

Federal Election Commission

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ABSTRACT

The Federal Election Commission (FEC) is an independent regulatory agency that discloses campaign finance information to enforce the provisions of the Federal Election Campaign Act of 1975, such as the limits and prohibitions on contributions, and to oversee the public funding of Presidential elections. Two-mode FEC networks are constructed, where one node class consists of United States federal candidates during the 2007-2008 election cycle and the other node class consists of federally registered committees as reported to the Federal Election Commission. The network is bipartite and directed links are made from the committees to the candidates seeking election. The directed, valued networks represent committee expenditures in support and opposition to various candidates. The data set is time stamped and consists of over 14,000 entities. The network is explored using basic centrality measures, relational algebra, and longitudinal network analysis.

Method

Download from the FEC website what organization donated to which candidates

Cleaned data to remove duplicate entries

Did the following relational algebra:

$$(Org \times Cand)^T \times (Org \times Cand) = (Cand \times Cand)$$

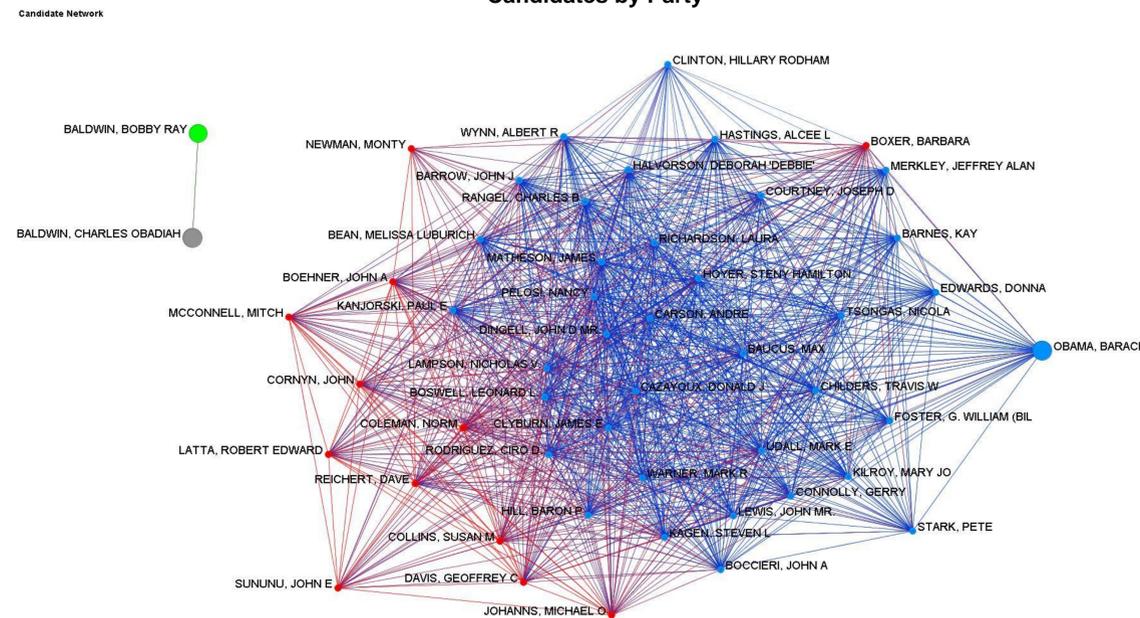
$$(Org \times Cand) \times (Org \times Cand)^T = (Org \times Org)$$

Investigate Central Candidates and Organizations within Special Interest Network

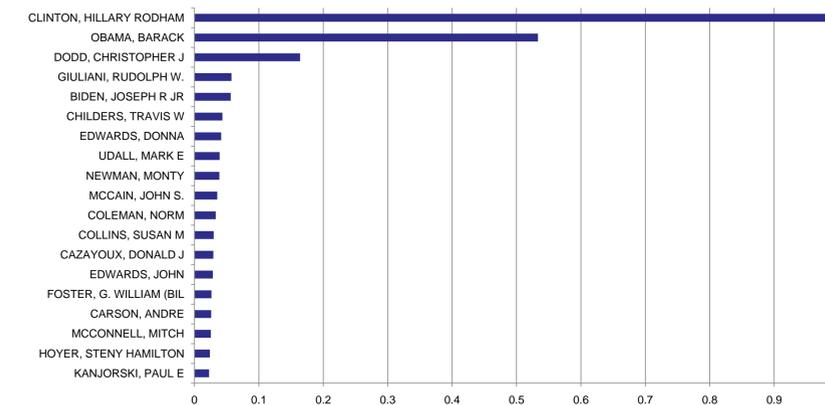
Reduced Network to the Core Candidates that were in the top 20 Centrality Measures (by Eigenvector, Betweenness, Degree, and Closeness)

