Your Friends and Neighbors: Localized Economic Development, Inequality, and Criminal Activity

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Abstract

We exploit a sudden shock to demand for a subset of low-wage workers generated by the 2005 Base Realignment and Closure (BRAC) program in San Antonio, Texas to identify the effects of localized economic development programs on crime. We use a difference-in-difference methodology that takes advantage of variation in BRAC's impact over time and across neighborhoods. We find that appropriative criminal behavior increases in neighborhoods where a fraction of residents experienced increases in earnings. This effect is driven by residents who were unlikely to be BRAC beneficiaries, implying that local inequality can increase crime. We find less evidence of an impact on serious violence.

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1. Introduction

A large literature dating back to Becker (1968) and Ehrlich (1973) links economic incentives to criminal behavior, where individuals divide their time between legal and illegal "work" in order to maximize their expected utility. A direct implication of this theory is that policy interventions that improve labor market opportunities, especially opportunities for low-wage workers, should reduce crime. At the same time, to the extent that policy interventions provide financial benefits only to a few individuals, they can inadvertently increase the return to criminal behavior for non-beneficiaries. Compared to the vast empirical literature examining how an individual's own legal labor market opportunities affect his or her propensity to engage in crime,[1] research on the impact of changes in other people's well being on criminal behavior is scant and contradictory.[2]

In this paper, we provide evidence on the impact of differential economic opportunity on criminal activity following a large increase in demand for a specific subset of construction workers in San Antonio, Texas. Between 2007 and 2010, the Department of Defense (DoD) spent roughly $2 billion on the renovation and construction of four military bases in the city as part of the 2005 Military Base Realignment and Closure (BRAC). This increase in federal expenditure, which was roughly equal to 3% of the 2007 metropolitan area GDP and represented a seven-fold increase in typical military construction spending in the area, created a surge in demand for certain construction workers, specifically construction workers eligible to work on federal contracts, which required identity verification and criminal background checks. At the same time, due to the broader recession, construction workers who could not meet these requirements faced a substantial reduction in employment opportunities.

While the 2005 BRAC shuttered military installations and withdrew an important source of employment and income in some cities, it delivered substantial economic benefits to others. In fact, the consolidation of military operations in San Antonio was described as the "largest economic development event in the city's history."[3] Total federal expenditure on construction in San Antonio associated with the 2005 BRAC was roughly equivalent to annual federal

[1] This literature is reviewed in Piehl (1998), Fagan and Freeman (1999), Bushway and Reuter (2001), and Mustard (2010).

[2] This is likely due to the fact that most research does not use quasi-experimental or experimental variation in inequality. Notable exceptions to this include Bjerk (2010) and Kling et al. (2005). Both identify a positive impact of inequality on property crime, using, respectively, instrumental variables and experimental variation in local inequality.

[3] http://www.embracebrac.org/

expenditure on place-based programs with a national scope, such as the New Markets Tax Credit and Low-Income Housing Tax Credit.[4] However, not only were the billions spent on consolidating military operations in San Antonio confined to a relatively small geographic area, but the direct economic benefits of BRAC were, at least initially, concentrated in the hands of construction workers on federal contracts.[5]

Using data on employment and neighborhood conditions from the Census Bureau, we show that poverty rates increased in San Antonio as a whole over this period, but were more stable in neighborhoods where, historically, more people worked in construction. Also, while we find smaller increases in median household income and housing values in construction-intensive neighborhoods, households in these communities were more likely to purchase second cars. Patterns of neighborhood change in San Antonio stand in stark contrast to those in nearby Austin, where socioeconomic conditions showed little signs of improvement during the 2000s in areas with more construction workers.

We then show that in San Antonio, BRAC was associated with an increase in car theft, burglary, robberies, and larcenies committed by residents of neighborhoods with relatively large concentrations of construction workers, and that this increase in criminal behavior was driven by people who had been accused or convicted of felonies in the past. Due to strict employment guidelines for federal contractors put in place in 2004, these people were unlikely to benefit directly from BRAC, but are instead better characterized as the neighbors of BRAC beneficiaries. Our results are robust to a number of alternative specifications and controls for pre-treatment trends in criminal activity, and appear to pre-date the collapse of the non-BRAC construction market.

We find much weaker evidence that BRAC neighbors were more likely to engage in crimes that do not have a clear economic motive. We argue that the most plausible explanation for the observed changes in criminal behavior is a rational response to an increase in criminal opportunities generated by the increased earning power of local, BRAC-eligible construction workers.

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[4] The federal government allocated $26 billion to the New Markets Tax Credit program between 2003 and 2009, or an average of $3.7 billion per year, to encourage commercial investment in low-income communities throughout the country (Freedman 2012). Lost federal tax revenues associated with the Low-Income Housing Tax Credit, which subsidizes affordable rental housing development, were just under $5 billion per year in the mid-2000s (Eriksen and Rosenthal 2010).

[5] The San Antonio Business Journal estimated that 80% of the total economic impact of BRAC was the direct result of the increased labor market opportunities for construction workers (Thomas 2009).

A large literature focusing on individuals who gain or lose jobs generally finds that the beneficiaries of improvements in economic conditions commit fewer crimes. Our results suggest that the associated decline in aggregate crime may be somewhat attenuated by increased criminal activity by those who do not benefit. To the extent that business cycles or economic development programs increase local disparities in income, our results indicate that increased acquisitive crime may be an unanticipated and unfortunate consequence. However, our findings do not imply BRAC was a net negative for San Antonio; taking the social cost of increased criminal activity into account, we estimate that the local economic multiplier used by the DoD to evaluate the impact of BRAC was at most 0.2% too large.

The paper proceeds as follows. In the next section, we briefly summarize the existing literature on economic inequality and criminal behavior. In Section 3, we provide institutional background on the 2005 BRAC, with particular emphasis on the selection process and pattern of spending. We also discuss other public works projects that partially coincided with BRAC. Section 4 provides a theoretical framework for thinking about the impact of BRAC on criminal behavior. We then describe the data we use to measure the impact of BRAC on crime in Section 5, and outline our differences-in-differences identification strategy in Section 6. In Section 7, we present evidence that BRAC was associated with specific socioeconomic improvements in neighborhoods with more construction workers, but also with higher rates of acquisitive crime. We conclude with a brief discussion of the results and their implications in Section 8.

2. Inequality, Criminal Opportunities, and Economic Development

In the now standard economic model of criminal behavior (Becker 1968, further developed by Ehrlich 1973), rational agents will engage in crime if doing so increases their lifetime expected utility. There are essentially three parts to an individual's decision: the utility associated with legal employment, the utility associated with engaging in crime, and the expected utility loss from being punished for criminal acts. On the margin, people should equalize the expected net return of spending an additional hour in legitimate and illegitimate activity.

Researchers using quasi-experimental variation in employment opportunities, particularly opportunities available to low-wage earners, have generally found that higher wages and lower unemployment rates are associated with lower aggregate crime rates (Raphael and Winter-Ebmer 2001, Machin and Meghir 2004, Mocan and Rees 2005, Machin and Marie 2006). An enormous

literature also indicates that increasing the expected cost of crime, either by increasing penalties or increasing the probability of detection, will reduce the incidence of crime, although there is still some debate about the magnitudes of these effects (Durlauf and Nagin 2011).

There is comparatively little evidence on how responsive people are to variation in the private return to crime, or "criminal opportunity." Criminal opportunity is typically broken into three components: (1) propinquity, the cost of obtaining information about the return to a criminal act, which in criminology is often measured as the physical distance between and offender and victim (Canter and Youngs 2009), (2) payoff, the gross private return to committing the crime, and (3) vulnerability, the expected level of resistance by the victim (Cook 1986).[6]

Experimental evidence suggests that variation in criminal opportunities are potentially of great importance in explaining crime patterns, and specifically that income inequality can induce worse-off people to offend (Harbaugh et al. 2011). However, empirical findings outside of the lab are not entirely conclusive. Glaeser and Sacerdote (1999) estimate that steeper local income gradients can explain at most one-fourth of the elevated crime rates in cities compared to rural or suburban areas. A handful of cross sectional studies of income inequality and property crime find a positive, although often statistically imprecise, relationship between the two (Fajnzylber et al. 2002, Kelly 2000, Hsieh and Pugh 1993). However, the time series analyses in Brush (2007) and Saridakis (2004) yield negative relationships. Meanwhile, Kling et al. (2005) find that boys who moved to slightly wealthier neighborhoods as part of the Moving to Opportunity experiment were more likely to be arrested for property crimes than the control group, but girls were not affected. Bjerk (2010) presents quasi-experimental evidence that increasing income segregation, which implies that poor people are less likely to interact with wealthier people, lowers property crime rates at the city level, but increases violence.

In this paper, we combine data on where criminals live with quasi-exogenous variation in local economic conditions generated by military spending during the 2000s in the city of San Antonio, Texas. While this spending may have reduced the propensity to engage in crime among direct beneficiaries, we show that because of the targeted nature of the spending program, an important effect of this program was to increase the criminal opportunities of the average San Antonian. In the Cook (1986) framework, increasing the income of construction workers likely

[6] Technically, Cook (1986) describes four components of criminal opportunity, but he includes the expected loss from punishment. We draw a distinction between expected punishment and other parts of the Cook (1986) definition to highlight the relative lack of research by economists on this particular issue.

increased their neighbors' payoff from committing property crime, especially to the extent that neighbors may have been negatively affected by the Great Recession. At the same time, if construction workers responded to the increased demand for their labor by working more and spending less time at home, this could cause a corresponding increase in the vulnerability of their households.[7]

Our identification strategy is in part based on the fact that our local economic shock benefited a specific subset of the working population, creating geographic heterogeneity in the impact of the program based on where these workers lived. In that sense, our identification is similar to that of Machin and Marie (2006), who exploit geographic heterogeneity in the impact of a reduction in unemployment insurance benefits in the UK to identify the net relationship between crime and economic strain. However, without information on who was committing crime, they are unable to disentangle the impacts of reduced income and reduced criminal opportunities. Further, as we will show, the benefits of BRAC were even more tightly concentrated in the hands of a particular subset of the population than were the costs of the UK benefit cut.

In addition to this geographic variation, we take advantage of highly detailed information on the accused criminals. Due to federal employment rules, BRAC jobs were only open to people without serious criminal records. This institutional detail, combined with our rich data, allows us to separate the impacts of the legal and criminal opportunities created by the program. Because our dataset contains information on all felony cases dating back to the 1970s, we are able to differentiate between the criminal activity of people who could have potentially benefited from BRAC and the activity of those who were not eligible to work on BRAC projects, but were plausibly aware that others benefited from a BRAC windfall.

The implementation of the 2005 BRAC was in many ways comparable to place-based programs, such as state enterprise zones, the Low-Income Housing Tax Credit (LIHTC), the New Markets Tax Credit, Weed and Seed, and Business Improvement Districts (BIDs), in the sense that its impacts were concentrated in certain geographic areas. A small literature has found mixed evidence on the impacts of these programs on crime. For example, Bushway and Reuter (2001) review evaluations of Weed and Seed, which generally find no impact on crime at all. In

[7] Cantor and Land (1985) emphasize this perverse impact of lowering unemployment on crime - workers are away from their home more often. Research on criminals' response to changes in the vulnerability of victims, particularly through hand gun regulation, is divided; see Cook et al. (2011) for a review of this literature.

contrast, Cook and MacDonald (2011) find that BIDs, where businesses pay extra taxes or fees to finance improvements within a designated area (often including improvements to security), reduce property crime as well as violent offenses.

Meanwhile, Freedman and Owens (2011) find that rental housing development in low-income areas subsidized by the LIHTC is associated with reduced rates of assault and robbery, but higher rates of car theft. By improving the quality of the housing stock in poor neighborhoods, the LIHTC program may have attracted slightly wealthier people to low-income communities, which could increase criminal opportunities for existing residents. Similarly, by improving the welfare of some residents and not others within neighborhoods, the 2005 BRAC in San Antonio might be expected to foster more acquisitive crime in affected communities. However, not only was BRAC spending in San Antonio large and highly concentrated, but as we will show, its impacts on crime are likely to have operated more through changes in the purchasing power of certain residents than through changes in neighborhood composition.[8]

3. The 2005 Military Base Realignment and Closure

In 2005, Congress established a new Defense Base Closure and Realignment Commission, which was tasked with orchestrating the first military base realignment and closure (BRAC) in ten years.[9] The goal of the 2005 BRAC was to increase the efficiency of the DoD by concentrating domestic military operations in a smaller number of areas. In May of 2005, the commission announced that San Antonio would become the new "home of Military Medicine and Installation Command" for the U.S. Military.[10]

In previous BRACs, the DoD officially ranked "local economic impact" as the third most important criteria in their reshuffling decision. When the selection criteria for the 2005 BRAC were announced, local economic impacts had fallen to the 12th most important criteria. Instead, locations with more available space and little history of residents complaining about base activities received preference in the BRAC selection decision (Sorenson 2007).

[8] Existing research on the impacts of place-based initiatives often suffers from lack of power; partly as a result, there is only limited evidence that geographically targeted state and federal economic development programs improve economic conditions at all, let alone enough to generate a measurable impact on criminal behavior (Glaeser and Gottlieb 2008). The sheer magnitude of spending associated with BRAC in San Antonio makes it an attractive candidate to study the social impacts of local economic development programs.
[9] Previous BRAC rounds occurred in 1988, 1991, 1993, and 1995.
[10] DoD Document AFD-101004-006.ppt.

BRAC affected four bases in San Antonio. Air Force units from other parts of the country were reassigned to three existing bases in the San Antonio area: Randolph Air Force Base, Lackland Air Force Base, and Brooks City-Base. Most new military activity would occur at Fort Sam Houston, a base roughly two miles northeast of the Alamo in downtown San Antonio, which was designated as a new major medical research and education center for the DoD. Overall, the DoD predicted that the 2005 BRAC would bring roughly $8.3 billion to San Antonio by 2011 (Nirvin 2009).

