



Governmental Transparency through Data

Jordan Poles, Aparna Narendrula,
and Tony Chen



Outline of our Analysis of the US Senate

1. About the data
2. Senate members & political parties
3. Passing bills through the US Senate
4. Individual senator voting patterns

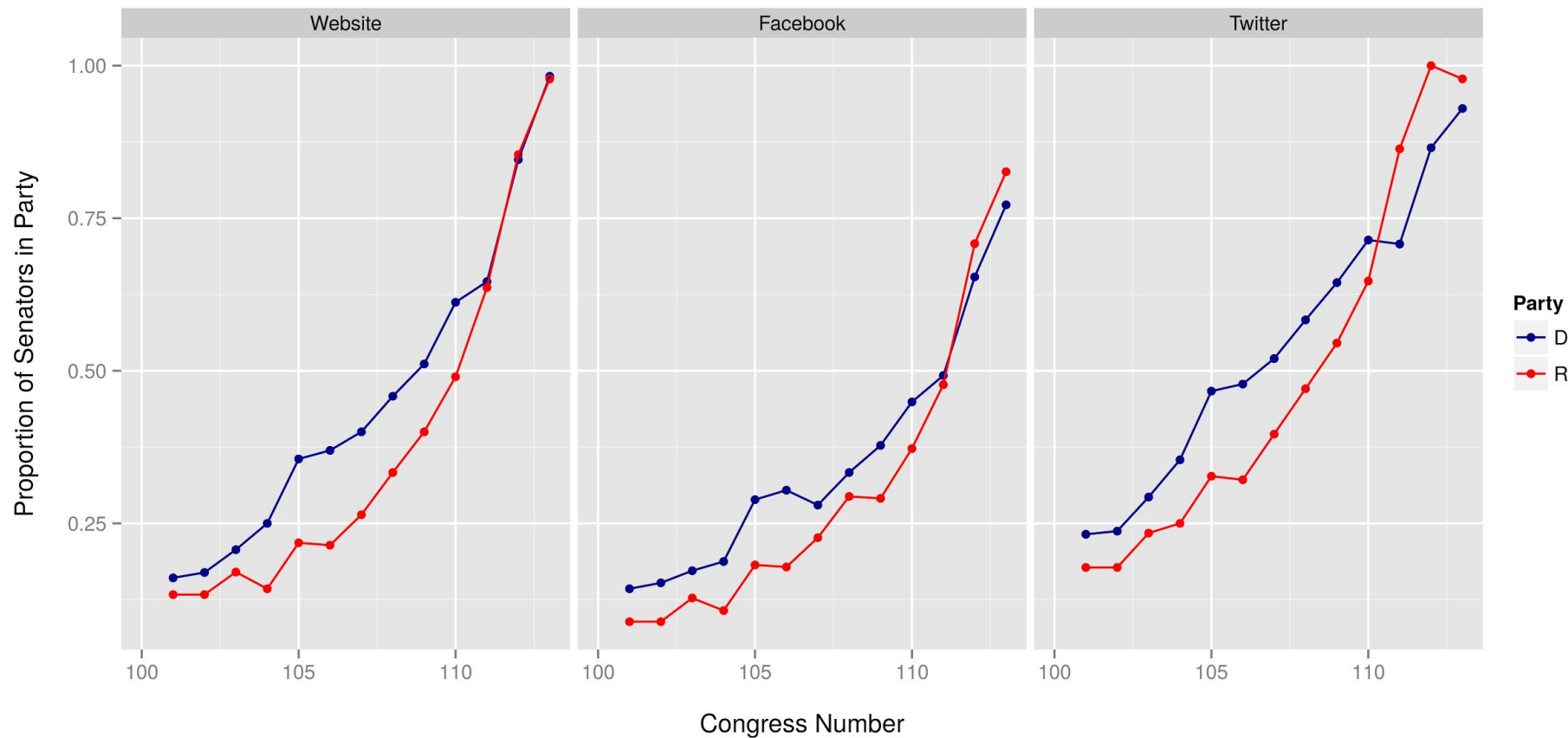
About the Data

- Congresses 101 to 113 (1989 to 2014)
 - NY Times Congress API: Characteristics of senate members
 - Senate.gov: Roll-call bills
 - Govtrack.us: Individual votes by senator

How have senators adopted web platforms (such as social media)?

