

# Update Document

## Motivation and Research Question

- Local Politicians expect private gains from their political tenure and they also can change the state of the government bureaucracy depending on their characteristics/objective function. Prior evidence (Iyer and Mani, 2012) does suggest bureaucrats consider relationship with politicians as a substitute to investing in their own skill.
- Under oversize licensing and permit regulations, firms are often throttled by bureaucrats. One plausible reason here is that bureaucrats can and often do extract rents from firms in exchange of relaxing regulations (well understood channel).
- The research question is to investigate the general effect on firm dynamics that is through politicians influence on bureaucracy. This is to be noted that I consider this different from previous research that focuses on effects arising from direct firm-politicians linkage.

## Summary:

1. **Fact 1:** Asset value of electoral candidates is growing monotonically at a rate much higher than the aggregate growth rate.
2. **Fact 2:** Holding the number of positions constant, evidence from two states suggest that there is a secular positive trend in bureaucratic churn.
3. **Fact 3:** For two states, higher asset level of elected candidates are correlated with a higher bureaucratic churn.
4. Potential drivers of candidate selection.

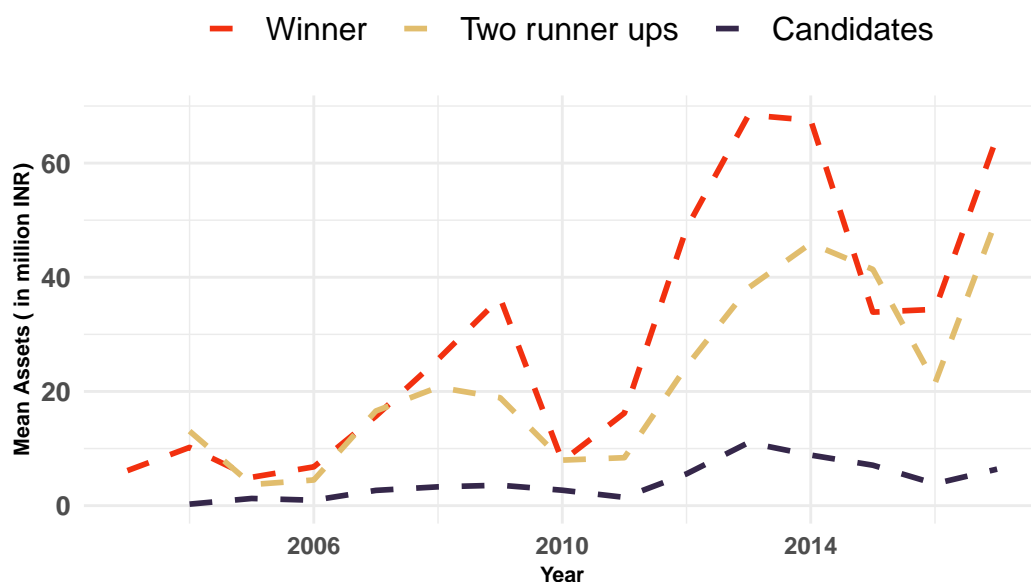
## Political assets

Trend in Political assets. ( Using SHRUG data that covers years till 2017)

Using publicly available asset disclosure data for each contesting candidates, we can track the trend in assets. Following figure plots the trend over available time period which is from 2003 to 2017. A few salient points from the figure:

1. Over the sample period, asset level of all contesting candidates are monotonically increasing. On an average, each election cycle the running candidates are 2.6x wealthier than previous set of candidates.
2. Top 3 candidates ( in terms of votes) are consistently wealthier than rest of the candidates.
3. Average asset level of a top 3 running candidates in 2003-2005 is ~7.75 million INR (~ 93k USD), and the same figure in 2016-2017 is 43 million INR (~ 518k USD).

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``summarise()`` has grouped output by 'state\_id', 'assembly\_no'. You can override using the ``.groups`` argument