Did a Subgroup Analysis : ConCor

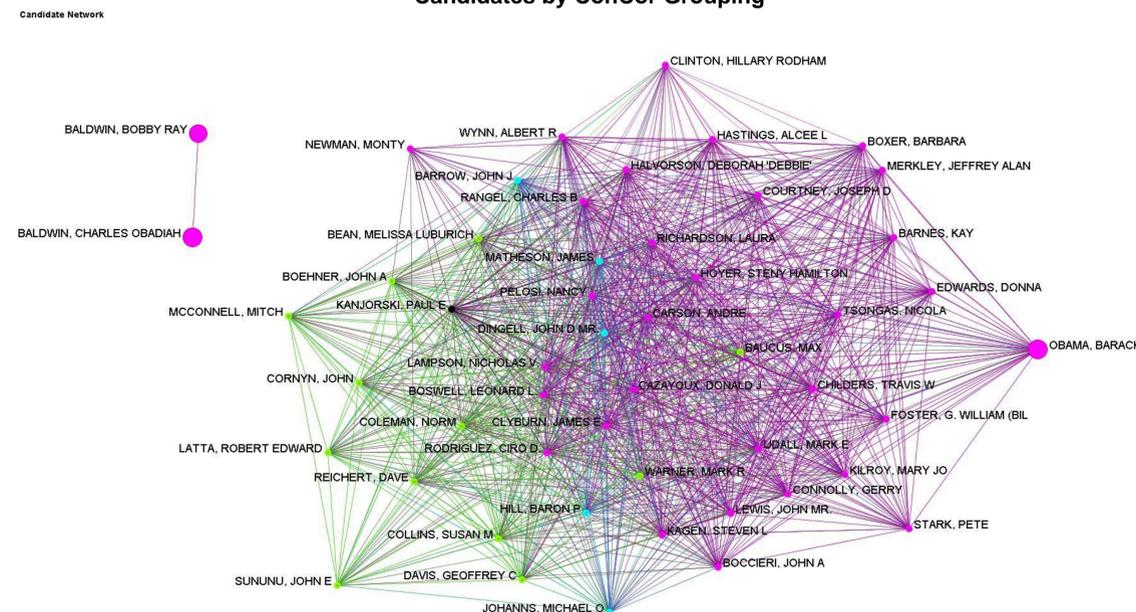
Candidates by Party



Greatest Contributions to Candidates



Candidates by ConCor Grouping



Results / Discussion

In a network containing all of the 2008 political candidates who received donations of \$10K or greater from various committees, the top fifty recipients are color coded by party. The network shows that the Democratic candidates have received the largest donations. This is also shown in the graph, above. The greatest contributions to candidates were favoring the Democratic Party in 15 of the top 19 recipients. The number one issue that was widely supported was Abortion. Most corporations and the population, based on voting results, are pro-choice. On the issue of Gay Marriage, the Democratic candidates have a myriad of stances. The most common is to leave the decision of allowing gay marriage up to the states. The ConCor Grouping signifies the special interest groups relating each candidate. The similarity of the "Candidates by Party" Network and the ConCor Network show the similarities in the donating organizations. Most Christian organizations donated toward Republican candidates, because of the church's stance on abortion and gay marriage. These two issues are popular, because there is no 'gray' opinion to give on either. One candidate cannot somewhat support one side of the spectrum. Because they are human rights issues, the population supports the right to choose. If an organization were to consider donating to a candidate, the popular opinion matters, and values aside, the best candidacies to support would be those that are popular with the public.