Senators Who Have Ever Used a Web Platform In Their Political Career

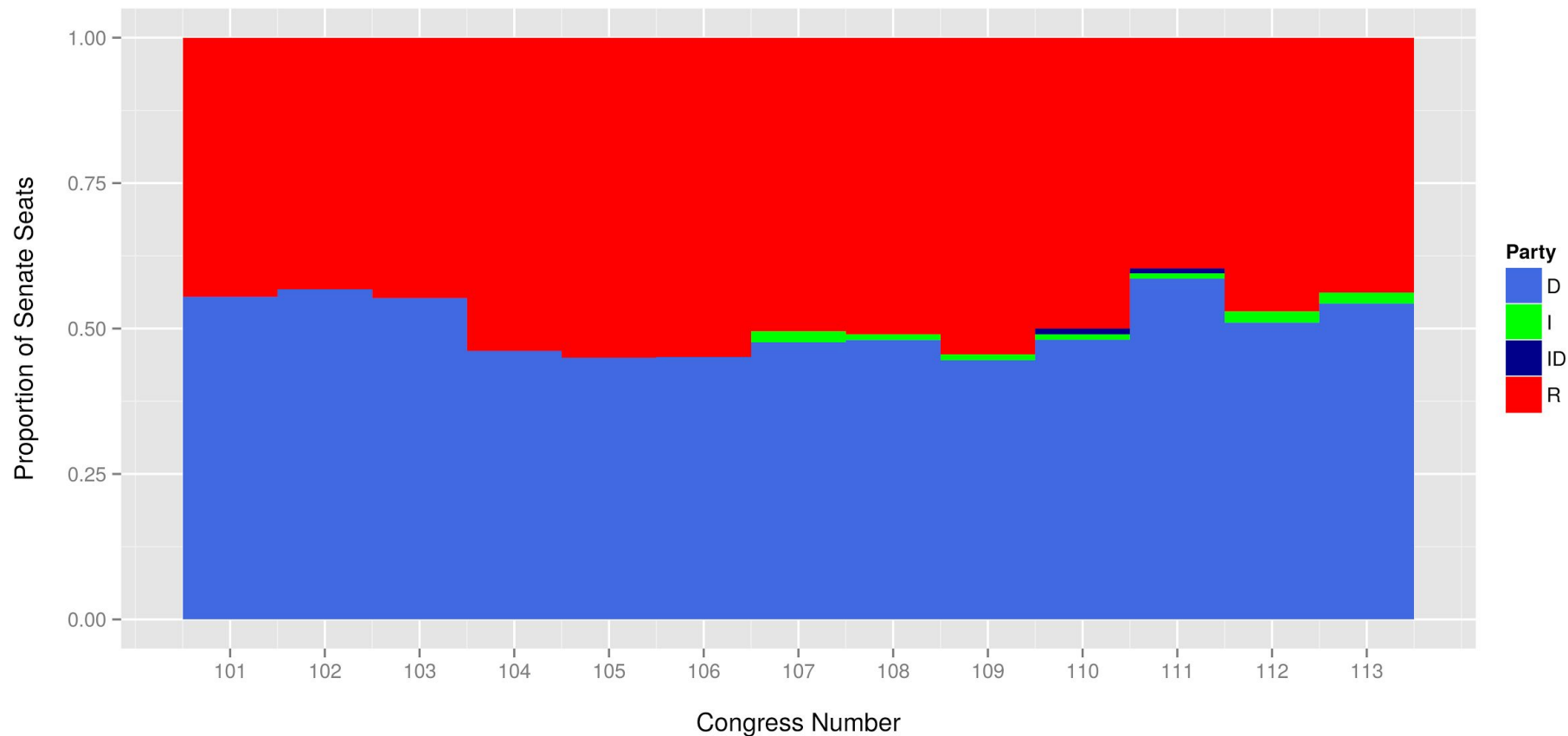
Facebook Appears to Lag Behind Websites and Twitter



What are the dynamics of political parties in the US
Senate over time?