This economic boon was not equally shared by all residents. In fact, approximately 80% of the federal money would be spent on construction and renovation (Nirvin 2009). The federal government awarded $92 million in BRAC construction contracts in September of 2007, followed by an additional $1.2 billion in 2008 and $700 million in both 2009 and 2010.[11] To put these expenditures in perspective, the military spent between $65 and $100 million on construction in San Antonio per year prior to 2005 (AFD-071217-009).[12]

In the same way that the effects of place-based economic development programs are spatially concentrated, BRAC's effects were felt more in some neighborhoods than others. In particular, its initial impacts were felt most acutely in neighborhoods in which a large fraction of workers were employed in the construction industry. Figure 1 highlights the plausible spatial heterogeneity in the impact of BRAC spending on the purchasing power of households in different parts of Bexar County, which contains the city of San Antonio. The figure shows the fraction of employment in the construction industry across census block groups based on 2000 Decennial Census data and 2005-2009 American Community Survey data. The construction industry is a relatively important employer in several of the larger block groups in the southern and central parts of the county as well as in many of the smaller block groups that constitute downtown San Antonio. Notably, the spatial distribution of construction workers changed little during the 2000s, although there was some shifting of where construction workers were concentrated midway through the decade.

[11] Depending on the credit constraints of construction workers in San Antonio, it is plausible that their purchasing power increased when BRAC was announced rather than when BRAC contracts were awarded. For this reason, we do not emphasize this variation in military expenditure between 2007 and 2010, and in our analysis we explicitly allow for an increase in the purchasing power of construction workers, and thus the criminal opportunities of their neighbors, after the announcement of BRAC.

[12] Obviously, the timing of a grant or construction contract will not line up with when workers are actually paid. For this reason, we will use variation in the total number of dollars awarded in each BRAC year as a proxy for variation in the potential consumption of construction workers.

While BRAC was a federal project, construction jobs were contracted out to private companies. The companies that won BRAC contracts were primarily headquartered in San Antonio or had large branches in the area. In September of 2009, a representative of the Association of General Contractors of San Antonio estimated that two-thirds of all commercial construction in San Antonio was taking place on one of the bases, and that without BRAC, unemployment in the construction industry would be "at 15-17 percent" (Thomas 2009).

There is some evidence to suggest that BRAC spending buffered the San Antonio construction industry against the economic downturn and collapse of the housing market in the late 2000s. In Figure 2, we compare employment and wages of construction workers in Bexar County to those in nearby Travis County, where the state capital Austin is located, as reported in the Quarterly Census of Employment and Wages (QCEW) from 2001 to 2010.[13] From 2005 to 2007, Bexar was losing construction jobs relative to Travis, and those jobs paid roughly 86% of Travis wages. After BRAC spending began, this trend reversed; the gap in construction jobs between Bexar and Travis grew by over 3,500 between 2007 and 2009, an amount roughly equivalent to some DoD estimates of the number of construction jobs created by BRAC (Thomas 2009, Thomas Miller and Associates 2008). Over the same period, the wage premium in Travis shrank to less than 10%. Clearly, San Antonio construction workers fared better than workers in neighboring markets during the second half of the decade.

While BRAC was "keeping a lot of people busy … who would otherwise be struggling to find work" (Thomas 2009), these jobs were not necessarily open to all construction workers. Civilians working on federal contracts enjoy relatively lucrative wages and benefits,[14] but face some additional barriers to employment. Specifically, on August 27, 2004, President George W. Bush issued Homeland Security Presidential Directive 12, which required that all employees of federal contractors have a "verified identity" if they were to be allowed access to a federal government facility. The language of this Directive was subsequently interpreted by the Government Accountability Office (GAO) as requiring all employees of companies with federal contracts to undergo a criminal background check (U.S. GAO 2007).[15] Because of Directive 12,

[13] QCEW data are not available prior to 2001. We define construction using the two digit NAICS code 23.
[14] The Davis-Bacon Act requires construction contractors to pay prevailing wages and benefits to workers on federal projects.
[15] The requirement that federal contractor workers undergo background checks has been the subject of some controversy, but was upheld by the Supreme Court in *09-530 National Aeronautics and Space Administration et al. v. Nelson et al.* (2011). That case established that the U.S. Federal Government had the specific right to know about

construction workers with criminal histories, or without proper documentation of their eligibility to work in the U.S., were in principle ineligible to work on contracts awarded by the federal government.

The announcement of BRAC coincided with another shock to lower income, working San Antonio residents, particularly those working in construction and tourism. In June of 2005, Phil Hardberger was elected city mayor. During his four-year term, Mayor Hardberger oversaw three major projects. First, after Hurricane Katrina, Mayor Hardberger successfully lobbied to have the displaced New Orleans Saints NFL franchise temporarily move to San Antonio and play half of their home games in the city's major sports arena, the Alamodome. Second, between 2006 and 2007, Mayor Hardberger oversaw a significant extension of the San Antonio Riverwalk, one of the city's major tourist attractions, which is lined with restaurants, bars, and hotels. Finally, Mayor Hardberger spearheaded the renovation of the historic downtown Main Plaza in 2008. Because these were locally-initiated projects that directly affected multiple industries and were not subject to federal contractor rules, it is less obvious that the Hardberger projects can be interpreted as shocks to local economic inequality, but we will be careful to take these projects into account in our empirical analysis of BRAC.

In Figures 3 and 4, we provide graphical evidence on the impact of BRAC as well as the Hardberger projects on employment and wages in San Antonio, again using data from the QCEW. In Figure 3, we plot the number of jobs in Bexar County in construction (NAICS 23), tourism and food services (NAICS 71 and 72), and health care and social services (NAICS 62).[16] We chose these two additional industries because of their importance to the San Antonio economy; roughly one quarter of San Antonio jobs were in these two sectors in 2011 (Greater San Antonio Chamber of Commerce 2011). Tourism in particular should have directly benefited from the Hardberger projects, and people working in the food service industry may have received some early spillover benefit from BRAC.[17]

"'violations of the law,' 'financial integrity,' 'abuse of alcohol and/or drugs,' 'mental or emotional stability,' 'general behavior or conduct,' or 'other matters'" related to the character of non-federal employees working on federal contracts.

[16] The number of construction jobs in the QCEW actually created by BRAC is difficult to determine. However, the US Army Corp of Engineers (USACE) estimated that, during the construction period, BRAC brought on average more than 2,200 construction workers to bases every day (Thomas 2009). Note that this is roughly two-thirds of the size of the jump in QCEW construction jobs in 2007.

[17] There is a weak, but positive correlation (ρ=0.09) between the residential choices of tourism and construction workers in Bexar county. Tourism workers tend to live in the southwestern part of Bexar County. There is a heavy

Employment in these three sectors follows two noticeably different paths. Both health care and tourism jobs grew steadily through the decade, with some downturn in tourism jobs in 2009. The stability of these industries in the late 2000s is in line with other work suggesting that these San Antonio did not suffer as much as other parts of the country during the Great Recession (Puentes and McFerrin 2012). Meanwhile, construction jobs declined between 2001 and 2003, stabilized in 2004, then after the beginning of the Hardberger projects, jumped by almost 6%. After the first BRAC contract was awarded in 2007, construction employment jumped again, from 40,000 jobs to 43,000 jobs. However, even as BRAC spending was ramping up, total construction jobs declined in 2009 and 2010 after Hardberger left office and his projects wound down. One implication of this is that construction workers who could not meet federal employment standards faced increasing economic hardship in these years, further exacerbating the income inequality in construction-heavy neighborhoods.

Trends in wages further confirm that high-paying BRAC jobs were an increasingly large share of all construction work. In Figure 4, we see a corresponding increase in the wages of construction workers, relative to the health care industry, that coincides with the Hardberger projects and implementation of BRAC. Notably, workers in tourism also saw a jump in their salary, especially in 2006, which we attribute to the shared benefit of the Hardberger projects among these two industries. While not directly apparent in the figure, in terms of purchasing power, growth in construction wages was substantially larger than in tourism wages. Average wages in construction increased from $635 a week in 2001 to $781 a week by 2006, and were $862 a week by 2010. Workers in the tourism industry earned, on average, $279 a week prior to 2006. Their average weekly wages increased to $327 in 2006, fell by $14 a week in 2007, and finally rose to about $330 per week between 2008 and 2010.

Based on the graphical evidence, as well as DoD and Chamber of Commerce publicity, we conclude that BRAC had a substantial effect on the number and nature of employment opportunities for construction workers in San Antonio. At the same time, there were other important changes in the market for construction workers, in particular the Hardberger projects and the Great Recession, which will be important to take into account in our analysis.

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concentration of both construction and tourism workers along Route 281 in central San Antonio, just east of Fort Sam Houston.

4. Local Economic Shocks and Crime

We will use a simple model of appropriative conflict in the spirit of Ehrlich (1973), Grossman and Kim (1995), and Bjerk (2010) to think about the possible impact of the BRAC on the criminal behavior of two types of neighbors: construction workers who directly benefit from BRAC and people who, because of their human capital, immigration status, or criminal history, do not receive any direct benefit from BRAC. While simple and stylized, this model captures some key features of the relationship between criminals and victims, and in particular the role of income shocks and geographic space.

Suppose that a given individual i can earn w_i in the legitimate labor market. They can supplement their income by stealing, which gives them an expected return of s_i additional dollars, but with the potential loss of utility u(f) if they are caught. Apprehension happens with probability p. Each neighbor will engage in crime in a given period if and only if $u(w_i + s_i) - pu(f) \geq u(w_i)$. Assuming that people are risk averse, with $u' > 0$ and $u'' < 0$, a higher legal wage will reduce person i's likelihood of engaging in crime, as it will reduce the extra utility gained from an additional s_i, but not the disutility associated with punishment. It is also the case that as s_i increases, the incentive to commit crime increases. This begs the question: what determines s_i?

We follow theoretical research in criminology, specifically routine activity and the distance-decay hypothesis (Cohen and Felson 1979), and define s_i as $\sum_{-i} \frac{w_j}{f(h_j, d_{ij})}$, where d_{ij} is the linear distance between neighbors i and j and h_j represents neighbor j's investment in protection from crime.[18] We include a flexible function in distance in order to capture several possible mechanisms relating distance to criminal behavior; not only is travel costly, but, following the idea of propinquity, the amount of income that other people have, w_j, may not be known with certainty when someone decides to commit a crime. We assume that individuals have better information about the wages of people who live closer to them, making one's neighbors more attractive targets for theft than someone whose actual resources are less clear.[19] This is particularly important when we think about the plausible impacts on different types of criminal

[18] To the extent that employment opportunities may reduce the amount of time that construction workers spent at home, BRAC may have reduced investment in protection. Since we are unable to observe changes in h_j, we focus on observable variation in d_{ij}.

[19] At the same time, people are more likely to know (or at least recognize) their neighbors, so these mechanisms are counterbalanced by the fact that anonymity itself may also contribute to criminal behavior (Wilson and Herrnstein 1985).

behavior. Any person passing through a neighborhood might notice a fancy car parked in the driveway, but neighbors are much more likely to notice delivery vans, electronics boxes, or backyard furniture that would suggest opportunities for burglary or theft.[20]

A direct implication of this formulation of criminal opportunity is that the change in criminal opportunities generated by BRAC will be geographically concentrated around BRAC beneficiaries. There is a fair amount of empirical support for this hypothesis. For example, Bernasco et al. (2012) estimate that robbers in Chicago are over five times more likely to operate in a census block for each log-kilometer closer it is to their home. Rhodes and Conley (1981) estimate that the average burglary occurred 1.2 miles from a burglar's home, the average rape about 0.73 miles from a rapist's home, and the average robbery less than 1.6 miles from a robber's home. They also point out that people living in "target rich" areas travel shorter distances to engage in crime. Consistent with Rhodes and Conley, Phillips (1980) finds that assaults and rapes tend to be committed within a mile of the offender's home. Wiles and Costello (2000), meanwhile, find that most offenders travel less than two miles from home to commit burglary and robbery, but travel as much as two and a half miles on average to commit larceny.

Recall that BRAC created a positive, temporary shock in demand for construction workers who were eligible to work as federal contractors. This should have lowered the incentives for these construction workers to engage in crime, but simultaneously made these workers more attractive criminal targets for the remainder of the population. The net effect of BRAC on crime is therefore unclear, as it depends on both the prevalence and behavioral response of BRAC beneficiaries and those who did not directly benefit. Among all San Antonians not employed on BRAC projects, we expect that those who live closest to BRAC construction workers, all else being equal, would be most likely to increase their criminal behavior because of BRAC. Note also that, to the extent that criminals who commit crimes close to home are more likely to be caught, we might expect more of these offenders to be arrested.[21]

[20] There is some evidence that the income elasticity of consumption of "visible" goods, specifically cars, clothing, and furniture, is higher than the income elasticity of less conspicuous items like underwear or life insurance (Heffetz 2011).

[21] This could be reflected in our simple model by making p a function of d_{ij}.

5. Estimating the Impact of BRAC on Crime

We estimate the impact of BRAC on criminal behavior using data on all felony charges filed in Bexar County District Court between 1976 and 2010, focusing on the post-2000 data. There are two features of this dataset that merit discussion. First, individuals only appear in these data if they had felony charges filed against them, and multiple people could be accused of the same criminal act. The fact that only a fraction of crimes result in a felony charge is a limitation of our data, but it is important to point out that all research on the characteristics of offenders using official reports suffers this limitation. For example, researchers regularly interpret the age of arrestees in the UCR as representative of changes in the age of offenders (see, for example, Donohue and Levitt (2001) and Lochner and Moretti (2004)).

