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Abstract

We take a systematic look at how fiscal pressure affects local criminal justice expenditure and activity using the exogenous formulary allocations of the 2009 American Recovery and Reinvestment Act (ARRA) as our instrument (Wilson 2012). High predicted stimulus and low predicted stimulus regions show no significant differences in underlying crime rates, but low stimulus states increase their collection of fines and fees, particularly in smaller jurisdictions. We also find that local governments reduce arrests for crimes with diffuse or hard to realize benefits. The empirical strategy is validated by Ferguson, which appears as an outlier in each of the analyses.

Financing and Criminal Justice

One curious aspect of criminal justice in the U.S. is the way that financial and operational authority are spread across local, county, state and federal jurisdiction. While much of the financing responsibility lies at the level of government providing the policing, court, or correctional punishment, intergovernmental grants are substantial and frequently difficult to track (Gordon 2018). In this paper, we are interested in the financing of local government and, more particularly, the margins of adjustment for localities when they are strapped for resources. In related research, Mello (2018) analyzes the nearly \$1 billion increase in the Community Oriented Policing Services program to spur police hiring, finding substantial crime reductions. Our focus is on the lion's share of the \$ 490 billion in ARRA stimulus funds and its effect on choices by local jurisdictions with regard to funding and resource allocation. There may be policy implications of our research. According to the Department of Justice investigation of Ferguson following the 2014 protests, the troubles between the Ferguson police department and the residents they serve were in large part caused by local government's reliance on fine revenue that drove police and court action (U.S. Dept of Justice 2015).