Senate Seats Held Per Party Is Fairly Stable over Time

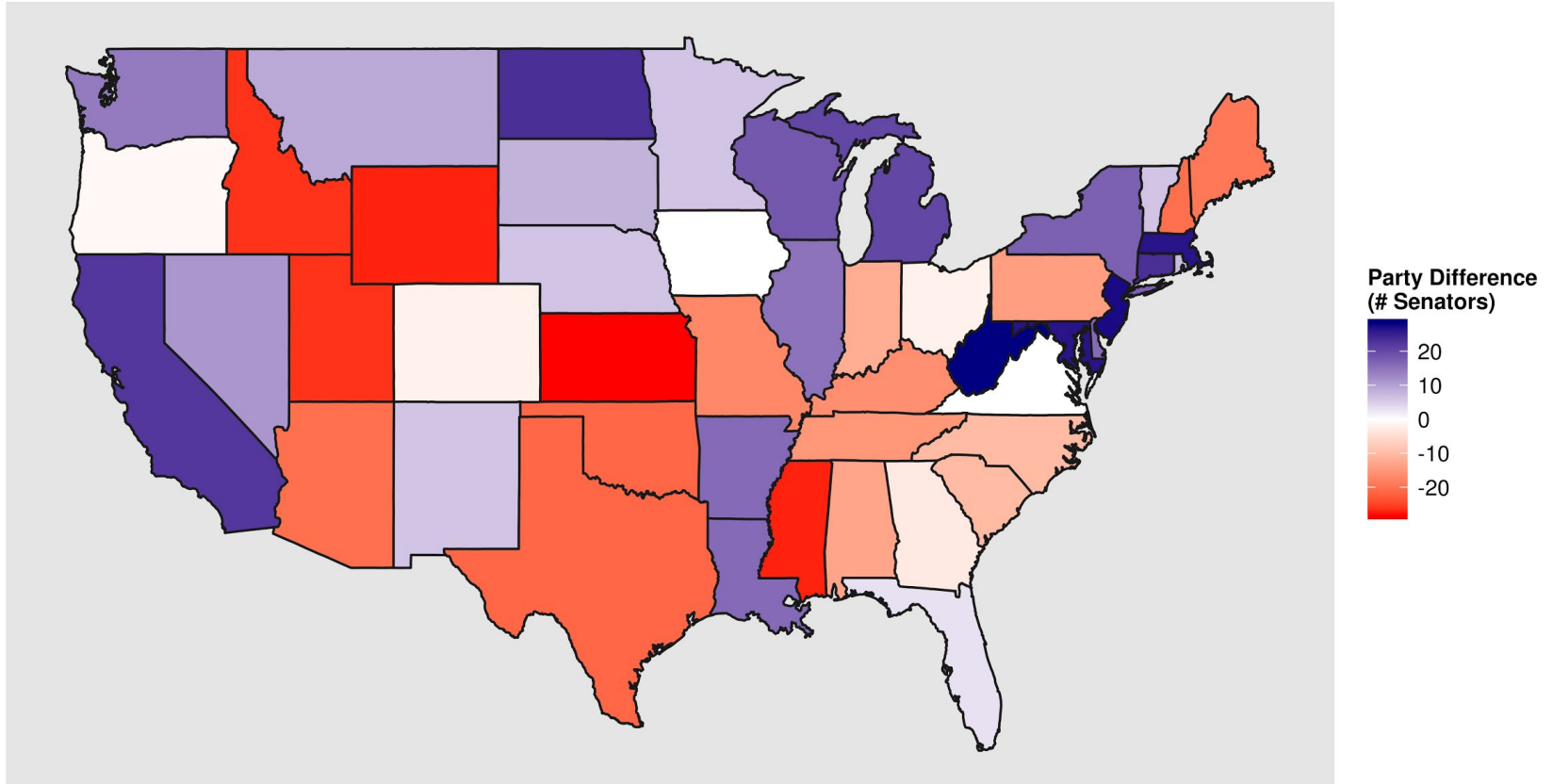
Republicans and Democrats Hold Majority of Seats; Independents New on the Scene



Do certain states prefer certain political parties?