In Table 1, we present estimates of the number of criminals per index crime (Panel A) and number of adults arrested (Panel B) in Bexar County using county-level crime estimates from the Uniform Crime Reports (UCR) for 2000-2009.[22] Most of the difference between felony charges and crime rates appears to be driven by police activity, as the number felony charges is much closer to the number of adults arrested each year. Not surprisingly, there are more felony charges for murder, rape, and robbery per known crime than for less serious offenses, and no more than 2% of the larcenies occurring in Bexar County appear to result in felony charges being filed, corresponding to 10-30% of adults arrested.[23] While roughly 40% of adults arrested for sexual offenses appear to be charged with felonies, definitional differences between UCR and state statutes make this difficult to interpret.[24] There is a general increase in the number of felony charges filed per crime in Bexar County over time, but this time trend is substantially weaker conditional on the number of adults arrested.

If the fraction of people arrested and eventually charged with felonies were changing over time in a way that was correlated with the fraction of people who worked in construction, then

[22] These estimates are derived from the UCR County-Level Detailed Arrest and Offense Data, which are not yet available for 2010.

[23] Police clearance rates for larceny are generally quite low. Also, because larceny is typically considered a minor crime, prosecutors may be less likely to file felony charges against an arrested thief.

[24] We try to include people charged with what is commonly understood to be a sexual assault in our definition of rape. For example, we do not define felony charges for sodomy, incest, unnatural sexual acts, or fondling in our definition of rape, but we do include charges for any type of sexual assault. The FBI records part one rape and part two sexual offenses. The definition of UCR rape is exclusively carnal knowledge of a female against her will, which is narrower than we would like to define sexual assault. At the same time, UCR sexual assault, a part two offense, includes any offenses against "common decency," which we think is too broad a definition. For more information, see www2.fbi.gov/ucr/05cius/about/offense_definitions.html.

our estimates will reflect a combination of both increased criminal behavior and increased probability of punishment for criminal behavior when some residents earn more money. Instead of being problematic bias, we argue that this would be consistent with a behavioral change in our model of criminal opportunity; specifically, people deciding to commit crimes closer to where they live, where they may be more likely to be apprehended.[25]

Taking advantage of information on initially filed charges and a fingerprint-supported unique identifier in the Bexar County District Court data, we identified individuals who were accused of committing a crime that occurred between 2000 and 2010. We then used mapping software to locate the census block group where each individual in the data lived at the time that charges were filed against them.[26] Block groups, which are the second smallest geographic unit identified by the Census Bureau, are larger than a city block but smaller than a census tract. Census tracts roughly correspond to homogenous "neighborhoods," and in Bexar County, there are just under four block groups per census tract on average. The median population of the 1,009 block groups in Bexar County was 1,100 in 2000.[27] The median land area was 0.2 square miles, well within the range that most criminals travel.

For each census block group in Bexar County, we calculated "crime rates" for eight types of crime – burglary, car theft,[28] larceny, robbery, murder, rape, plus two types of assault – using block group population estimates based on linear interpolations between the 2000 Decennial Census and 2005-2009 American Community Survey (ACS).[29] The Texas criminal statute differentiates between domestic assault and assaulting someone not in your family. To the extent that economic strain is a strong correlate of domestic assault (Gelles 1998) and that an increase in the wealth of your neighbors is perceived as a reduction in your own wealth (Frank 1985), we

[25] This point is specifically raised in Brantingham and Brantingham (1981). Alternatively, people with more money might be more willing to cooperate with the police, which would lead to more arrests and charges filed. This is also a policy relevant outcome, as it means that local economic development could place greater strain on the criminal justice system.

[26] We use 2000 Decennial Census geographic boundaries.

[27] We drop seven block groups in Bexar County that had zero population in either the 2000 Decennial Census or the 2005-2009 American Community Survey data.

[28] Texas does not have a specific law against stealing motor vehicles. Someone who takes another's car with the "intent to deprive" the owner of that property is charged with theft, with the sub-classification of theft of a vehicle. This is a different, and more serious, charge than unauthorized use of a motor vehicle (UUM). In Texas, UUM means that someone operated a vehicle without the consent of the owner, but without the intent to permanently deprive the owner of that vehicle. In essence, Texas law differentiates between someone stealing a car for acquisitive purposes and "joyriding." Since we are primarily interested in acquisitive crime, we focus on theft of a motor vehicle. Consistent with this, we find much weaker effects of BRAC on UUM.

[29] We also extrapolate population to 2010.

might expect assaults on family members to respond differently to a sudden increase in a neighbor's wealth than fights between non-family members.

For our main measures of criminal activity, we simply calculated the number of offenses that residents of each census block group were alleged to have committed each year. Next, we divided our criminal activity rate into two additional groups: crimes allegedly committed by people who had never appeared in the Bexar District Court before, and crimes allegedly committed by those who had previously been accused of a crime that occurred at any time since 1976. Since most, if not all, of BRAC workers were required to have criminal background checks, we argue that these people are more likely to be ineligible to work on a BRAC contract. We further refined this by calculating a fourth crime rate, based on crimes alleged to be committed by people who had previously been found guilty of a felony in Bexar County. To the extent that Directive 12 was enforced, any change in the criminal behavior of this group after BRAC should only be related to the increase in criminal opportunities.[30]

We then linked these block group crime rates to information on local demographic characteristics and economic conditions using 2000 Decennial Census data and 2005-2009 ACS data.[31] We used the 2000 Decennial Census to calculate the fraction of jobs held by construction workers in each block group in Bexar County. Obviously, this is only a coarse proxy for the number of workers who will benefit from BRAC, and therefore our identification relies on the assumption that there is a positive correlation between the share of adults working in construction in general and the share that will be eligible to work on federal contracts. Notably, measuring construction share as of 2000 means that our identification is not based on jobs that were created, and then lost, during the construction boom and bust of the mid- to late-2000s. To the extent that only a fraction of construction workers in a block group will be eligible for BRAC jobs, this will only sharpen the differential impact of BRAC on household consumption and criminal opportunities within a neighborhood.

We also extracted from the 2000 Decennial Census a host of block group demographic characteristics, including information on total population, racial and ethnic composition, the age

[30] In our analysis, our unit of observation is a criminal act (e.g. assault), rather than a criminal event (e.g. a robbery and assault committed at the same time). For the purposes of calculating these "crime rates," we treat all offenses occurring on the same day as one crime, and all convictions occurring on the same day to be the same conviction.
[31] The geographic boundaries in the 2005-2009 ACS for Bexar County match those used in the 2000 Decennial Census, ensuring that no measurement error arises from changes in geographic boundaries driven by shifts in the geographic distribution of the population.

distribution, educational attainment levels, household and family income, poverty rates, employment rates, and unemployment rates. The 2000 data also include a number of housing variables, including total housing units, share vacant, share occupied, share owned, share rented, median age of units, household turnover, median house values, and vehicle ownership.

To assess changes in neighborhood conditions later in the decade, we use recently released small-area estimates from the 2005-2009 ACS. These estimates are based on interviews conducted by the Census Bureau between January 1, 2005 and December 31, 2009. The ACS block group estimates cannot be used to measure neighborhood characteristics in a given year; they can only be used to measure average neighborhood characteristics over the entire five-year period. Notably, though, the dates for which the ACS block group estimates are available bracket the period during which the BRAC and Hardberger projects were underway and include the early years of the Great Recession. We extract from the ACS information on population, poverty rates, employment, household income, housing units, median house values, household turnover, and vehicle ownership.

The magnitude of the impact of BRAC on the criminal opportunities of non-beneficiaries is assumed to be proportional to the fraction of workers in that block group who work in construction, or "construction share." In Table 2, we present some basic descriptive statistics for block groups with 2000 construction shares above and below the 50th percentile of construction share (which is just over 7%). Block groups with higher construction shares also tend to have more workers in the tourism industry and fewer workers in the health care sector. It is also clear from the table that areas with higher construction shares are typically more disadvantaged along a number of dimensions. Educational attainment levels, income levels, and house values are all lower in areas with higher construction employment shares. Not surprisingly, each type of major crime is more common in neighborhoods with higher construction shares.

In Figures 5 and 6, we provide some graphical evidence on the net effect of BRAC on crime rates, dividing crimes by whether or not there is a clear economic return to the behavior. We mark in the figures both when BRAC was announced and the Hardberger projects began (2005) as well as when the first BRAC contract was awarded (2007). Larceny, the most common acquisitive crime, appears to have been increasing in Bexar County for most of our sample period. There is a slight upward trend in burglary, car theft, and robbery in the early 2000s, but there is a sharp increase in these crimes between 2007 and 2008. Turning to crimes with less of a

clear financial motive, we see less evidence of a shock in the BRAC years. Rape and murder rates, which are multiplied by ten for ease of comparison, are flat or slightly downward sloping between 2000 and 2010, with the exception of a brief spike in the murder rate in 2007. Assault, and in particular intra-family assault, has a strikingly different pattern, with the number of people charged with this crime increasing steadily after 2006.

6. Analytic Framework

The overall trends in felony charges suggest that BRAC coincided with an increase in some crimes in San Antonio. If this actually was caused by an increase in criminal opportunities, we would expect the increase in burglary, robbery, and car theft rates to be larger in neighborhoods where more people plausibly benefited from BRAC. We therefore use a continuous difference-in-difference strategy to identify the net effect of this localized economic shock on criminal activity. The main outcome of interest is the natural log of the number of crimes committed by residents of a block group in a given year divided by the estimated population of that block group in that year. In our main specification, we examine how crime rates (technically the rate of felony charges filed) vary with construction shares over the 2000s, controlling for year and block group fixed effects:

$$(1)\quad \ln\left(\frac{Charges_{bt}}{Population_{bt}}\right) = (ConstructionShare_b BRACHardberger_t)\beta_1 + (ConstructionShare_b BRACAward_t)\beta_2 + \mathbf{X}_{bt}\Psi + \eta_t + \theta_b + \varepsilon_{bt}$$

where b indexes census block groups and t years.[32] The main coefficients of interest are β_1 and β_2, the coefficients on the interactions of the share of block group workers who work in construction and the two stages of BRAC. The first-order impact of BRAC on criminal behavior is absorbed by year fixed effects η_t, and therefore β_1 and β_2 differentiate between block groups where we expect the economic impact of BRAC to be larger. $BRACHardberger_t$ takes the value of 1 in the years 2005 and 2006, when the BRAC decision was made public and the Hardberger projects began. During this period, wages for both construction workers and tourism workers rose due to Hardberger, and construction workers' propensity to spend may have also increased in anticipation of BRAC. $BRACAward_t$ is equal to one in the years 2007, 2008, 2009, and 2010,

[32] We also considered specifications controlling for baseline (i.e., year 2000) block group demographic and housing characteristics along with tract and year fixed effects. We show the results of these regressions, which are quantitatively and qualitatively similar to those with block group fixed effects, in Appendix Tables A1-A9.

when BRAC construction took place. While BRAC did not directly benefit those in tourism, it is plausible that construction workers were more likely to eat out or otherwise engage in activities that would have benefited workers in that sector during this period.

We also include in $\mathbf{X}_{bt}$ interactions of the share of block group employment in tourism (NAICS 71 and 72) and the share in health care (NAICS 62) with dummies for both stages of BRAC. Finally, we control for time-invariant differences across the 1,009 block groups in our sample with a vector of block group fixed effects, θ_b. In all regressions, we allow for arbitrary correlation in crime rates within block groups by clustering our standard errors at the block group level.

In a series of robustness checks, we test the sensitivity of our estimates to a number of alternative modeling strategies. Specifically, we check the robustness of our results to including flexible controls for pre-BRAC trends in crime, using crime rates as the outcome, using alternative measures of construction employment concentration, and replacing $BRACHardberger_t$ and $BRACAward_t$ with separate dummies for each year between 2004 and 2010. We also explore how the Great Recession may have interacted with BRAC spending to affect outcomes. We discuss each of these robustness tests after presenting our main results in the next section.

7. Results

7.1. BRAC and Neighborhood Characteristics

Before we present our estimates of the impact of BRAC on criminal behavior, we first must establish that BRAC improved the economic circumstances of some San Antonio residents, increasing the criminal opportunities for others. We do this by replacing the dependent variable in equation (1) with a series of measures of block group economic conditions and neighborhood characteristics.[33] These outcomes are measured in the 2000 Decennial Census and again in the 2005-2009 ACS, such that we only effectively have two observations for each block group. Further, to the extent that some of the surveys used to generate the 2005-2009 ACS estimates were conducted prior to construction beginning on some of the Hardberger or BRAC projects and the recession in Texas, we might expect our estimates to understate the degree of

[33] Observation counts in these regressions vary slightly across regressions due to missing information on neighborhood characteristics.

neighborhood change owing to the projects. Still, if we see relative improvement in neighborhood conditions between 2000 and 2005-2009 in areas with relatively more construction workers, it would lend credence to our claim that BRAC increased criminal opportunities relatively more in neighborhoods with a disproportionate number of construction workers.

The results of our analysis of changes in the economic well-being of San Antonians appear in Panel A of Table 3. To highlight the impact of BRAC and the extent to which it mediated some of the effects of the recession of the late 2000s, we show results of the same regressions for nearby Travis County in Panel B of the same table. We find that in contrast to trends in Travis County, poverty rates in Bexar County were statistically significantly lower in block groups with greater shares of construction workers after 2005. Note, however, that the average block group resident in Bexar County did not appear to benefit from BRAC; as in Travis County, the impact on median household income is small and statistically indistinguishable from zero. This is consistent with the idea that BRAC only benefited a subset of households in a neighborhood.