Data & Identification

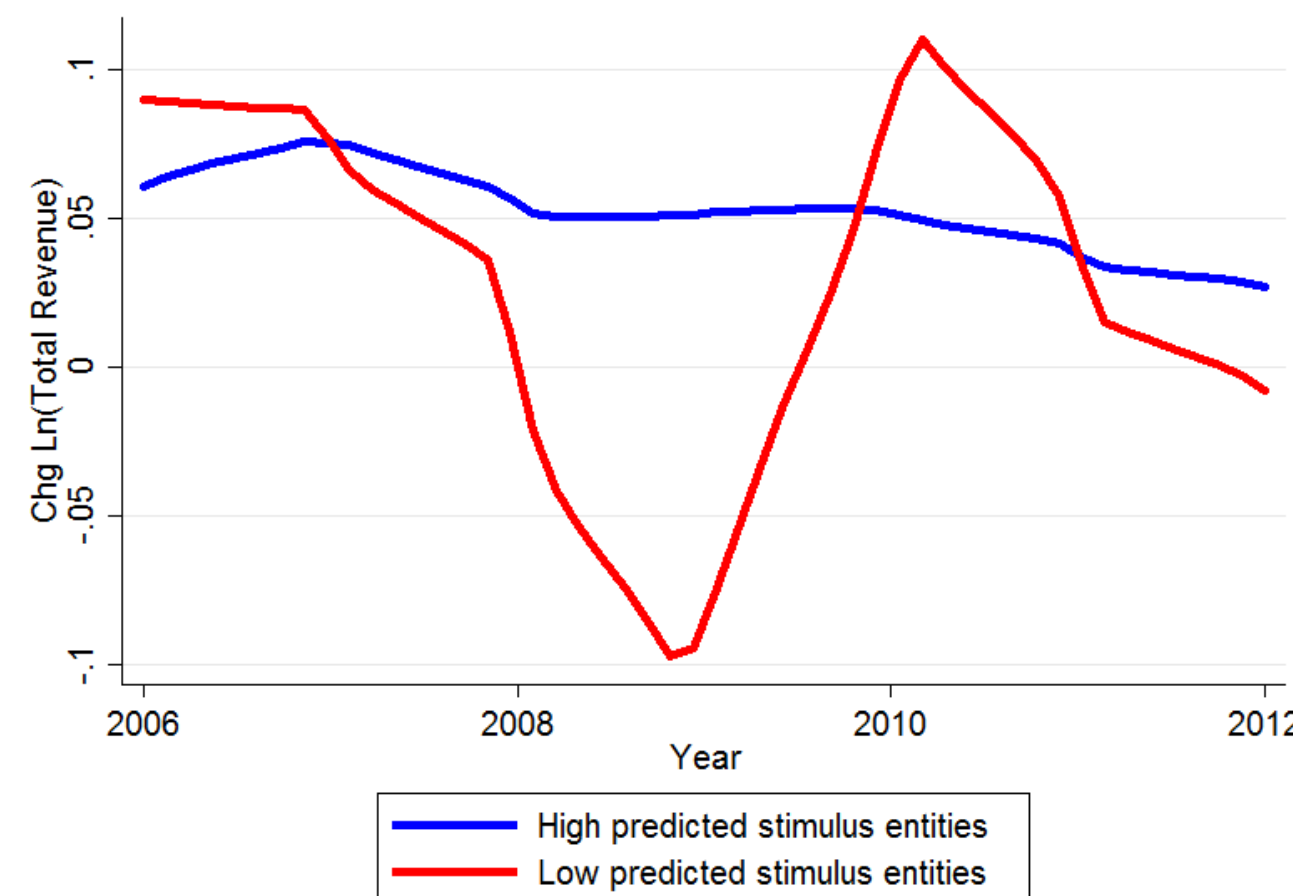
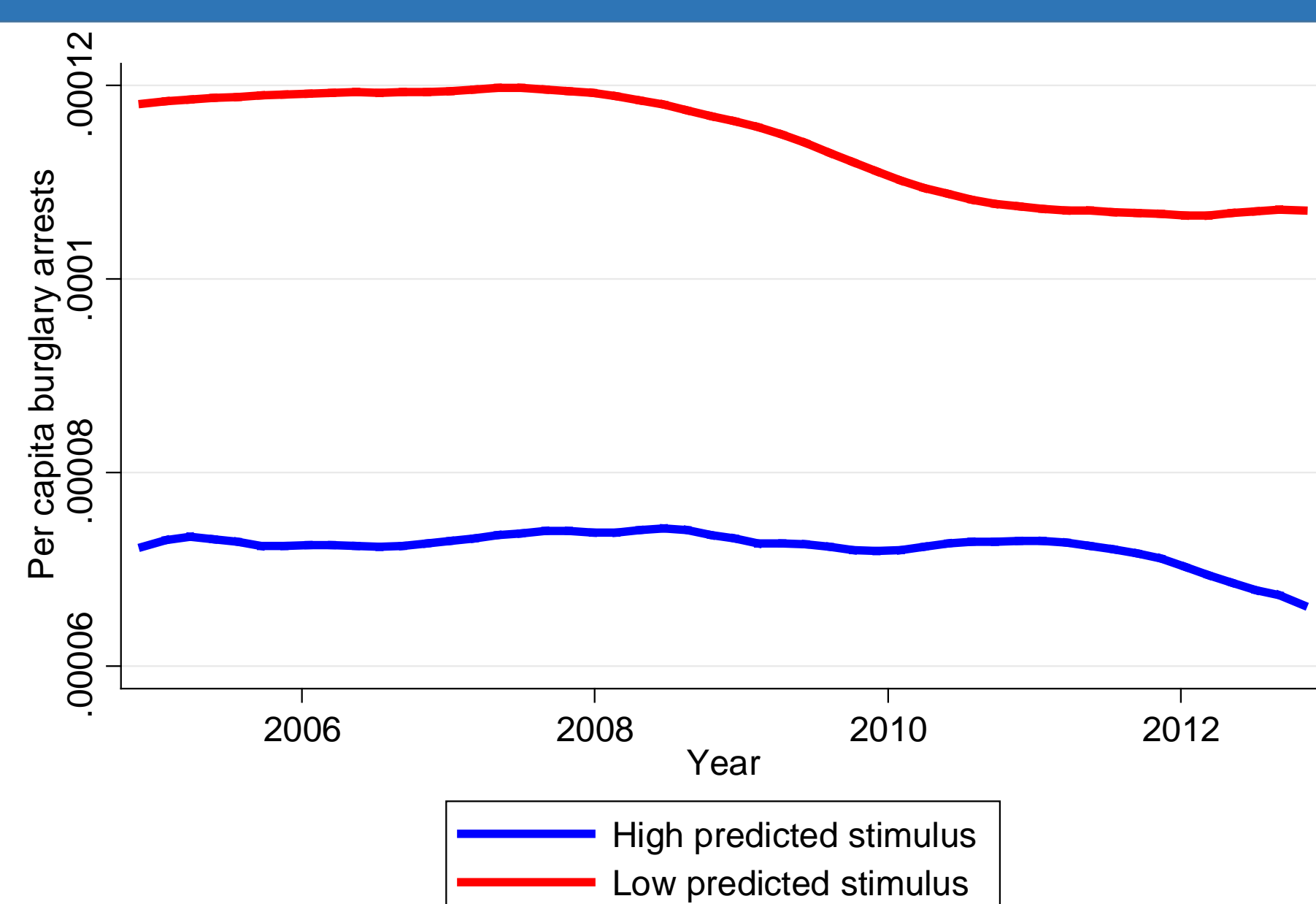


Fig 1. Change in Ln Total Revenue for governments.