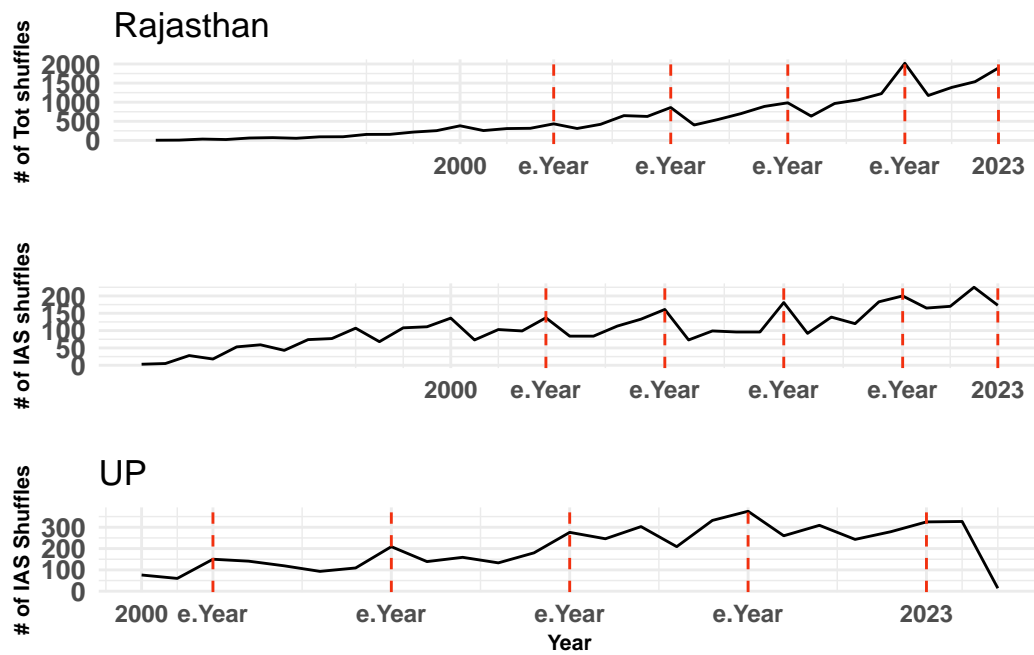


## Bureaucratic Churn Trend

Data from two Indian states with either officer level ( all postings) or bureaucratic post level data. Currently, I am mostly focussing on churn per year.

1. Bureaucratic churn as measured by raw number of transfers made. It seems to be monotonically increasing. The following figures illustrates the trend while holding the total posts constant.
2. In most states, right after election the bureaucratic churn is 43% higher than trend line, the election effect is remarkably similar in both states.

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`summarise()` has grouped output by 'designation'. You can override using the  
 `.groups` argument.

## Elections and Churn

Election year see around 43% increased churn compared to trend line in both states.

## Political assets and Bureaucratic churn

We can also look at whether characteristics of elected representatives have any influence over how local bureaucracy behave, specifically bureaucratic churn in this case.

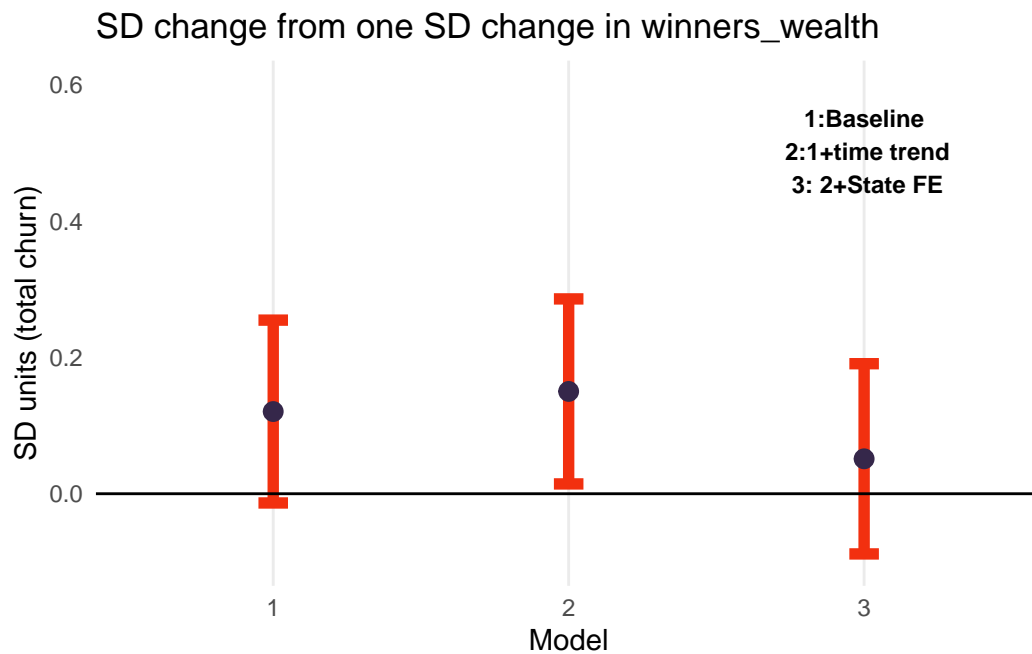
Using assembly constituency level data on elected representatives, we can aggregate it to district level to match the bureaucracy data. To start, we take net asset level of elected representatives and look at the effect of asset level on bureaucratic churn.

