Introduction

- Data regulations have become of paramount importance to consumers and businesses, particularly in balancing privacy and information.
- Student information holds a specific protected class in the current legal canon as a result of governmental actions such as the Family Educational Rights and Privacy Act (FERPA).
- Student data holds this classification as a result of the intersection of several major risk factors.

Methodology

- We filed a series of Public Records/Freedom of Information Act requests with 36 school districts in Connecticut (blue) and 22 school districts in Massachusetts (red).
- These requests comprised of gaining access to educational technology contracts for free and paid software utilized by the school districts.
- Following this, we encoded contract information, data privacy information from CT school districts and information from the NCES into a rectangularized dataset.
- We then conducted analysis on the variables, including a Difference-In-Differences (DID) model to estimate the effect of the treatment (the law) on the level of reported technology usage.
- Some schools were dropped from our sample due to non-responsiveness. Additionally, some CT schools did not comply fully with PA 16-189.

Results

- The above graph show a significant increase in the reported amount of educational technology utilized in the state of Connecticut among schools who conformed to CT 16-189.
- Our Difference-In-Difference gives results that are significant at the 5% level with a positive coefficient, meaning that the law increases the predicted number of technology vendors.
- Assuming parallel trends, we can attribute the differences between the observed CT data and the counterfactual (dotted line) to causal effects.
- However, the trend in compliant vs. non-compliant districts may provide insight into the reasons behind this observed trend.

Conclusions

- From our DID analysis, we observe a significant difference in the number of educational technology vendors utilized by districts, which is higher in Connecticut than in Massachusetts.
- However, inconsistencies in the structure of reporting may mean that there are confounding variables (such as increased documenting of the available technology on a per-district basis) that may play an additional role in this observed shift.
- As such, we conclude that while there is evidence Connecticut’s law increases technological adoption, potential confounding factors means that more analysis is desirable.

Future Directions

- Gather more complete educational technology school records to strengthen causal analysis.
- Conduct a placebo test in order to eliminate the possibility of confounding variables.

References

1. The K-12 Blueprint, 2022
3. National Center for Education Statistics, 2022

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