# Electoral Agency Game

*This activity is heavily based on in class activities developed by Alex Hirsch.*

Play a series of games to learn some of the intuitions of the agency model of elections. Following several of the games, pause to discuss related empirical evidence.

## Tell the students:

At the beginning of each game, I will select an "incumbent" and a "challenger". The rest of the class will be voters. We will be randomly changing the payoffs of the game and seeing what happens. We will select new politicians each time we play.

- In each round I will select two of you to be the politicians; the rest will be voters
- After that I will randomly identify one of the politicians to be the incumbent
- Then we will play a "2 period" game of policy making with an election between the periods.
- Be *ruthless* and try to maximize your points. Don't take into account that you interact outside of the game and want to be on good terms with each other– this brings in unmodeled "payoffs" outside the game.
- This is a series of games but play *separately*, i.e. don't collude / cut deals with your partner across games. Consider each game in isolation.

### *Materials*

- Deck of cards for assigning who is the incumbent and who is challenger and for assigning types to politicians
- Blank index cards (for writing policy choices)

## Every round of the game will have the following structure:

- The "incumbent" will choose to exert effort or not, i.e. "govern." This choice will affect everyone's payoffs. Sometimes you'll see the decision immediately, and other times you'll only see it later.
- The two politicians will run campaigns
- Potentially other "stuff" happens
- We will have a majority rule election to retain the incumbent or replace the with the challenger
- The new winner governs again
- [AT THE END WE REVEAL ALL THE GOVERNING DECISIONS SO WE CAN CALCULATE PAYOFFS]

**Game 1** (pure moral hazard)
*Lesson: Increasing the benefits to holding office can strengthen incentives for politicians to take actions which improve likelihood of reelection.*

**In these two iterations, you just need to assign incumbent and challenger (highest card is incumbent is one way to do it). Let the incumbent choose effort or not. Reveal the choice. Let them each give a 30 second campaign speech. Vote. Then let the winner govern again. Reveal outcome. Game is over.**

**We do 2 versions of this game:**

1.1 Small rewards

- Benefits of holding office: 5
- Cost of effort: 10
- Benefit to each voter of incumbent effort: 5

1.2 Larger rewards

- Benefits of holding office: 20
- Cost of effort: 10
- Benefit to each voter of incumbent effort: 5

Voters are indifferent, so it is worth talking to the students about how they decided who to vote for. This will set up later iterations.

The politician should not exert effort in game 1.1 but if they anticipate voters are going to use a "retrospective" rule, they should exert effort in game 1.2.

Relate to the paper by Gagliarducci and Nanicini exploiting a population discontinuity in the pay given to mayors in Italian cities. Note, there could be an explanation that is about the pool of candidates, rather than incentives.

**Game 2** (Candidate differentiation through preference for incumbency)

*Lesson: Candidate differentiation can screw up incentives*

**In is version again you just need to assign incumbent and challenger (highest card is incumbent is one way to do it). Let the incumbent choose effort or not. Reveal the choice. Let them each give a 30 second campaign speech. *Remind voters about incumbency advantage.* Vote. Then let the winner govern again. Reveal outcome. Game is over.**

- Benefits of holding office: 20
- Cost of effort: 10
- Benefit to each voter of incumbent effort: 5
- Benefit to each voter of reelecting incumbent: 2

Voters are no longer indifferent. They should always reelect the incumbent, regardless of effort. Understanding this, the incumbent should exert no effort.

This sometimes doesn't work. That's ok. If it doesn't, talk about it. Usually it is because students think the benefit of 2 is not big enough relative to the benefits of effort.

Try the game again with a benefit of reelecting the incumbent of 20. Then it will work. Then talk about how the equilibrium logic is the same when the benefit is 2.

**Game 3** (action conveys information)

*Lesson: When effort (or outcomes) conveys information, both the incentive and the selection mechanism exist.*

**Two types of politicians:**

- **Good types who like effort.**
- **Bad types who dislike effort**.

**In these two iterations, you need to assign incumbent and challenger (highest card is incumbent is one way to do it). Then you need to privately assign types. (Give each a new card, red cards are good types black cards are bad types).**

**Let the incumbent choose effort or not. Reveal the choice. Let them each give a 30 second campaign speech. Vote. Then let the winner govern again. Reveal choice. Game is over.**

**Two iterations:**

3.1 Small rewards (separating equilibrium)

- Benefits of holding office: 5
- Cost/Benefit of effort for Bad/Good types: 10
- Benefit to each voter of incumbent effort: 5
- Benefit to each voter of reelecting incumbent: 2

*In equilibrium, voters reelect following effort but not following no effort. Good types exert effort, bad types don't. In 2nd period, good types exert effort and bad types do not.*

3.2 Large rewards (pooling equilibrium)

- Benefits of holding office: 20
- Cost/Benefit of effort for Bad/Good types: 10
- Benefit to each voter of incumbent effort: 5
- Benefit to each voter of reelecting incumbent: 2

Point out that these games illustrate the two mechanisms: incentives and selection.

Relate to empirical work on the mechanisms:

- Brazilian mayors:
  - Incentives: If reelection eligible, implement a CCT better
  - If implement CCT better, electorally rewarded
- US governors
  - Incentives: 1st term eligible for reelection perform better than 1st term term limited
  - Selection: 2nd term eligible for reelection perform better than 1st term eligible for reelection

**Game 4** (Voter Information)

*Lesson: Voter access to information affects incentives and selection.*

**Two types of politicians:**

- **Good types who like effort.**
- **Bad types who dislike effort**.

**In this version, *voters don't observe incumbent action or outcome prior to voting.* You need to assign incumbent and challenger (highest card is incumbent is one way to do it). Then you need to privately assign types. (Give each a new card, red cards are good types black cards are bad types).**

**Let the incumbent choose effort or not. *Do not reveal the choice or outcome*. Let them each give a 30 second campaign speech. Vote. Then let the winner govern again. Reveal all choices from both rounds. Game is over.**

Voters don't observe incumbent action or outcome prior to voting.

- Benefits of holding office: 20
- Cost/Benefit of effort for Bad/Good types: 10
- Benefit to each voter of incumbent effort: 5
- Benefit to each voter of reelecting incumbent: 2

*In equilibrium, no effort by either type. Reelect incumbent*.

Relate to empirical work showing that voter information affects voter responsiveness and politician effort.

**Game 5** (uncompetitive elections)

*Lesson: Uncompetitive elections are bad for incentives and selection*

**Two types of politicians:**

- **Good types who like effort.**
- **Bad types who dislike effort**.

**In this version, you need to assign incumbent and challenger (highest card is incumbent is one way to do it). Then you need to privately assign types. (Give each a new card, red cards are good types black cards are bad types).**

**Let the incumbent choose effort or not. Reveal the choice. Let them each give a 30 second campaign speech. Vote. Then let the winner govern again. Reveal choice. Game is over.**

- Benefits of holding office: 20
- Cost/Benefit of effort for Bad/Good types: 10
- Benefit to each voter of incumbent effort: 5
- Benefit to each voter of reelecting incumbent: 15

*In equilibrium, high types choose effort and low types do not in both periods. All incumbents get reelected.*

Compare this to the pooling equilibrium to see the effect of making the election non-competitive. Then compare to empirical evidence on response rate to constituency service requests for incumbents in competitive vs. non-competitive races.