Data on revenue and expenditures come from the Government Finance Database hosted by Willamette University. The sample includes all entities reporting in each year from 2005 to 2012. Arrest and crime data come from the FBI Uniform Crime Report masterfiles.

Because local financing and policing decisions are likely to depend on and influence other local level choices, we need an exogenous source of variation to identify a causal impact. For such an instrumental variable, we use a broad measure of fiscal pressure. Following Wilson (2012), we use the predicted stimulus from the \$ 490 billion in ARRA funds to capture reductions in fiscal pressure of the Great Recession. As can be seen in the figure above, it shows a strong relationship with local revenues, focused largely on 2009.

Results



Note: Agencies covering fewer than 500 people or missing more than 4 reports excluded. Bandwidth of 9 months.

Fig 2. Per capita burglary arrests.

Across low and high stimulus states reported crime rates and arrest rates for murder and rape appear similar. However, arrests for lesser crimes show systematic differences. A possible explanation is that burglary and theft are less politically salient than murder and rape, but very costly to investigate.

Effect of Revenue on Fines and Expenditure

Dependent variable	Sample Means	OLS	IV	IV Medium Sized*
$\Delta \ln(\text{fines and forfeits})$	0.359 (4.098)	0.012 (0.017)	-9.257 (2.340)	-18.361 (7.040)
$\Delta \ln(\text{policing, total expenditure})$	0.144 (0.990)	0.021 (0.018)	0.633 (0.481)	2.227 (1.605)
$\Delta \ln(\text{judicial, total expenditure})$	0.184 (3.098)	0.042 (0.024)	3.014 (1.265)	2.867 (3.368)
$\Delta \ln(\text{corrections, total expenditure})$	0.020 (3.017)	-0.029 (0.080)	2.543 (1.356)	2.880 (4.391)
N	4,103	4,103	4,103	1,321
F-test			26.56	9.53

Robust standard errors in parentheses; "Medium-sized" defined as 15,000-50,000 population.

The table above reports the results of separate regressions, (a) OLS, (b) IV using Wilson's predicted stimulus instrument, and (c) the IV using a smaller sample of medium-sized entities. Overall, police expenditures show little response to the recession or to the stimulus, but fines appear quite responsive (albeit from a low base). The median fine increase for low predicted stimulus was 8.5%, compared to no change for high stimulus states. As we might expect, entities between 15,000 and 50,000 in population (medium-sized) were more aggressive about using fines to meet shortfalls. Judicial and corrections expenditures were not affected as dramatically as fines, but were not as stable as policing.

We also investigated whether civil asset forfeiture laws affected the choice to pursue drug possession arrests where they may yield resources for the locality. Agencies in states with low stimulus funds appear to have maintained their previous rate of drug possession arrests only if state law provided low levels of forfeiture protection.

Outliers in Reliance on Fines

Across all 19,488 municipalities reporting in 2012, fines averaged 1.6% of all revenues. The 99th percentile of this distribution used fines for a remarkable 25% of revenue or more. Between 2007 and 2012, on average there was little shift in use of fines, and the distribution of change has only a modest positive skew. However, about 1.5% of municipalities, average size 1,400 and none larger than 25,000, increased their dependence on fines by more than ten percentage points.

Ferguson, Missouri is one of the larger ones in this group. The rapid growth in revenue in the Census data matches the increase in citations noted in the DOJ investigation that led to its finding of a "pattern or practice of unlawful conduct" within the Ferguson police department.