Meanwhile, median house values in affected San Antonio neighborhoods rose slightly, by about 0.5% for each additional percentage point of employment in construction, an elasticity of 4%. This again contrasts with Travis County, which experienced no differential change in median home values in communities with more construction workers.

Notably, a one percentage point increase in the share of employment in construction increased the percentage of households in Bexar County with two or more vehicles by a statistically significant 0.22 percentage points, compared to a statistically insignificant 0.04 percentage points in Travis County. Improved job opportunities for construction workers in Bexar County are associated with more cars in neighborhoods where more construction workers lived.[34] Note that only a few BRAC beneficiaries could spur a measurable increase in neighborhood car ownership; Kuhn et al. (2011) found that people who did not win the Dutch postcode lottery were more likely to purchase cars after their neighbors won.

These results suggest that neighborhoods most affected by BRAC and the Hardberger projects witnessed important improvements in economic conditions. However, they also suggest

[34] In results not shown here for sake of space, we find substantively trivial (<0.08 percentage points) and statistically insignificant ($p>0.2$) correlations between construction share than the fraction of households with one car or three or more cars in Bexar County. This highlights who exactly benefited from BRAC: not the poorest households, but also not particularly wealthy households. In comparison, there is a relatively large (1 percentage point), marginally precise ($p=0.11$) increase in any car ownership in block groups with more tourism workers.

that those improvements were not enjoyed by all residents.[35] Indeed, the effects appear to be concentrated among lower income individuals and households. The fact that poverty rates fell, but median household incomes remained essentially constant suggests that only a subset of households gained from BRAC, and that many of those households may have been living below the poverty line.[36]

It is plausible that some of the observed improvements in economic conditions were driven by changing neighborhood composition. Also, a large literature in criminology links neighborhood stability to crime rates (Wikström 1998). While the Decennial Census and ACS do not explicitly measure disorder or instability, we do observe some indicators of neighborhood growth and turnover. Regression results relating these indicators to neighborhood employment composition are also presented in Table 3. During this time period, the population of block groups in San Antonio grew by 4% on average, but this growth was roughly 0.9% slower on average for each additional percentage point increase in construction share. Growth in housing units was also slower in these neighborhoods. Meanwhile, we do not observe any statistically or substantively significant differences between construction-intensive communities and other neighborhoods in the change in the fraction of houses that were occupied or in household turnover; we create a proxy for the latter using information on the year that residents report moving into their current dwelling. We see very different patterns in Travis County, where neighborhoods with more construction workers saw sizable increases in vacancy rates and household turnover over the course of the decade.

Thus, there is little evidence that those in Bexar County who initially benefited from BRAC moved to better areas in large numbers or that areas with relatively more construction workers in 2000 experienced differential growth or turnover during the 2000s.[37] In fact, we find suggestive evidence that communities with more construction workers in 2000 were slightly more stable

[35] As we would expect given the requirements of Directive 12, the impacts on neighborhoods do not appear to be driven by areas with large non-citizen populations. Block groups with more foreign born adults and more construction workers in 2000 had slightly higher poverty rates by the end of the decade, but slightly smaller increases in two-vehicle ownership. Both effects, though, are statistically indistinguishable from zero.

[36] Notably, the ACS does not contain information on employment or unemployment rates at the block group level, making it difficult to assess the labor market effects of BRAC.

[37] In one robustness test, we use block group employment shares as measured in the 2005-2009 ACS as opposed to the 2000 Decennial Census. The 2005-2009 shares will largely capture changes in the spatial distribution of workers in response to BRAC and the general housing boom that predated the crash at the end of 2008. As discussed in Section 7.3.3, the results change little with this alternative measure, which is not surprising given that there is a high correlation in the construction share between surveys.

than other neighborhoods. Therefore, it is unlikely that inflows or outflows of more or less criminal residents are a primary explanation for any observed changes in crime rates in construction-intensive neighborhoods over this period. Rather, as the results in Table 3 indicate, changes in the well-being of a subset of existing residents, and the associated changes in criminal opportunities for their neighbors, appear to be a potentially more important driver behind changes in crime.

7.2. BRAC and Criminal Opportunities

After 2005, neighborhoods in Bexar County with more construction workers had lower poverty rates. Median house values and household income rose by only a small amount. There was also an increase in the fraction of households with two or more cars. Along with improved economic conditions in these neighborhoods came increased criminal opportunities.

Table 4 presents our baseline estimates of the impact of BRAC on property crimes at the census block group level.[38] We estimate that, after BRAC began, each percentage point increase in construction workers in a block group increased the number of residents who were charged with burglary by an imprecisely measured 1.5%.[39] The overall effect on burglaries, however, masks underlying heterogeneity in criminal behavior among different individuals within neighborhoods. Indeed, we see no impact on the number of first-time offenders charged with burglary, but much larger and statistically significant increases in burglaries committed by people who were likely ineligible for BRAC jobs. Each percentage point increase in construction workers in a block group is associated with a roughly 2% increase in the number of burglaries committed by neighbors who had been charged with or previously convicted of felonies. Both estimates are statistically significant at the 10% level. The effects are much smaller and insignificant for burglaries committed after the Hardberger projects began but before the first

[38] We also conducted the analysis at the census tract level. Highlighting the importance of spatial disaggregation in understanding local crime patterns, we tended to find weaker relationships between criminal activity and construction employment concentration when we used the tract as the geographic unit of analysis, although the estimates were qualitatively similar.

[39] The estimates are very similar if, instead of including block group fixed effects, we include block group characteristics and tract fixed effects.These results for each crime type appear in Appendix Tables A2-A9. Notably, the relationship between block group characteristics and crime rates (not shown) generally conform to expectations; average education and income levels are negatively related to crime, while the median age of the housing stock and share of renters are positively related to crime.

BRAC contracts were awarded. We find no evidence of changes in burglaries post-2005 in tourism- and health care-intensive areas; these results are reported in Appendix Table A2.

Car thefts also increased by 1.8% after BRAC increased the purchasing power of construction workers. As shown in the second panel of Table 4, while first-time offenders living near construction workers were no more or less likely to steal a car after 2007, people with criminal histories were. In particular, those who had been charged with felonies or were previously convicted of a felony were just over 2% more likely to steal a car for each percentage point increase in construction jobs. We do not find evidence that car thefts increased after the Hardberger projects began and BRAC was announced. The third panel of Table 4 also provides evidence that people who lived near construction workers were more likely to be charged with larceny after BRAC was announced; this is again driven by people who had previously been charged with or convicted of a felony.[40]

Overall, these results are consistent with an increase in criminal opportunities when some construction workers earn relatively more money.[41] While we do not know that BRAC construction workers were actually victimized by their neighbors, the pattern of effects is highly consistent with criminal opportunity theory, as those with the highest propinquity will also receive the highest "shock" to the return to crime.

We turn to people charged with violent crimes in the bottom five panels of Table 4. Robbery is clearly an acquisitive crime, which we should expect to see increase, while murders, rapes, and assaults are typically non-acquisitive crimes.[42] Intra-family assaults are also not acquisitive crimes, but their connection to family stress and economic strain makes the theoretical relationship between unequal economic shocks and this type of behavior less clear. Overall, we observe less change in violent crime in neighborhoods that benefited from BRAC. To the extent that there are increases, with the exception of intra-family violence, they are entirely driven by

[40] We find no such consistent pattern in the relationship between tourism and health care concentration and crime. The full regression results are presented in Appendix Tables A2-A9.

[41] These results do not appear to be driven by block groups with a larger number of non-citizen workers, who would be ineligible to work on BRAC contracts. Coefficients on three-way interactions between construction share, citizen share, and the Hardberger/BRAC dummies are generally positive, but never statistically significant and small in magnitude relative to the first order effects.

[42] For example, someone who injures another in the course of a robbery would have committed both assault and robbery. Depending on the facts of the case, assault may be an easier case to prove than the intent to take property, particularly if the robbery was unsuccessful.

crimes committed by people living in the same neighborhoods as construction workers, but who are unlikely to pass the background check required to work on a BRAC project.

In particular, after BRAC construction began, a one percentage point increase in the share of neighborhood jobs in construction was associated with a 2.5% increase in robberies committed by neighbors who had previously been accused of a felony. We observe a similar magnitude increase in robberies committed by neighbors with a felony record. There is no statistically meaningful increase in the incidence of people committing robbery for the first time, which typically occurs at a rate of 0.19 per year per 1,000 residents, compared to 0.21 for accused felons.

Meanwhile, consistent with these crimes being less driven by economic incentives, we find no evidence that the neighbors of construction workers are any more or less likely to commit murder, rape, or assault after BRAC spending began. Notably, though, the null effects for these non-acquisitive crimes suggest that observed increases in property crimes are not merely driven by changes in policing or cooperation with law enforcement in affected neighborhoods, as such changes would be expected to affect all crimes in the same way.

We do find evidence that family tension may have increased in construction neighborhoods after 2007. Like acquisitive crime, these effects are substantively large, corresponding with a 3% increase in felony behavior, and the effect grows (slightly) larger as we focus on behavior by individuals who were less likely to directly benefit from BRAC. However, unlike our results for acquisitive crimes, we observe similar sized increases in family assaults in neighborhoods with more tourism and healthcare workers. We are therefore less confident in identifying this change in behavior as being driven by diverging opportunities in the construction market. Instead, we may be picking up the impacts of the Great Recession on people working in lower wage industries in general.

7.3. Robustness Tests

7.3.1. Pre-Treatment Trends

It is not obvious that crime rates were trending upwards in San Antonio prior to the start of BRAC construction. However, if crime was differentially increasing in neighborhoods with more construction workers, this might bias our estimates upward in absolute value. In order to address this, we employ a strategy in the spirit of Evans and Owens (2007) and Freedman and Owens (2011). For each block group, we estimate a model of total crime rates between 2000 and 2006

as a function of a linear time trend.[43] We then divide block groups into ten groups of 100 to 101 block groups based on the deciles of their pre-BRAC crime trend and re-estimated equation (1) with crime trend group-specific year fixed effects. Marginal effects in this specification are identified off a differential change in the crime rates in construction-heavy neighborhoods relative to neighborhoods with fewer construction workers, but similar trends in crime prior to the increase in some construction workers' spending power.[44]

As Table 5 shows, our estimates of the impact of BRAC on acquisitive crime are quite robust to these fixed effects. One exception is that the magnitude of our estimates of the relationship between burglary by accused and convicted felons and BRAC falls by near 20% and loses some significance. However, the results for burglary are qualitatively similar to those without pre-treatment trend by year fixed effects. Meanwhile, the results for car theft, larceny, robbery, and intra-family assault are essentially unchanged.

7.3.2. Level Analysis

Next, we investigate whether our results are sensitive to functional form, and in particular our use of logged crime rates. In Table 6, we replace our dependent variable with charges filed per capita. We find qualitatively similar results for burglary, car theft, and robbery; BRAC was associated with an increase in criminal behavior in neighborhoods with higher shares of construction employment, driven by people who were unlikely to have directly benefited from the development.

Using charges filed per capita, we again no longer observe a statistically significant increase in the intra-family assault rate by accused and convicted felons in construction-intensive neighborhoods. In fact, the rise in intra-family violence appears to be driven primarily by first-time offenders, which is not predicted by our model of criminal opportunity. We also find weaker results for larceny when we assume that changes are better described in rates than in logged rates. While it is not obvious to us that neighborhoods with a higher share of construction workers should experience a constant increase in criminal behavior per capita rather than a constant percentage increase in criminal behavior, the fact that the observed increases in larceny and assault are sensitive to this functional form assumption suggests that one should perhaps not

[43] There is a reasonable amount of variation across block groups in the pre-BRAC trends in crime; the block group in the 1st percentile saw a decrease of 1.05 crimes per 1000 residents per year, and in the 99th percentile block group saw an increase of 1.38 crimes per 1000 residents per year.

[44] Conceptually, total crime trends may better capture changes in general social disorder or policing behavior than trends in any one specific crime. In any case, our results are very similar when we use crime-specific trends.

put too much weight on the results for these crimes. However, after BRAC, neighbors of BRAC beneficiaries were more likely to engage in robbery, car theft, and burglary relative to those who did not live near construction workers, in both percentage and level terms.

7.3.3. Later Period Employment Shares

In the previous regressions, we used employment shares for construction and other industries based on 2000 Decennial Census data. An important benefit of using earlier, rather than later, construction shares is that we are better capturing long-time construction neighborhoods. One impact of the mid-2000s housing boom may have been to draw workers into construction for the first time, and these less experienced workers may have been the hardest hit by the recession. This is only a conjecture, though, and there is no guarantee that the 2000 construction shares better reflect the communities most impacted by the new BRAC projects. Hence, as a robustness test, we calculate the industry employment shares using the 2005-2009 ACS and 2009 OnTheMap (OTM) data from the Census Bureau's Longitudinal Employer-Household Dynamics Program.[45]

The ACS data represent averages between 2005 and 2009, and will capture any reshuffling in the geographic distribution of workers that may have occurred mid-decade as BRAC projects got underway, but it is unclear whether or not these latter measures "better" reflect neighborhoods where BRAC beneficiaries lived, rather than people who first entered the construction industry during the boom, and may have been working informally. The 2009 OTM, which is based on state unemployment insurance records, has the benefit of capturing construction workers who, by construction, were still working in the formal construction sector post-recession; recall that industry leaders estimated that as much as 60% of construction workers were working on BRAC projects in September of 2009. The drawback of the OTM is that block-group employment shares are measured with error, as the Census introduces some noise in the data for confidentiality reasons.