Party Preferences By State as Determined by Senate Seats

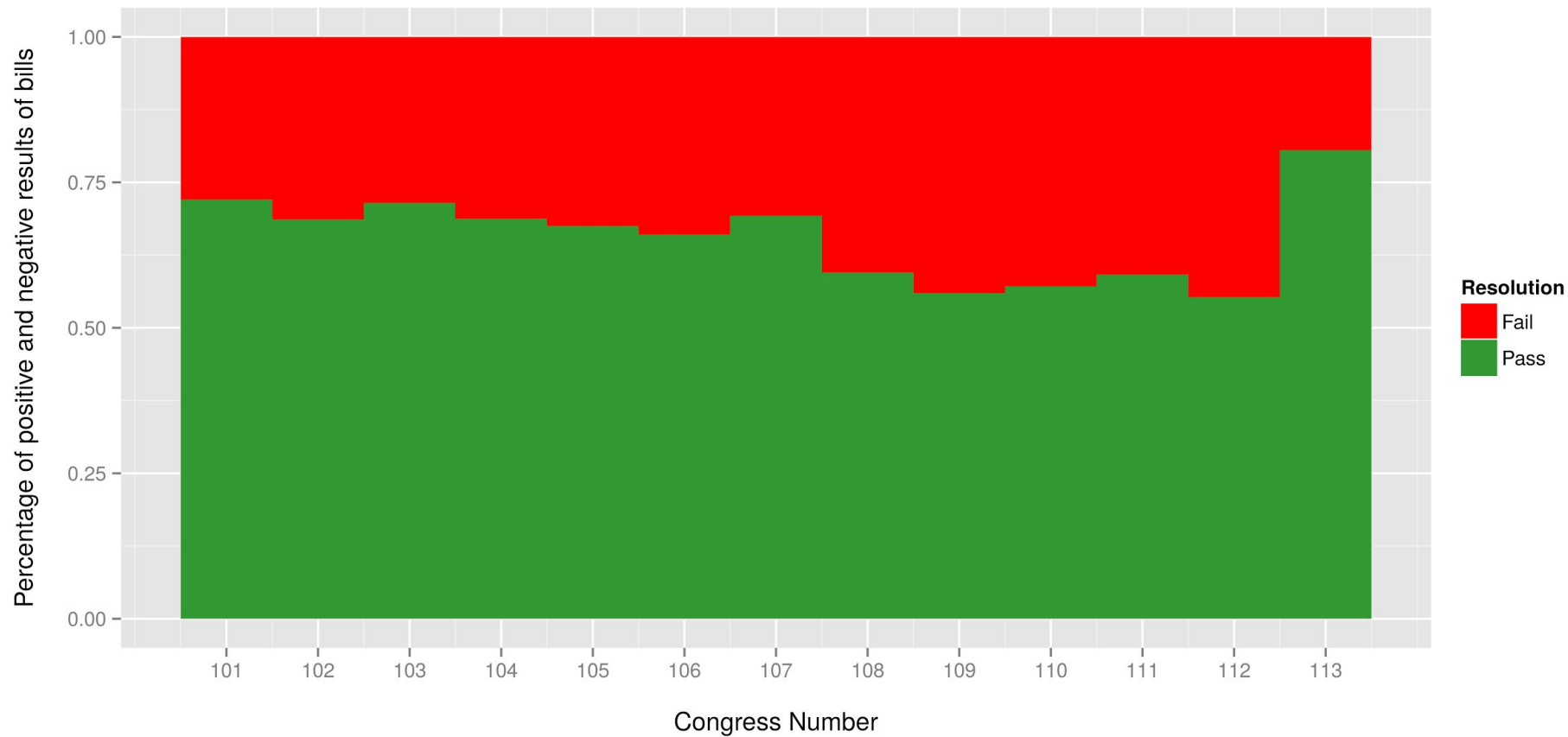
Republicans (Red) vs. Democrats (Blue)



How does the percentage of passed bills change over time?

