio of contributions for combined policies

Conclusions and Future Research

In this study of the U.S. House of Representatives, we sought to integrate several of the independently-researched components of the political system within a simulation model to provide greater clarity into the causes of undesirable dynamic behaviors such as growing elite influence and decreasing voter trust in government. From the results of studies by researchers like Lessig and Gilens, we find ourselves facing a system where the elite’s oversized influence allows them to both promote and prevent policies to suit their own individual preferences, which are often not in the best interests of the general public and/or the future of the United States.

Given the evidence provided by the data and the numerical analysis of our model, we suggest that the 1970 Legislative Reorganization Act in combination with the current U.S. system of campaign finance has precipitated an institutionalized corruption that has clearly biased public policy. It is also clear that such conditions will have a profound impact on our ability to address many of today’s most pressing societal challenges. The good news, however, is that given our more complete understanding of the system, we discovered which policies are more immediately effective while also providing long-term stability.

With further refinement and testing, we believe that this model could be used to design more optimal reform legislation that is based on rigorous evaluations of the different policy options currently being championed by a variety of advocacy groups. Based on our current simulation experiments, we suggest that the most effective reforms will target three complimentary aspects of the problem. The first is a program that provides a sizeable enough alternative source of funding so as to eliminate the need for soliciting large dollar contributions. The second are controls that prevent the growth in the cost of winning campaigns from exceeding that of the growth in middle class contributions. It is also possible that this same effect could also be achieved if the cost of reaching voters was dramatically lowered via social organizing and mass mobilization. The third and final aspect that must be addressed is to significantly reduce the amount of leverage that elites hold over the policy making process. This can be accomplished through the repeal of supposed “sunshine” laws and the institution of practices that

restore secrecy to the voting process, while simultaneously increasing the amount of transparency of the final legislation.

In closing it should be noted that institutional corruption is not limited to the U.S. Many other countries around the world struggle with corruption in all its forms. As such, this research and any subsequent reforms may serve as a guide towards improving the overall design for healthy, functional democracies. It is also worth acknowledging that until there is a truly effective solution to institutional corruption, our ability as a nation, and as a world, to effectively address many other pressing challenges, including climate change, national debt, and other issues that run counter to short-term elite interests, will remain severely diminished.

References

- Alexander, R., Mazza, S. W., & Scholz, S. (2009). *Measuring rates of return on lobbying expenditures: An empirical case study of tax breaks for multinational corporations*. *JL & Pol.*, 25, 401.
- Allison, B., & Harkins, S. (2014). *Fixed Fortunes: Biggest corporate political interests spend billions, get trillions*. Retrieved February 26, 2015, from <http://sunlightfoundation.com/blog/2014/11/17/fixed-fortunes-biggest-corporate-political-interests-spend-billions-get-trillions/>
- Biersack, B. (2012). *The Big Spender Always Wins?* Retrieved May 13, 2015, from <https://www.OpenSecrets/news/2012/01/big-spender-always-wins/>
- Continetti, M. (2013). *The K Street Gang: The Rise and Fall of the Republican Machine*. New York: Doubleday.
- CBS News (2007). *Under the Influence*. 60 Minutes.
- Chang, A. (2013). When Lobbyists Literally Write The Bill. NPR. Retrieved June 4, 2015, from <http://www.npr.org/sections/itsallpolitics/2013/11/11/243973620/when-lobbyists-literally-write-the-bill>
- CQ Press (1951). *What It Cost to Elect 82nd Congress*. Retrieved May 14, 2015, from <http://library.cqpress.com/cqalmanac/document.php?id=cqal53-1365612>
- CQ Press (1953). *House Candidates' Contributions, Spending*. Retrieved May 14, 2015, from <https://library.cqpress.com/cqalmanac/document.php?id=cqal51-1405834>
- CQ Press (1957). *1956 House Candidates Get \$2.5 Million, Spend \$2.9 Million*. Retrieved May 14, 2015, from <http://library.cqpress.com/cqalmanac/document.php?id=cqal57-1347162>
- CQ Press (1964). *55 New Lobby Registrations Filed in 1964*. Retrieved May 14, 2015, from <http://library.cqpress.com/cqalmanac/document.php?id=cqal64-1302723>
- CQ Press (1987). *Fading 'Sunshine' Reforms*. Retrieved June 3, 2014, from <http://library.cqpress.com/cqalmanac/document.php?id=cqal87-1143810>
- Fang, L. (2014). Where Have All the Lobbyists Gone? Retrieved May 24, 2015, from <http://www.thenation.com/article/shadow-lobbying-complex/>
- Ferguson, T. (1995). *Golden rule: The investment theory of party competition and the logic of money-driven political systems*. Chicago: University of Chicago Press.
- Gilens, M., & Page, B. I. (2014). *Testing theories of American politics: Elites, interest groups, and average citizens*. *Perspectives on Politics*, 12(03), 564-581.