The results of the ACS-based tests, which appear in Tables 7, are qualitatively similar to the main results in Table 4, but we do observe some important differences. We continue to see sizable and statistically significant increases in burglaries committed by accused and convicted felons. We do see some increase in these crimes after the Hardberger projects in construction-

[45] For more information on the Longitudinal Employer-Household Dynamics Program and the OTM data, see Andersson et al. (2008).

intensive neighborhoods, but the BRAC effects are, for the most part, larger in magnitude and higher in precision. There is also a statistically significant 1.4% increase in larceny and 0.9% increase in robberies committed by convicted felons in neighborhoods with a higher concentration of construction workers mid-decade. People accused or convicted of felonies are 0.8-0.9% more likely to be accused of stealing cars with each percentage point increase in the ACS construction share. As before, there are much more muted effects on murder, rape, assault, and intra-family violence.

In Table 8, we present our results using 2009 construction employment. These results are strikingly more similar to those in Table 4 than are the ACS results. As before, we observe large increases in the propensity of people living in construction-intensive neighborhoods to commit burglary (13.6 log points), car theft (12.9 log points), and robbery (6.1 log points). Even though 2009 construction share is arguably dominated by BRAC workers, the largest behavioral change seems to be among people who were ineligible for BRAC jobs – people who, at the time of the crime in question, had previously been accused of or convicted of felonies in local court.

Surprisingly, however, when we use 2009 construction shares from the OTM data, we observe an increase in some non-acquisitive crimes as well in these same neighborhoods. Intra-family assault appears to increase across the board. Sexual assaults by those excluded from BRAC also appear to increase in BRAC neighborhoods, by roughly three log points (se=1.7 to 1.6). This apparent increase in sexual assault is not obviously predicted by criminal opportunity theory, but given that it seems anomalous in the context of our other robustness tests, we are hesitant to overinterpret this result.

7.3.4. Differentiating BRAC from the Great Recession

During the planning period for BRAC, the USACE expressed some concern that high demand for construction workers would increase the cost of working in San Antonio (Thomas Miller and Associates 2008). Instead, as is evident in the QCEW, at the end of 2008, the construction sector sharply contracted. One possible interpretation of our results is therefore that what we are actually picking up with our construction share is variation across neighborhoods in an absolute reduction in income due to high unemployment in construction.

While the results in the previous subsection suggest that this is not necessarily the case, in an additional test to address this possible concern, we run our main regressions with an additional control for the interaction between estimates of total non-BRAC construction employment in

Bexar County with the construction share at the block group level measured in 2000.[46] We estimate changes in non-BRAC construction by subtracting USACE estimates of demand for construction workers from the number of construction jobs in the QCEW.[47] In this specification, we are explicitly controlling for the fact that, as a result of the housing boom and bust, non-BRAC construction employment overall rose and fell markedly over the course of the decade.[48] The estimated coefficient on BRAC x Construction Share is therefore interpreted as the change in crime associated with BRAC spending over and above the change in behavior we might expect to see given other fluctuations in the private construction market.

We present these results in Table 9. Compared to our primary specification in Table 4, the effects of BRAC on car theft, larceny, and robbery among accused and convicted felons are robust to non-BRAC changes in the construction market. Controlling for changes in non-BRAC construction reduces the precision of the estimated effects of BRAC on burglary, although the point estimates are qualitatively similar to those in Table 4.

7.3.5. Relaxing the Timing of BRAC

The potential confounding of BRAC with other economic shocks means that we want to be particularly sensitive to the timing of our "shock" to construction workers. Additionally, one might still be concerned that the observed patterns are driven by localized impacts of the Great Recession, and in particular the housing collapse, which took hold nationally at the end of 2007 and dampened construction activity in Bexar county later in the decade (see Figure 3). If our previous estimates were driven by increases in crime during 2009 and 2010, we would be concerned that we were identifying an increase in crime driven by an absolute reduction in legal wages generated by the recession, rather than in increase in criminal opportunities generated by BRAC.

In Tables 10 and 11, we present results from a more flexible specification of equation (1). Instead of dividing our sample into three time periods, we allow for the impact of the presence of construction workers on the criminal behavior of neighborhood residents to vary in each year

[46] Since the QCEW data only cover 2001-2010, we assume construction employment in 2000 was the same as in 2001. Alternative ways of imputing year 2000 construction employment (e.g., using January 2001 figures or extrapolating linearly from the 2001-2010 data) yielded similar results, as did dropping year 2000 data.

[47] This is likely to undercount the number of workers employed by BRAC, as these projections were made in 2006 under the assumption of a "taught" construction market.

[48] In ongoing research, we are exploiting the Great Recession's differential impact on neighborhoods due to the varying composition of residents with respect to their industry and occupation to further explore how changes in average income and the income distribution within communities affect crime.

between 2004 and 2010. As Table 10 shows, the relationship between construction workers and acquisitive criminal behavior appears to have fundamentally changed starting in 2007, prior to the recession but coincident with the start of BRAC spending. In particular, the increase in burglary and car theft by those ineligible to work on BRAC projects is entirely driven by increases in 2007 and 2008. Larceny began to increase in 2007, and remained higher in construction-heavy neighborhoods through 2009. We find the largest increase in robbery by BRAC neighbors in 2007, but also substantive increases in robbery during subsequent years.

Turning to non-acquisitive crime in table 11, we again find no clear pattern in the relationship between construction concentration and murder, rape, or assault. However, we do find that the increase in domestic violence in construction-heavy neighborhoods began in 2008, but really picked up in 2009 and 2010. While not inconsistent with increased tension in families who were excluded from BRAC, this is also consistent with the timing of the non-BRAC construction slowdown in Texas.

Based on these results, we conclude that there was an increase in acquisitive crime by residents living in neighborhoods with more construction workers that only began in earnest as BRAC awards began to be made and construction hiring increased in 2007. Further, we do not find strong evidence that pre-treatment trends are driving the observed relationships in our baseline results; there is no gradual increase in the coefficient estimates prior to BRAC. Instead, the rise in acquisitive crime in neighborhoods with more construction workers began as federal contract dollars started flowing to these areas later in the decade. Acquisitive criminal behavior by residents of construction-intensive neighborhoods was highest before the Great Recession reduced non-BRAC construction opportunities. Taken as a whole, the results point primarily to a rise in acquisitive crime in parts of Bexar County where some, but not all, residents enjoyed improved labor market conditions as a result of a surge in federal construction dollars under BRAC.

8. Conclusion

We take advantage of a positive economic shock to one particular group of workers in San Antonio, Texas to provide new evidence on the relationship between relative income and crime. During a time when the private labor demand for construction workers was shrinking, the 2005 BRAC dramatically increased wages and employment opportunities for construction workers in

San Antonio who were in the United States legally and who did not have criminal records. Using a unique data set of the residence of people accused of committing felonies in Bexar County and detailed, block group-level information on employment and other neighborhood characteristics from the Census Bureau, we provide evidence that an important outcome of BRAC was an increase in criminal opportunities. Specifically, people living in block groups with more construction workers were actually more likely to be accused of acquisitive crimes after the job prospects for other workers improved. These results are generally robust to using a log or level specification and do not appear to be driven either by pre-treatment trends or by the recession and associated collapse of the housing market later in the decade. While we do not know whether or not these accused felons were construction workers, this increase in criminal behavior is driven by people who, based on their criminal histories, were unlikely to be working for federal contractors. We find some evidence that residents of construction-heavy neighborhoods were more likely to engage in domestic violence, but the timing of these effects are more consistent with broader economic strain caused by the Great Recession rather than relative inequality generated by the BRAC boom.

Importantly, acquisitive crime is not as socially costly as murder or sexual assault. Based on our results and using conservative estimates of the cost of crime in Miller et al. (1996), the official DoD estimates of the economic impact of BRAC construction are only 0.07% too high; instead of an overall economic impact of $2.6682 per federal dollar spent, Bexar County gained $2.6664 on net.[49] More recent estimates of the cost of crime (Heaton 2010) increase the estimated multiplier gap to 0.2%, implying that each dollar spent on BRAC construction provided a $2.6629 boost to the San Antonio economy.

While the costs associated with greater criminal activity in Bexar County pale in comparison to the overall economic impact of BRAC, the fact that acquisitive crime rates increased in neighborhoods where the economic conditions of residents were improving on average has important policy implications. In particular, place-based economic programs that only benefit certain residents may have perverse effects on crime rates. Though such effects appear to be

[49] The DoD awarded $2,514,410,000 in construction contracts (in 2006 dollars) and estimated that the total economic benefit of that construction spending was $6,708,877,333, implying a local economic multiplier of 2.6682. The estimated costs of burglary, car theft, and robbery are $1,745, $4,614, and $23,693, respectively, in Miller et al. (1996), and $12,733, $8,826, and $65,414 in Heaton (2010). We estimate the total loss due to crime by multiplying these values by the coefficient estimates in Table 6, then by the average 2000 construction share of 8.84, and then the 2000 Bexar County population of 1.393 million.

small for BRAC, they could be much larger for programs that induce longer lasting changes in the economic circumstances of a particular subset of the population. Overall, our findings suggest that income inequality, rather than simply average income, deserves careful attention when estimating the criminal justice impacts of any policy that has implications for local economies.

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Figure 1: Spatial Concentration of Construction Jobs in Bexar County, by Block Group

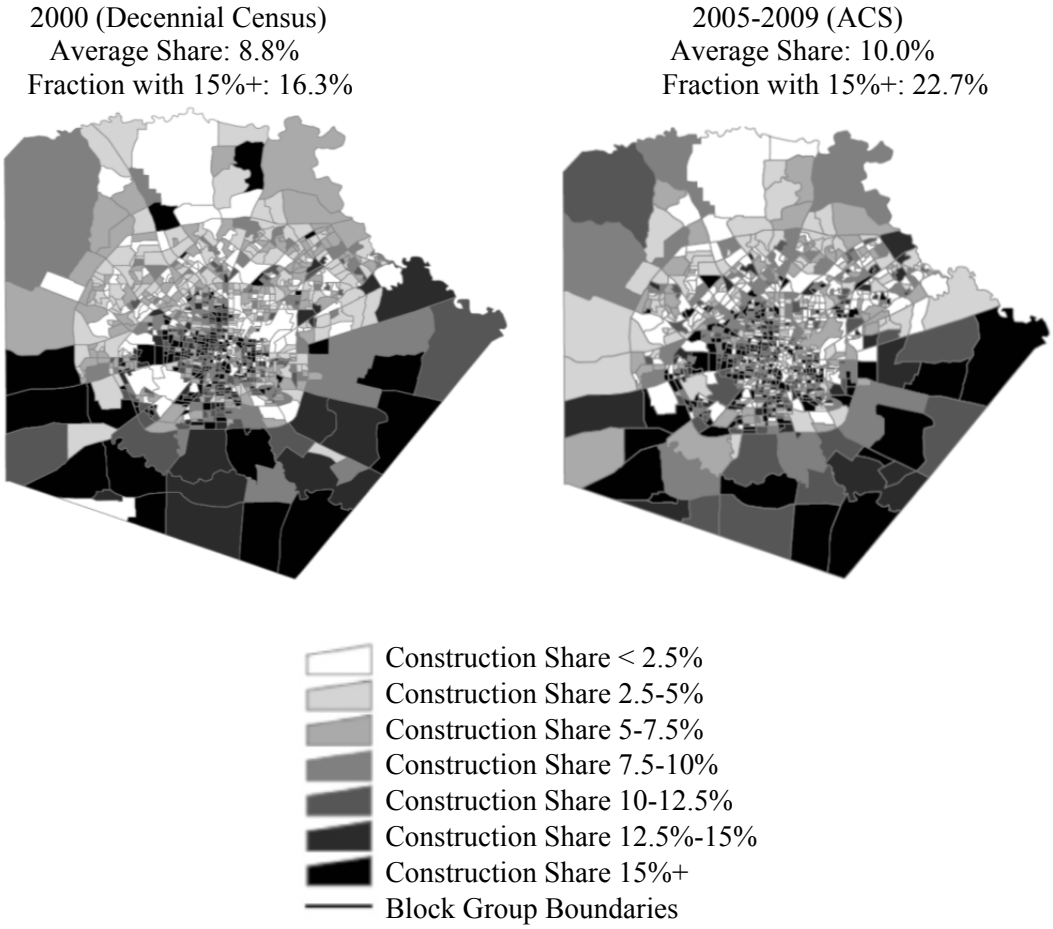
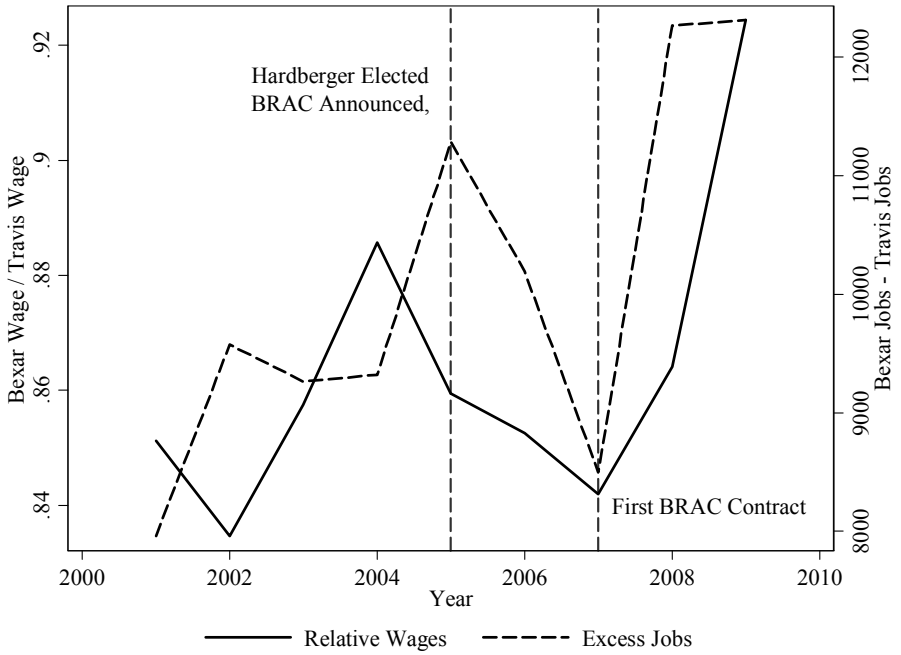
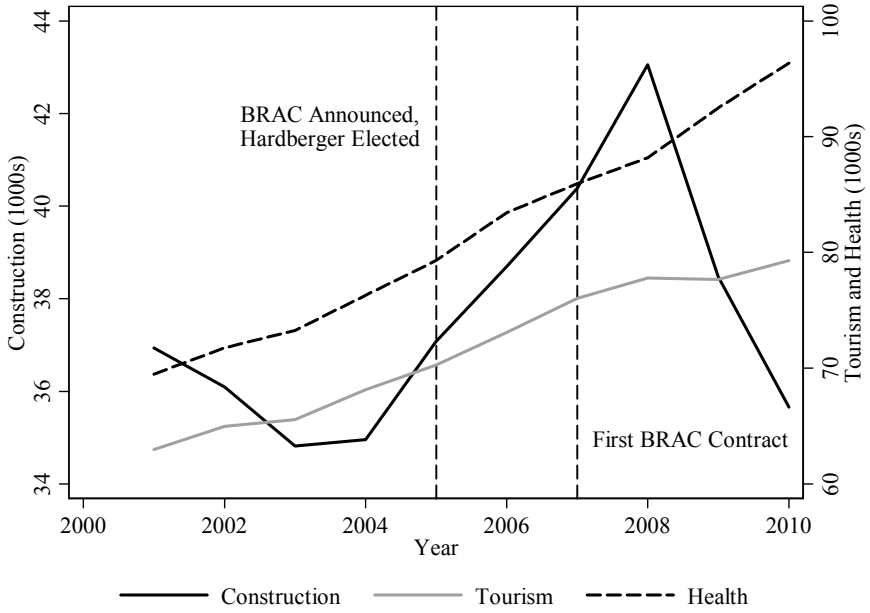