Percentage of Bills Passed Per Year

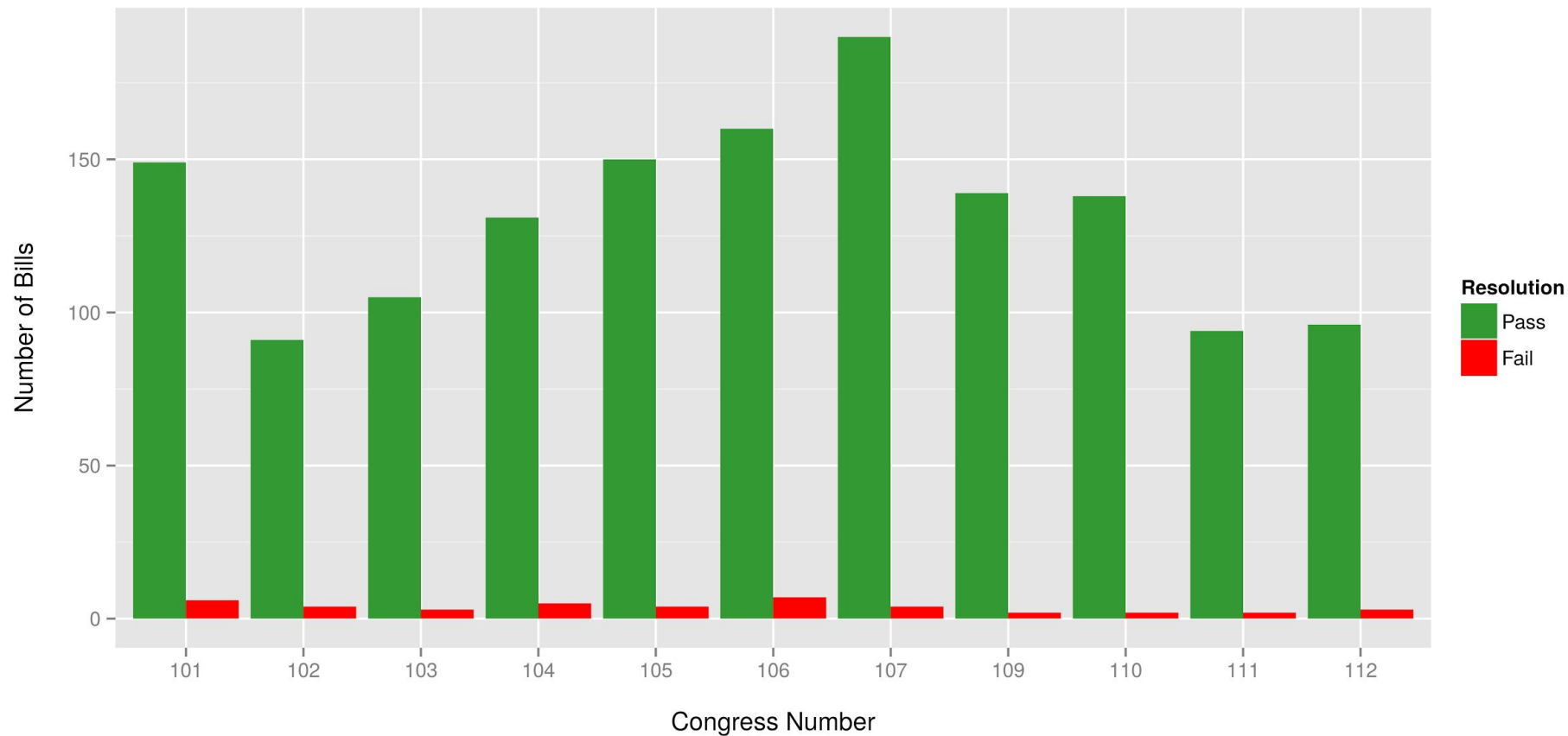
Pass Rate Decreases Before Peaking in 113th Congress



Are bills that received unanimous votes typically passed or failed?