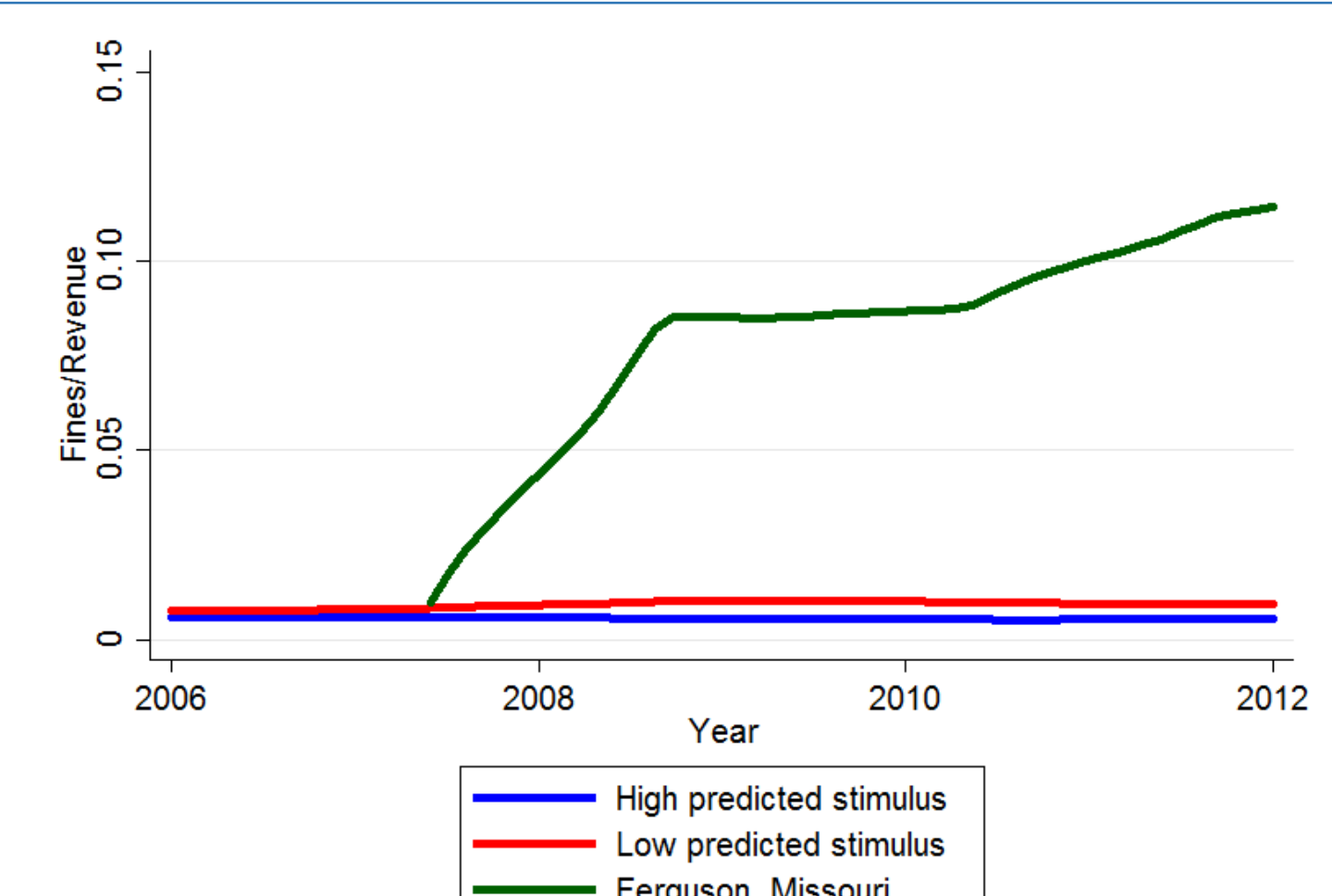


Fig 3. Fines as percent of all revenues.

Conclusions

Over the previous decade, reliance on revenue from fines increased in low stimulus states. In some localities, such as Ferguson, the increase was dramatic. Arrests for burglary fall in low stimulus states relative to high stimulus states, while arrest rates for violent crime stay the same. Arrests for drug possession fell in low stimulus states with strong protections against asset forfeiture, but were constant in high stimulus states as well as low stimulus states with limited protections.

It is worth noting that this aggregate-level research design may overlook important distributional effects. But to the extent that these fines are concentrated on poor subpopulations within these jurisdictions (U.S. Dept of Justice 2015; Alabama Applesseed 2018), the impact could nevertheless be extremely damaging.

References

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