- Hooper, M. (2012). *Boehner to members: Leadership is watching your voting patterns*. The Hill. Retrieved June 11, 2015, from <http://thehill.com/homenews/house/271173-boehner-members-punished-for-their-votes>
- Lessig, L. (2012). *Republic Lost: How money corrupts congress, and a plan to stop it* (p. 91). New York, NY: Twelve.
- Lessig, L. (2014). *What an Originalist Would Understand Corruption to Mean*. *Cal. L. Rev.*, 102, 1.
- McChesney, R. W., & Nichols, J. (2012). The Bull Market Political Advertising. *Monthly Review*, 63(11), 1-26.
- Oleszek, W. (2014). *Congressional Procedures and the Policy Process* (Ninth ed., pp. 201-207). Thousand Oaks, CA: CQ Press.
- OpenSecrets, (2015A). *The Center for Responsive Politics*. Retrieved Feb 4, 2015, from https://github.com/Solomon/opensecrets_to_postgres
- OpenSecrets. (2015B). *Outside Spending*. Retrieved June 10, 2015, from https://www.OpenSecrets/outsidespending/donor_stats.php
- OpenSecrets. (2015C). *Lobbying Database*. Retrieved June 10, 2015, from <https://www.OpenSecrets/lobby/>.
- OpenSecrets. (2014). *Overall Spending Inches Up in 2014: Megadonors Equip Outside Groups to Capture a Bigger Share of the Pie*. Retrieved June 10, 2015, from <http://www.OpenSecrets/news/2014/10/overall-spending-inches-up-in-2014-megadonors-equip-outside-groups-to-capture-a-bigger-share-of-the-pie/>
- Ornstein, N., Mann, T., Malbin, M., Rugg, A., & Wakeman, R. (2013). *Vital Statistics on Congress*. Retrieved April 11, 2015, from <http://www.brookings.edu/research/reports/2013/07/vital-statistics-congress-mann-ornstein>
- Pew Research Center. (2014). *Public Trust in Government: 1958-2014*. Retrieved March 16, 2015, from <http://www.people-press.org/2014/11/13/public-trust-in-government/>
- Piketty, T., & Goldhammer, A. (2013). *Capital in the Twenty-First Century*. Cambridge, MA: President and Fellows of Harvard College.
- Press, C. (Ed.). (1973). *Congress and the Nation, 1969-1972*, Vol. III: The 91st and 92nd Congresses. (3rd ed.). Washington, DC: CQ Press, 382-396. doi: <http://dx.doi.org/10.4135/9781483302669>
- Robertson, D. (1998). *Loss of confidence politics and policy in the 1970s* (p. 30). University Park, PA: Pennsylvania State University Press.
- John, S. (2014). H.R.20 - Government By the People Act of 2014. U.S. Congress. Retrieved June 26, 2015, from <http://1.usa.gov/1gOevn9>
- Sherman, J., & Palmer, A. (2015). Behind John Boehner's Crackdown on Conservatives. Politico. Retrieved July 7, 2015, from <http://www.politico.com/story/2015/06/john-boehner-crackdown-conservatives-richard-nugent-gop-119389.html>
- Skinner, B. F. (1963). *Operant behavior*. *American Psychologist*, 18(8), 503.
- Stone, C., Trisi, D., Sherman, A., & Debot, B. (2015). *A Guide to Statistics on Historical Trends in Income Inequality*. Retrieved July 15, 2015, from <http://www.cbpp.org/research/poverty-and-inequality/a-guide-to-statistics-on-historical-trends-in-income-inequality>

- Teachout, Z. (2014). *Corruption in America: From Benjamin Franklin's Snuff Box to Citizens United*. Cambridge, MA: Harvard University Press.
- US Census. (1960). *Population Estimates*. Current Population Reports, Series P-25, No. 221. Retrieved June 6, 2015, from <https://www.census.gov/population/socdemo/voting/p25-221.pdf>
- US Census. (1962). *Population Estimates*. Current Population Reports, Series P-25 No. 255. Retrieved June 6, 2015, from <https://www.census.gov/population/socdemo/voting/p25-255.pdf>
- US Census. (2014A). *Voting and Registration: Historical Time Series Tables*. Retrieved June 6, 2015, from <http://www.census.gov/hhes/www/socdemo/voting/publications/historical/index.html>
- US Census. (2014B). *Historical Income Tables: Households*. Retrieved May 15, 2015, from <http://www.census.gov/hhes/www/income/data/historical/household/>