Number of Bills Resolved Unanimously Per Congress

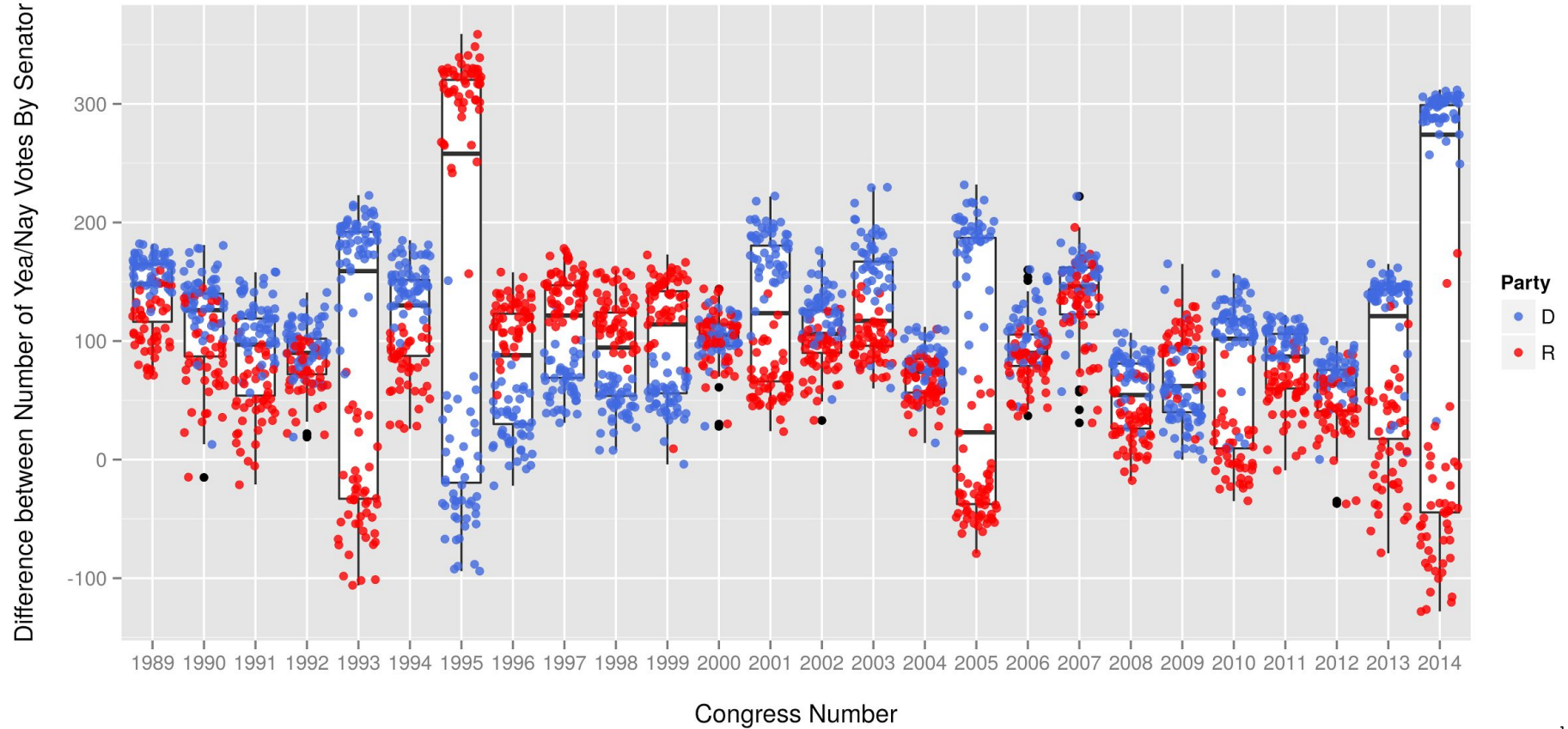
Bills with 5 or Fewer Dissenting Votes



Do trends exist in senator voting patterns based upon year and party?