For each district, we have the average asset level over all assembly constituencies in the district and we have the total number of transfers made during the assembly term.

$$TotChurn_{dsa} = a + (\beta_1 Asset_{dsa} + \beta_2 Incumbency_{dsa} + \beta_3 Aligned_{dsa})$$

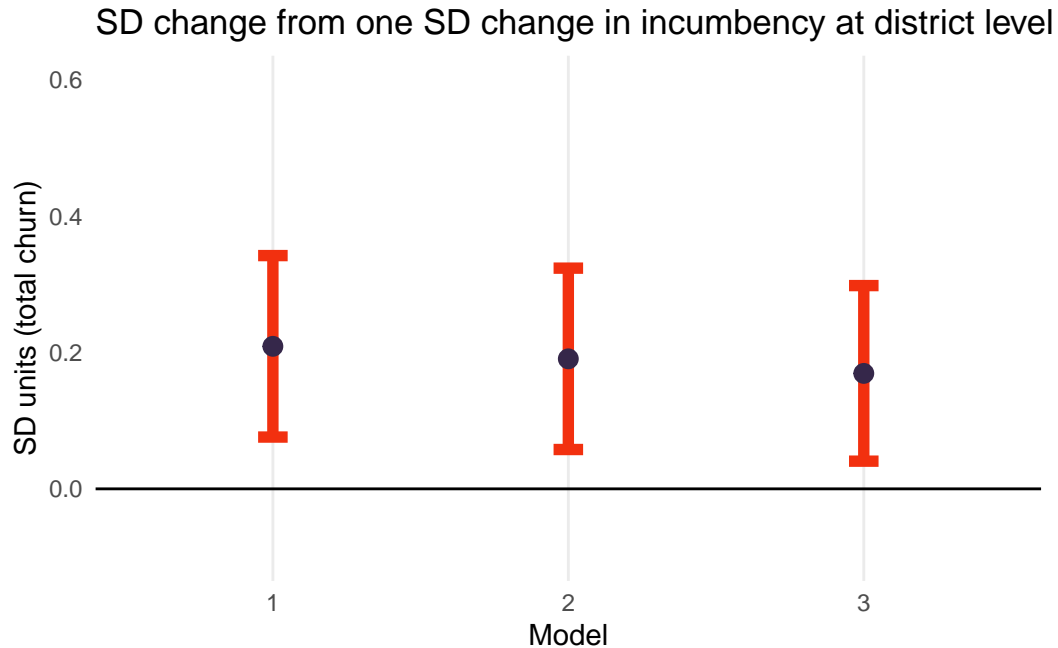
### B.Churn~ Asset Level

```
asset_eff_plot
```



## B.Churn~ Incumbent Share

```
inc_eff_plot
```



I also look at share of candidates aligned with state ruling party but surprisingly, I find zero effect for that across all the specifications.

### What drives selection of candidates?

Here I am going to take an external measure which is Cost of Construction index across 47 cities and see if local demand shocks are correlated with candidate selection. There are a few assumptions here:

1. I am assuming the shocks in CCI are due to demand shocks.
2. I am assuming that these demand shocks imply that there is a growth spurt in local construction sector.

Call:

```
felm(formula = fml, data = regdt)
```

Residuals:

Min	1Q	Median	3Q	Max
-217.712	-29.659	-4.497	10.242	211.451

Coefficients:

	Estimate	Std. Error	t value	Pr(> t )
index_yr_max	0.4567	0.2862	1.596	0.116

Residual standard error: 72.74 on 57 degrees of freedom

Multiple R-squared(full model): 0.5161    Adjusted R-squared: 0.3463

Multiple R-squared(proj model): 0.04276    Adjusted R-squared: -0.2931

F-statistic(full model): 3.039 on 20 and 57 DF, p-value: 0.0005277

F-statistic(proj model): 2.546 on 1 and 57 DF, p-value: 0.1161

## Ongoing/next steps

1. Getting better data that might be useful to create shocks for candidate selection. The idea is that candidate make a decision to contest based on the expected value of the prize. So for eg, there are some big projects that are exogenous to any local decision but would generate local rents. It might affect candidates decision to run or not.
2. Better government data.
3. Finally the black box of firm dynamics.