Figure 2: QCEW Relative Wages and Excess Jobs in Construction, Bexar vs. Travis County



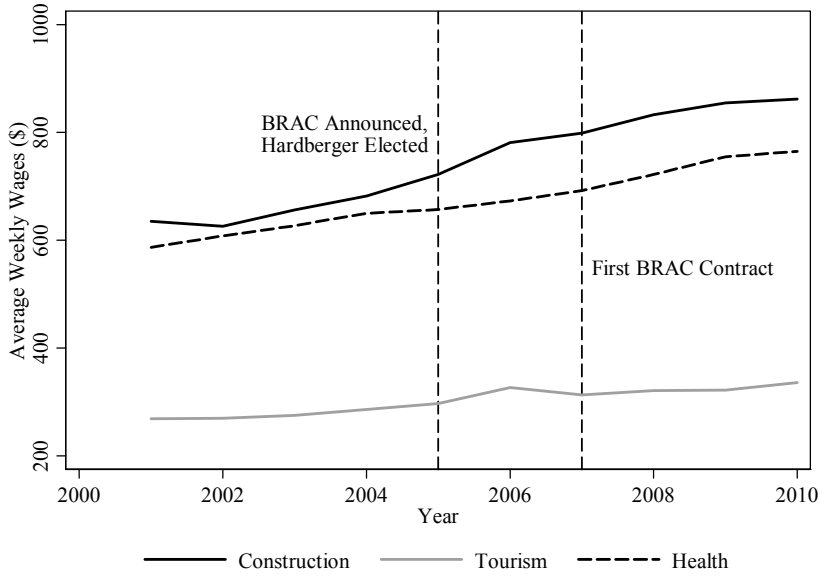
Note: Includes private-sector employment in each county.

Figure 3: QCEW Employment in Bexar County in Construction, Tourism, and Health Care



Note: Includes private-sector employment in each industry.

Figure 4: QCEW Weekly Wages in Bexar County in Construction, Tourism, and Health Care



Note: Includes private-sector employment in each industry.

Figure 5: Acquisitive Crimes in Bexar County

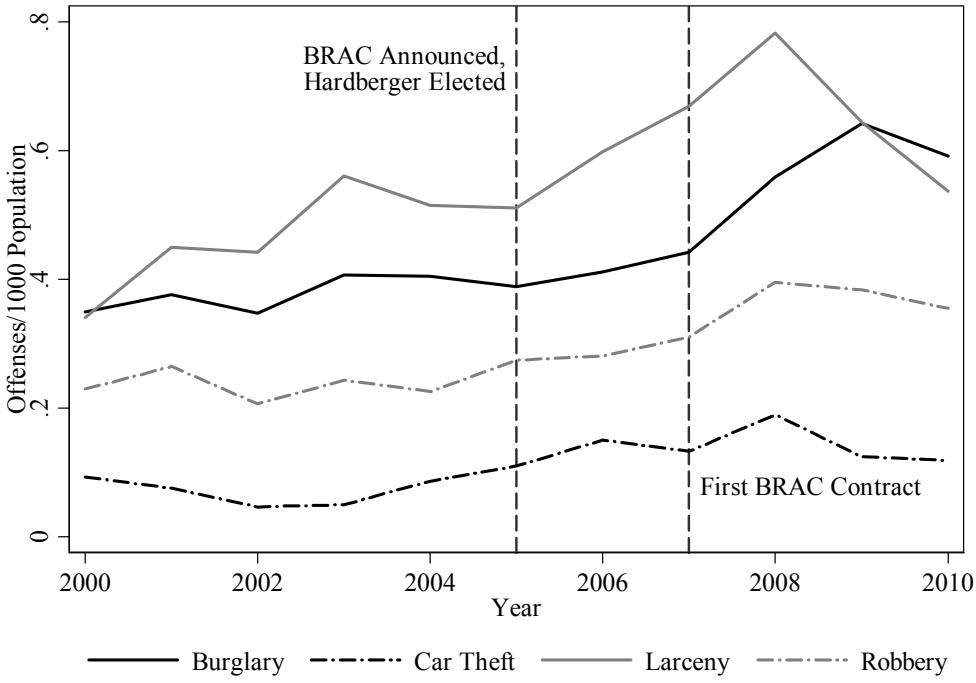
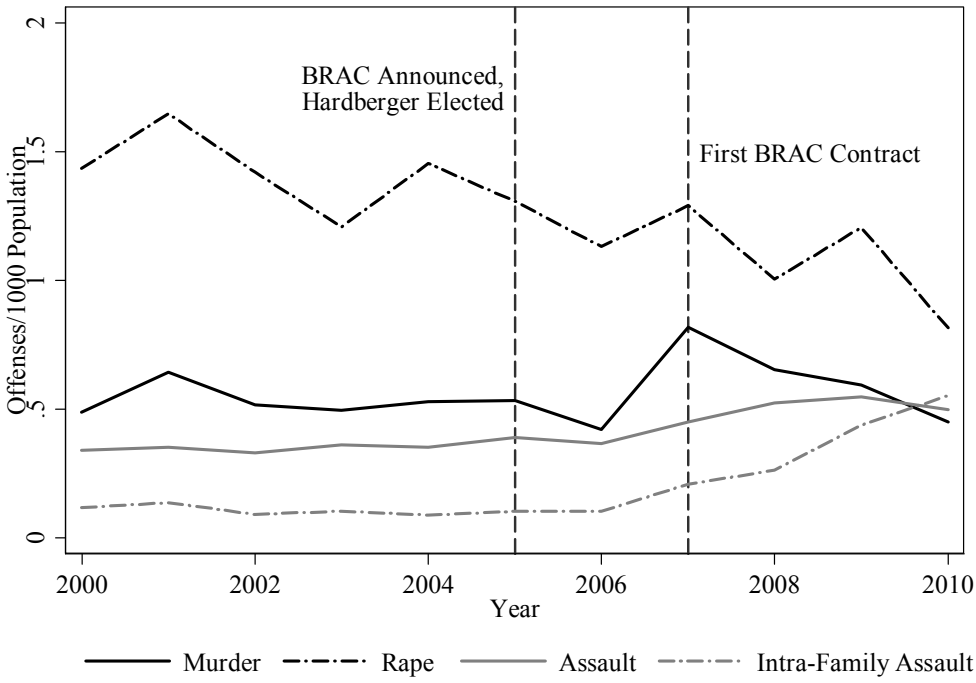


Figure 6: Non-Acquisitive Crimes in Bexar County



Note: Murder and rape rates are multiplied by ten.

Table 1: Coverage of Bexar County Felony Data

	A. Felony Charges Filed per 100 UCR Index Crimes						
	Property Crimes			Violent Crimes			
	Burglary	Car Theft[1]	Larceny	Robbery	Murder	Assault	Rape[3]
2000	3.66	7.04	0.70	17.32	68.69	10.17	38.17
2001	3.31	5.63	0.86	16.39	85.05	9.36	41.09
2002	3.23	5.32	0.87	13.09	64.91	7.88	37.29
2003	3.53	4.74	1.16	16.09	72.00	13.20	27.89
2004	3.51	6.70	1.10	14.62	75.00	11.83	28.44
2005	3.45	6.30	1.11	17.84	82.47	12.67	28.70
2006	3.61	7.25	1.38	17.21	49.23	12.75	29.10
2007	3.42	6.61	1.49	18.17	95.45	21.63	27.30
2008	3.92	8.16	1.53	20.81	73.91	17.58	28.86
2009	4.78	7.75	1.33	20.99	80.34	31.00	25.50
	B. Felony Charges Filed per 100 Adults Arrested						
	Property Crimes			Violent Crimes			
	Burglary	Car Theft[1]	Larceny	Robbery	Murder	Assault[2]	Rape[3]
2000	85.29	-	33.57	112.32	219.35	121.92	51.28
2001	93.01	-	37.54	111.64	260.00	130.80	62.97
2002	110.15	132.94	20.53	137.67	180.49	113.13	79.38
2003	86.82	87.63	16.37	93.65	124.14	91.08	43.03
2004	79.31	69.00	11.55	75.17	98.73	76.08	47.67
2005	72.75	71.83	11.61	83.88	121.21	73.47	29.12
2006	72.04	73.57	12.92	75.31	98.46	67.91	30.34
2007	82.25	77.80	12.57	80.61	150.00	93.52	40.37
2008	93.66	102.14	13.36	87.04	104.08	104.34	24.61
2009	85.69	85.14	10.29	84.33	91.26	115.84	31.26

Notes: Authors' calculations from Uniform Crime Reports County-Level Detailed Arrest and Offense Data and Bexar County District Court felony filings.

[1] Felony car theft charges include unauthorized use of a motor vehicle. Data on car theft arrests for 2000 and 2001 are excluded due to clear underreporting in UCR arrest data.

[2]Felony assault includes both assault and intra-family assault, which are modeled separately in all regressions.

[3] Felony rape charges include sexual assault. Rape arrests include arrests for sexual offenses.

Table 2: Descriptive Statistics

	Low Construction Share	High Construction Share
Employment Shares (2000)		
Share in Construction	0.04	0.14
Share in Tourism	0.10	0.12
Share in Health Care	0.13	0.11
Demographic & Housing Characteristics (2000)		
Population	1553	1209
Share Black	0.09	0.06
Share Hispanic	0.45	0.73
Share Male	0.47	0.49
Share Under Age 30	0.43	0.47
Share Age 65 or Over	0.13	0.12
Share HHs Speak Spanish*	0.39	0.66
Share Foreign Born	0.09	0.15
Share in Same House 1 Year Ago	0.51	0.59
Share with HS Degree	0.23	0.27
Share with Some College	0.25	0.19
Share with College Degree	0.34	0.14
Unemployment Rate*	0.06	0.08
Labor Force Participation Rate	0.64	0.56
Poverty Rate	0.14	0.24
Median HH Income	44,959	30,352
Employment to Pop. Ratio†	0.45	0.38
Housing Units	608	425
Share Units Vacant*	0.06	0.07
Share Units Owner-Occupied*	0.63	0.63
Median House Value*	92,975	54,435
Median House Age	33.22	37.59
Share HHs with 2+ Vehicles	0.54	0.47
Demographic & Housing Characteristics (2005-2009)		
Poverty Rate	0.17	0.24
Median HH Income*	52,489	35858
Employment to Pop. Ratio†	0.45	0.41
Median House Value*	136,413	81,859
Share HHs with 2+ Vehicles	0.54	0.49
Observations (2000, 2005-2009)	504	505
Crime Rates (2000-2010)		
Burglary Rate	0.472	0.770
Car Theft Rate	0.119	0.184
Larceny Rate	0.638	0.921
Robbery Rate	0.330	0.470
Murder Rate	0.060	0.098
Rape Rate	0.135	0.189
Assault Rate	0.511	0.646
Intra-Family Assault Rate	0.225	0.371
Observations (2000-2010)	5544	5555

Notes: * Missing one or more observations in 2000 Decennial Census and/or 2005-2009 ACS data.
†Employment to population ratio calculated as total employment divided by total population (including persons with ages less than 16).