Number of Bills Approved By Senators Changes by Year

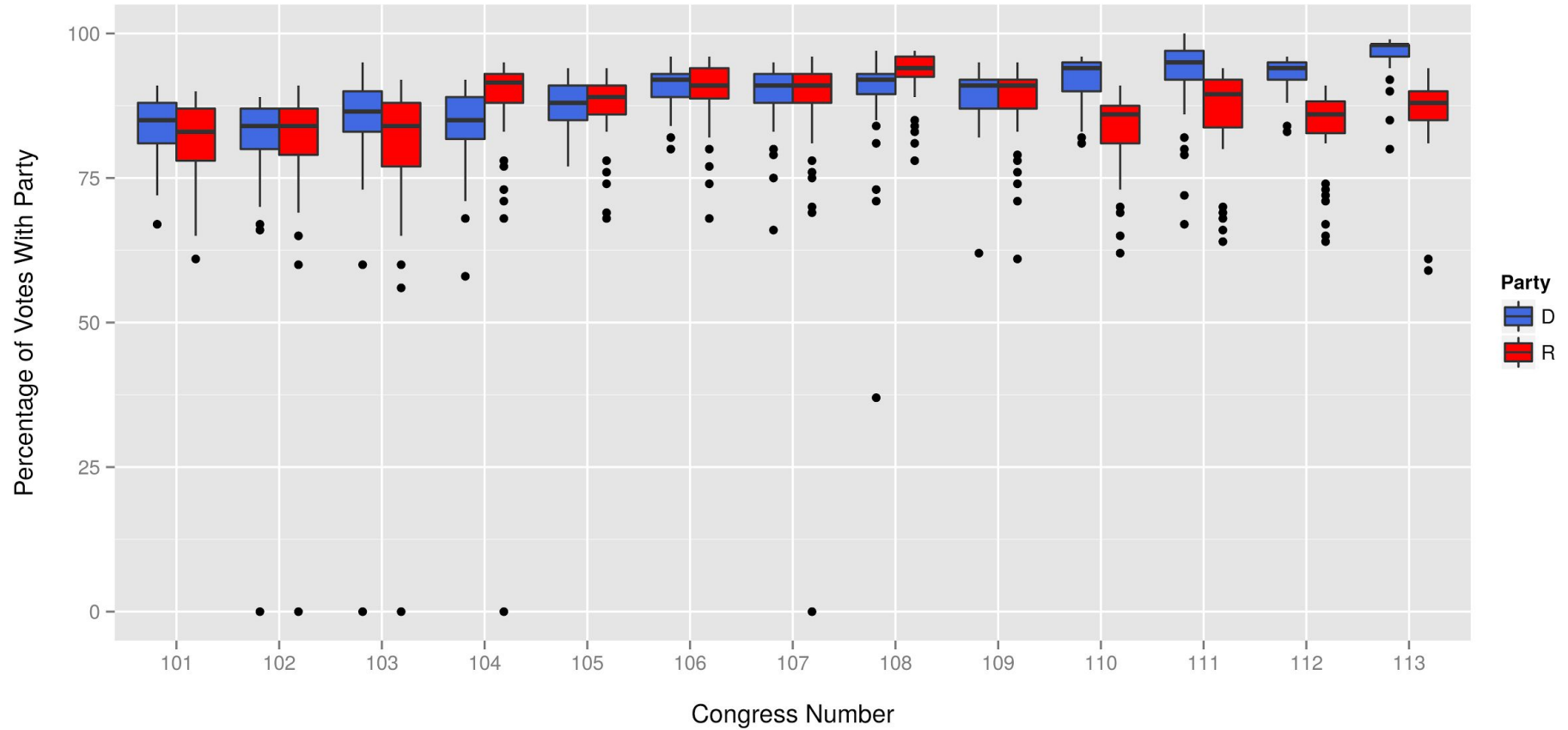
There is Clear Separation of Party Voting Patterns in Many Congresses



How frequently do senators vote against their party?

Senators Typically Vote Along their Party Lines

% of Votes Has Increased Among Democrats in Recent Years



Developing a Workflow for Gov. Transparency

Avg. Percentage of Votes Missed by State Senators
Congress Number: 101