Table 3: Neighborhood Outcomes and Construction Workers in Bexar and Travis Counties, 2000 to 2005-2009

	Poverty Rate (%)	Log Median HH Income	Log Median House Value	HHs with 2+ Vehicles (%)	Log Population	Log Housing Units	Housing Units Occupied (%)	HHs Moving in > 5 Years Ago (%)
A. Bexar County								
Percentage in Construction	**-0.259****	**0.002**	**0.005****	**0.215***	**-0.009*****	**-0.006****	**-0.069**	**-0.065**
x BRAC/Hardberger	**[0.110]**	**[0.002]**	**[0.002]**	**[0.120]**	**[0.004]**	**[0.003]**	**[0.084]**	**[0.120]**
Percentage in Tourism	0.045	0.002	0.006**	0.122	-0.012**	-0.008**	0.003	-0.149
x BRAC/Hardberger	[0.118]	[0.003]	[0.003]	[0.126]	[0.005]	[0.004]	[0.101]	[0.144]
Percentage in Health Care	-0.033	0.001	0.002	0.074	-0.009	-0.004	0.007	-0.242
x BRAC/Hardberger	[0.151]	[0.003]	[0.003]	[0.148]	[0.006]	[0.005]	[0.101]	[0.171]
Observations	2018	2016	1972	2017	2018	2017	2017	2017
R-Squared	0.803	0.909	0.948	0.846	0.912	0.935	0.662	0.835
B. Travis County								
Percentage in Construction	**0.055**	**-0.001**	**0.001**	**0.038**	**0.00002**	**0.005**	**-0.168***	**0.342****
x BRAC/Hardberger	**[0.120]**	**[0.003]**	**[0.004]**	**[0.179]**	**[0.004]**	**[0.004]**	**[0.100]**	**[0.142]**
Percentage in Tourism	0.166	0.001	0.016***	0.054	-0.020***	-0.015**	-0.205*	0.0001
x BRAC/Hardberger	[0.159]	[0.005]	[0.005]	[0.203]	[0.006]	[0.007]	[0.124]	[0.191]
Percentage in Health Care	0.018	-0.002	0.004	0.063	-0.009	-0.009	-0.017	0.078
x BRAC/Hardberger	[0.175]	[0.007]	[0.005]	[0.252]	[0.006]	[0.011]	[0.180]	[0.320]
Observations	1012	1005	966	1010	1016	1010	1010	1010
R-Squared	0.898	0.926	0.955	0.893	0.922	0.936	0.643	0.872
Block Group Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y
Year Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y

Notes: Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01.

Table 4: Fixed Effects Estimates of Crime and Construction Workers in Bexar County

	All	First Time	Accused Felons	Felons
		Burglary		
Percentage in Con. x Hardberger	-0.008	-0.010	-0.008	0.006
	[0.013]	[0.011]	[0.011]	[0.011]
Percentage in Con. x BRAC	**0.015**	**0.008**	**0.019***	**0.019***
	[0.013]	**[0.010]**	**[0.010]**	**[0.010]**
		Car Theft		
Percentage in Con. x Hardberger	-0.005	-0.005	0.0004	0.007
	[0.009]	[0.006]	[0.008]	[0.008]
Percentage in Con. x BRAC	**0.018****	**0.001**	**0.021*****	**0.022*****
	[0.009]	**[0.006]**	**[0.008]**	**[0.007]**
		Larceny		
Percentage in Con. x Hardberger	0.005	0.003	0.001	0.002
	[0.014]	[0.011]	[0.013]	[0.013]
Percentage in Con. x BRAC	**0.029****	**0.014**	**0.027****	**0.028****
	[0.012]	**[0.010]**	**[0.011]**	**[0.011]**
		Robbery		
Percentage in Con. x Hardberger	0.015	0.017*	0.001	-0.0004
	[0.012]	[0.010]	[0.009]	[0.009]
Percentage in Con. x BRAC	**0.025****	**0.003**	**0.027*****	**0.030*****
	[0.010]	**[0.008]**	**[0.008]**	**[0.007]**
		Murder		
Percentage in Con. x Hardberger	-0.008	-0.001	-0.007*	-0.0001
	[0.006]	[0.005]	[0.004]	[0.005]
Percentage in Con. x BRAC	**-0.003**	**-0.004**	**0.001**	**0.005**
	[0.006]	**[0.005]**	**[0.004]**	**[0.004]**
		Rape		
Percentage in Con. x Hardberger	-0.011	-0.012	0.002	-0.004
	[0.010]	[0.008]	[0.006]	[0.006]
Percentage in Con. x BRAC	**-0.008**	**-0.010**	**0.003**	**-0.003**
	[0.007]	**[0.007]**	**[0.005]**	**[0.005]**
		Assault		
Percentage in Con. x Hardberger	-0.009	-0.006	-0.003	-0.001
	[0.014]	[0.012]	[0.011]	[0.011]
Percentage in Con. x BRAC	**0.008**	**-0.0002**	**0.014**	**0.011**
	[0.013]	**[0.011]**	**[0.011]**	**[0.011]**
		Intra-Family Assault		
Percentage in Con. x Hardberger	-0.013	-0.009	-0.005	-0.003
	[0.010]	[0.007]	[0.007]	[0.007]
Percentage in Con. x BRAC	**0.031*****	**0.017****	**0.030*****	**0.034*****
	[0.010]	**[0.008]**	**[0.009]**	**[0.009]**
Employment Interactions	Y	Y	Y	Y
Year Effects	Y	Y	Y	Y
Block Group Fixed Effects	Y	Y	Y	Y
Observations	11,099	11,099	11,099	11,099

Notes: Dependent variables are ln(people charged with felonies committed in year/1000 population). Employment interactions include tourism employment share interacted with Hardberger and BRAC dummies as well as health care employment share interacted with Hardberger and BRAC dummies. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01. See Appendix Tables A2-A9 for mean crime rates by criminal history.

Table 5: Fixed Effects Estimates of Crime and Construction Workers in Bexar County, Including Block Group Pre-Treatment Trend by Year Fixed Effects

	All	First Time	Accused Felons	Felons
		Burglary		
Percentage in Con. x Hardberger	-0.014	-0.013	-0.013	0.001
	[0.013]	[0.011]	[0.011]	[0.011]
Percentage in Con. x BRAC	**0.015**	**0.011**	**0.016**	**0.016**
	[0.013]	**[0.010]**	**[0.011]**	**[0.010]**
		Car Theft		
Percentage in Con. x Hardberger	-0.010	-0.009	-0.001	0.005
	[0.009]	[0.006]	[0.008]	[0.008]
Percentage in Con. x BRAC	**0.015***	**0.0004**	**0.017****	**0.020*****
	[0.009]	**[0.006]**	**[0.008]**	**[0.007]**
		Larceny		
Percentage in Con. x Hardberger	0.007	0.005	0.001	0.002
	[0.014]	[0.011]	[0.013]	[0.013]
Percentage in Con. x BRAC	**0.032*****	**0.014**	**0.029*****	**0.029*****
	[0.012]	**[0.010]**	**[0.011]**	**[0.011]**
		Robbery		
Percentage in Con. x Hardberger	0.007	0.010	-0.004	-0.007
	[0.012]	[0.010]	[0.009]	[0.009]
Percentage in Con. x BRAC	**0.024****	**0.003**	**0.027*****	**0.030*****
	[0.010]	**[0.009]**	**[0.008]**	**[0.008]**
		Murder		
Percentage in Con. x Hardberger	-0.010	-0.002	-0.008*	-0.001
	[0.006]	[0.005]	[0.004]	[0.005]
Percentage in Con. x BRAC	**-0.003**	**-0.003**	**0.001**	**0.004**
	[0.006]	**[0.005]**	**[0.004]**	**[0.004]**
		Rape		
Percentage in Con. x Hardberger	-0.011	-0.013	0.003	-0.003
	[0.010]	[0.008]	[0.006]	[0.006]
Percentage in Con. x BRAC	**-0.008**	**-0.010**	**0.003**	**-0.003**
	[0.008]	**[0.007]**	**[0.005]**	**[0.005]**
		Assault		
Percentage in Con. x Hardberger	-0.013	-0.012	-0.003	-0.001
	[0.014]	[0.012]	[0.011]	[0.011]
Percentage in Con. x BRAC	**0.008**	**-0.0002**	**0.013**	**0.010**
	[0.013]	**[0.011]**	**[0.011]**	**[0.011]**
		Intra-Family Assault		
Percentage in Con. x Hardberger	-0.012	-0.008	-0.005	-0.004
	[0.010]	[0.007]	[0.007]	[0.007]
Percentage in Con. x BRAC	**0.027*****	**0.014***	**0.026*****	**0.030*****
	[0.010]	**[0.008]**	**[0.009]**	**[0.009]**
Employment Interactions	Y	Y	Y	Y
Year Effects	Y	Y	Y	Y
Block Group Fixed Effects	Y	Y	Y	Y
2000-2006 Crime Trend x Year Fixed Effects	Y	Y	Y	Y
Observations	11,099	11,099	11,099	11,099

Notes: Dependent variables are ln(people charged with felonies committed in year/1000 population). Employment interactions include tourism employment share interacted with Hardberger and BRAC dummies as well as health care employment share interacted with Hardberger and BRAC dummies. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01. See Appendix Tables A2-A9 for mean crime rates by criminal history.

Table 6: Fixed Effects Estimates of Crime and Construction Workers in Bexar County, Level Analysis

	All	First Time	Accused Felons	Felons
		Burglary		
Percentage in Con. x Hardberger	-0.003	-0.0001	-0.003	-0.002
	[0.005]	[0.004]	[0.004]	[0.003]
Percentage in Con. x BRAC	**0.015*** **	**0.002**	**0.013*** **	**0.010** **
	[0.006]	**[0.003]**	**[0.004]**	**[0.004]**
		Car Theft		
Percentage in Con. x Hardberger	0.001	-0.001	0.002	0.003
	[0.003]	[0.001]	[0.003]	[0.003]
Percentage in Con. x BRAC	**0.005***	**0.0002**	**0.004***	**0.005*** **
	[0.003]	**[0.002]**	**[0.002]**	**[0.002]**
		Larceny		
Percentage in Con. x Hardberger	0.001	-0.001	0.002	0.004
	[0.007]	[0.003]	[0.006]	[0.006]
Percentage in Con. x BRAC	**0.010**	**0.001**	**0.009**	**0.008**
	[0.011]	**[0.004]**	**[0.008]**	**[0.008]**
		Robbery		
Percentage in Con. x Hardberger	0.006	0.005	0.001	0.001
	[0.005]	[0.004]	[0.003]	[0.003]
Percentage in Con. x BRAC	**0.013** **	**0.001**	**0.011** **	**0.012** **
	[0.006]	**[0.003]**	**[0.006]**	**[0.006]**
		Murder		
Percentage in Con. x Hardberger	-0.001	0.0003	-0.001	-0.001
	[0.002]	[0.001]	[0.002]	[0.001]
Percentage in Con. x BRAC	**0.002**	**0.001**	**0.001**	**0.001**
	[0.002]	**[0.002]**	**[0.001]**	**[0.001]**
		Rape		
Percentage in Con. x Hardberger	-0.003	-0.003	-0.0002	-0.001
	[0.002]	[0.002]	[0.001]	[0.001]
Percentage in Con. x BRAC	**-0.004**	**-0.004***	**0.0002**	**-0.001**
	[0.003]	**[0.002]**	**[0.001]**	**[0.001]**
		Assault		
Percentage in Con. x Hardberger	0.011	-0.001	0.012	0.013
	[0.013]	[0.004]	[0.012]	[0.012]
Percentage in Con. x BRAC	**0.014**	**0.0004**	**0.014**	**0.012**
	[0.014]	**[0.004]**	**[0.013]**	**[0.012]**
		Intra-Family Assault		
Percentage in Con. x Hardberger	-0.003	-0.002	-0.001	-0.001
	[0.003]	[0.001]	[0.002]	[0.002]
Percentage in Con. x BRAC	**0.010***	**0.006** **	**0.004**	**0.006**
	[0.006]	**[0.003]**	**[0.005]**	**[0.004]**
Employment Interactions	Y	Y	Y	Y
Year Effects	Y	Y	Y	Y
Block Group Fixed Effects	Y	Y	Y	Y
Observations	11,099	11,099	11,099	11,099

Notes: Dependent variables are people charged with felonies committed in year/1000 population. Employment interactions include tourism employment share interacted with Hardberger and BRAC dummies as well as health care employment share interacted with Hardberger and BRAC dummies. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01. See Appendix Tables A2-A9 for mean crime rates by criminal history.

Table 7: Fixed Effects Estimates of Crime and Construction Workers in Bexar County, ACS-Based Estimates

	All	First Time	Accused Felons	Felons
		Burglary		
Percentage in Con. x Hardberger	0.012	0.001	0.012*	0.015*
	[0.008]	[0.007]	[0.007]	[0.008]
Percentage in Con. x BRAC	**0.024*** **	**0.008**	**0.024*** **	**0.020*** **
	[0.008]	**[0.007]**	**[0.006]**	**[0.006]**
		Car Theft		
Percentage in Con. x Hardberger	0.004	-0.006*	0.009*	0.008*
	[0.006]	[0.004]	[0.005]	[0.005]
Percentage in Con. x BRAC	**0.011***	**0.003**	**0.009***	**0.008**
	[0.006]	**[0.004]**	**[0.005]**	**[0.005]**
		Larceny		
Percentage in Con. x Hardberger	-0.001	-0.005	0.002	0.001
	[0.009]	[0.008]	[0.008]	[0.007]
Percentage in Con. x BRAC	**0.009**	**0.003**	**0.011**	**0.014***
	[0.007]	**[0.007]**	**[0.008]**	**[0.007]**
		Robbery		
Percentage in Con. x Hardberger	0.001	0.010	-0.004	-0.0001
	[0.008]	[0.007]	[0.006]	[0.006]
Percentage in Con. x BRAC	**0.003**	**-0.002**	**0.009**	**0.009***
	[0.007]	**[0.006]**	**[0.006]**	**[0.005]**
		Murder		
Percentage in Con. x Hardberger	-0.002	-0.001	0.00003	0.001
	[0.005]	[0.004]	[0.003]	[0.003]
Percentage in Con. x BRAC	**0.0001**	**-0.001**	**0.001**	**0.001**
	[0.004]	**[0.003]**	**[0.003]**	**[0.003]**
		Rape		
Percentage in Con. x Hardberger	0.003	-0.0002	0.002	-0.001
	[0.007]	[0.006]	[0.004]	[0.004]
Percentage in Con. x BRAC	**-0.003**	**-0.002**	**-0.002**	**-0.003**
	[0.006]	**[0.005]**	**[0.004]**	**[0.004]**
		Assault		
Percentage in Con. x Hardberger	-0.005	-0.009	-0.0004	0.005
	[0.008]	[0.008]	[0.006]	[0.006]
Percentage in Con. x BRAC	**0.002**	**-0.002**	**0.007**	**0.006**
	[0.007]	**[0.007]**	**[0.006]**	**[0.006]**
		Intra-Family Assault		
Percentage in Con. x Hardberger	-0.003	-0.002	-0.001	-0.001
	[0.003]	[0.001]	[0.002]	[0.002]
Percentage in Con. x BRAC	**0.010***	**0.006****	**0.004**	**0.006**
	[0.006]	**[0.003]**	**[0.005]**	**[0.004]**
Employment Interactions	Y	Y	Y	Y
Year Effects	Y	Y	Y	Y
Block Group Fixed Effects	Y	Y	Y	Y
Observations	11,099	11,099	11,099	11,099

Notes: Dependent variables are ln(people charged with felonies committed in year/1000 population). Employment interactions include tourism employment share interacted with Hardberger and BRAC dummies as well as health care employment share interacted with Hardberger and BRAC dummies. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01. See Appendix Tables A2-A9 for mean crime rates by criminal history.

Table 8: Fixed Effects Estimates of Crime and Construction Workers in Bexar County, 2009 OTM Construction Shares

	All	First Time	Accused Felons	Felons
		Burglary		
Percentage in Con. x Hardberger	0.010	-0.009	0.022	0.053
	[0.048]	[0.038]	[0.041]	[0.040]
Percentage in Con. x BRAC	**0.136*** **	**0.024**	**0.156*** **	**0.150*** **
	[0.041]	**[0.032]**	**[0.038]**	**[0.035]**
		Car Theft		
Percentage in Con. x Hardberger	0.024	0.017	-0.003	-0.01
	[0.035]	[0.026]	[0.025]	[0.025]
Percentage in Con. x BRAC	**0.129*** **	**0.062*** **	**0.080*** **	**0.072*** **
	[0.031]	**[0.023]**	**[0.024]**	**[0.022]**
		Larceny		
Percentage in Con. x Hardberger	0.017	0.035	0.017	0.022
	[0.050]	[0.046]	[0.043]	[0.042]
Percentage in Con. x BRAC	**0.059**	**0.071***	**0.045**	**0.047**
	[0.046]	**[0.037]**	**[0.041]**	**[0.040]**
		Robbery		
Percentage in Con. x Hardberger	-0.017	0.021	-0.04	-0.039
	[0.046]	[0.038]	[0.035]	[0.032]
Percentage in Con. x BRAC	**0.061**	**-0.018**	**0.074** **	**0.056** **
	[0.038]	**[0.032]**	**[0.030]**	**[0.026]**
		Murder		
Percentage in Con. x Hardberger	-0.044*	-0.024	-0.015	-0.001
	[0.024]	[0.019]	[0.016]	[0.017]
Percentage in Con. x BRAC	**-0.026**	**-0.023**	**0.002**	**0.005**
	[0.021]	**[0.016]**	**[0.013]**	**[0.013]**
		Rape		
Percentage in Con. x Hardberger	-0.002	0.016	0.004	0.016
	[0.036]	[0.031]	[0.024]	[0.024]
Percentage in Con. x BRAC	**0.022**	**0.003**	**0.029***	**0.035** **
	[0.029]	**[0.026]**	**[0.017]**	**[0.016]**
		Assault		
Percentage in Con. x Hardberger	-0.032	-0.045	-0.012	0.004
	[0.048]	[0.041]	[0.039]	[0.037]
Percentage in Con. x BRAC	**0.030**	**0.033**	**0.010**	**0.002**
	[0.040]	**[0.037]**	**[0.034]**	**[0.032]**
		Intra-Family Assault		
Percentage in Con. x Hardberger	-0.016	-0.009	-0.003	-0.002
	[0.035]	[0.025]	[0.026]	[0.025]
Percentage in Con. x BRAC	**0.146*** **	**0.080*** **	**0.103*** **	**0.095*** **
	[0.036]	**[0.030]**	**[0.031]**	**[0.029]**
Employment Interactions	Y	Y	Y	Y
Year Effects	Y	Y	Y	Y
Block Group Fixed Effects	Y	Y	Y	Y
Observations	11,099	11,099	11,099	11,099

Notes: Dependent variables are ln(people charged with felonies committed in year/1000 population). Employment interactions include tourism employment share interacted with Hardberger and BRAC dummies as well as health care employment share interacted with Hardberger and BRAC dummies. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01. See Appendix Tables A2-A9 for mean crime rates by criminal history.

Table 9: Fixed Effects Estimates of Crime and Construction Workers in Bexar County , Including QCEW Construction Employment Interactions

	All	First Time	Accused Felons	Felons
		Burglary		
Percentage in Con. x Hardberger	-0.009	-0.011	-0.008	0.003
	[0.014]	[0.012]	[0.012]	[0.012]
Percentage in Con. x BRAC	**0.014**	**0.007**	**0.018**	**0.015**
	[0.014]	**[0.012]**	**[0.012]**	**[0.011]**
		Car Theft		
Percentage in Con. x Hardberger	-0.012	-0.004	-0.008	-0.001
	[0.011]	[0.007]	[0.009]	[0.008]
Percentage in Con. x BRAC	**0.010**	**0.003**	**0.011**	**0.012***
	[0.010]	**[0.007]**	**[0.008]**	**[0.008]**
		Larceny		
Percentage in Con. x Hardberger	0.002	0.002	-0.002	-0.002
	[0.014]	[0.011]	[0.014]	[0.013]
Percentage in Con. x BRAC	**0.025***	**0.012**	**0.024***	**0.024***
	[0.013]	**[0.011]**	**[0.013]**	**[0.013]**
		Robbery		
Percentage in Con. x Hardberger	0.014	0.009	0.009	0.003
	[0.013]	[0.011]	[0.009]	[0.010]
Percentage in Con. x BRAC	**0.023***	**-0.007**	**0.037*****	**0.034*****
	[0.012]	**[0.010]**	**[0.010]**	**[0.009]**
		Murder		
Percentage in Con. x Hardberger	-0.014**	-0.005	-0.010**	-0.003
	[0.007]	[0.006]	[0.004]	[0.005]
Percentage in Con. x BRAC	**-0.010***	**-0.008***	**-0.002**	**0.001**
	[0.006]	**[0.004]**	**[0.004]**	**[0.004]**
		Rape		
Percentage in Con. x Hardberger	-0.009	-0.010	0.002	-0.003
	[0.010]	[0.009]	[0.006]	[0.006]
Percentage in Con. x BRAC	**-0.006**	**-0.007**	**0.003**	**-0.003**
	[0.009]	**[0.008]**	**[0.005]**	**[0.005]**
		Assault		
Percentage in Con. x Hardberger	-0.012	-0.009	-0.005	-0.002
	[0.015]	[0.013]	[0.012]	[0.012]
Percentage in Con. x BRAC	**0.004**	**-0.004**	**0.012**	**0.010**
	[0.015]	**[0.012]**	**[0.012]**	**[0.012]**
		Intra-Family Assault		
Percentage in Con. x Hardberger	-0.011	-0.010	0.0001	0.004
	[0.011]	[0.009]	[0.008]	[0.008]
Percentage in Con. x BRAC	**0.034*****	**0.015**	**0.035*****	**0.041*****
	[0.012]	**[0.010]**	**[0.011]**	**[0.011]**
Employment Interactions	Y	Y	Y	Y
Year Effects	Y	Y	Y	Y
Block Group Fixed Effects	Y	Y	Y	Y
QCEW Con. Emp. Interaction	Y	Y	Y	Y
Observations	11,099	11,099	11,099	11,099

Notes: Dependent variables are ln(people charged with felonies committed in year/1000 population). Employment interactions include tourism employment share interacted with Hardberger and BRAC dummies as well as health care employment share interacted with Hardberger and BRAC dummies. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01. See Appendix Tables A2-A9 for mean crime rates by criminal history.

Table 10: Fixed Effects Estimates of Acquisitive Crime and Construction Workers in Bexar County, Relaxing the Timing of BRAC

	Burglary				Car Theft				Larceny				Robbery			
	All	First Time	Accused Felons	Felons	All	First Time	Accused Felons	Felons	All	First Time	Accused Felons	Felons	All	First Time	Accused Felons	Felons
Percentage in Con. x 2004	0.009	0.006	0.011	0.021	-0.004	-0.004	-0.0004	-0.003	0.018	0.016	0.014	0.022	-0.024*	-0.019*	-0.014	-0.018*
	[0.018]	[0.015]	[0.015]	[0.015]	[0.011]	[0.009]	[0.009]	[0.008]	[0.017]	[0.015]	[0.015]	[0.015]	[0.013]	[0.011]	[0.010]	[0.010]
Percentage in Con. x 2005	-0.009	-0.009	-0.009	0.005	-0.020*	-0.003	-0.017**	-0.008	0.001	0.004	-0.001	0.007	0.016	0.012	0.004	-0.006
	[0.018]	[0.014]	[0.015]	[0.015]	[0.011]	[0.008]	[0.008]	[0.008]	[0.016]	[0.014]	[0.016]	[0.015]	[0.016]	[0.014]	[0.012]	[0.012]
Percentage in Con. x 2006	-0.004	-0.009	-0.002	0.017	0.008	-0.009	0.018	0.021*	0.016	0.009	0.009	0.005	0.005	0.015	-0.008	-0.002
	[0.017]	[0.015]	[0.014]	[0.014]	[0.015]	[0.009]	[0.013]	[0.013]	[0.019]	[0.016]	[0.017]	[0.017]	[0.017]	[0.014]	[0.012]	[0.012]
Percentage in Con. x 2007	**0.033***	**0.019**	**0.024**	**0.029***	**0.005**	**-0.003**	**0.006**	**0.01**	**0.041****	**0.032***	**0.024**	**0.028***	**0.032****	**0.008**	**0.028****	**0.040*****
	[0.019]	**[0.016]**	**[0.016]**	**[0.015]**	**[0.013]**	**[0.010]**	**[0.010]**	**[0.009]**	**[0.019]**	**[0.018]**	**[0.017]**	**[0.017]**	**[0.016]**	**[0.013]**	**[0.014]**	**[0.013]**
Percentage in Con. x 2008	**0.009**	**0.003**	**0.026**	**0.030***	**0.042*****	**-0.002**	**0.050*****	**0.048*****	**0.025**	**0.011**	**0.033***	**0.046*****	**0.015**	**0.014**	**-0.001**	**0.004**
	[0.018]	**[0.016]**	**[0.017]**	**[0.016]**	**[0.015]**	**[0.010]**	**[0.014]**	**[0.014]**	**[0.018]**	**[0.016]**	**[0.018]**	**[0.018]**	**[0.017]**	**[0.015]**	**[0.014]**	**[0.013]**
Percentage in Con. x 2009	***0.017***	***0.008***	***0.022***	***0.031****	***-0.003***	***-0.012***	***0.012***	***0.012***	***0.048*****	***0.011***	***0.047*****	***0.041****	***0.012***	***-0.018***	***0.034****	***0.033****
	[0.019]	***[0.016]***	***[0.018]***	***[0.017]***	***[0.014]***	***[0.009]***	***[0.011]***	***[0.011]***	***[0.018]***	***[0.016]***	***[0.017]***	***[0.016]***	***[0.017]***	***[0.013]***	***[0.015]***	***[0.015]***
Percentage in Con. x 2010	***0.008***	***0.006***	***0.014***	***0.005***	***0.026****	***0.018****	***0.013***	***0.014***	***0.016***	***0.014***	***0.014***	***0.015***	***0.021***	***-0.007***	***0.037****	***0.028****
	[0.020]	***[0.017]***	***[0.017]***	***[0.017]***	***[0.014]***	***[0.011]***	***[0.011]***	***[0.011]***	***[0.019]***	***[0.015]***	***[0.018]***	***[0.017]***	***[0.018]***	***[0.015]***	***[0.016]***	***[0.014]***
Employment Interactions	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Block Group Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099

Notes: Dependent variables are ln(people charged with felonies committed in year/1000 population). Employment interactions include tourism employment share interacted with Hardberger and BRAC dummies as well as health care employment share interacted with Hardberger and BRAC dummies. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01. See Appendix Tables A2-A9 for mean crime rates by criminal history.

Table 11: Fixed Effects Estimates of Violent Crime and Construction Workers in Bexar County, Relaxing the Timing of BRAC

	Murder				Rape				Assault				Intra-Family Assault			
	All	First Time	Accused Felons	Felons	All	First Time	Accused Felons	Felons	All	First Time	Accused Felons	Felons	All	First Time	Accused Felons	Felons
Percentage in Con. x 2004	0.008	0.0002	0.008	0.009	0.008	0.014	-0.002	-0.0002	-0.014	-0.023	-0.003	0.002	-0.028**	-0.018**	-0.012	-0.009
	[0.009]	[0.006]	[0.007]	[0.007]	[0.015]	[0.013]	[0.008]	[0.009]	[0.016]	[0.014]	[0.014]	[0.014]	[0.011]	[0.008]	[0.009]	[0.009]
Percentage in Con. x 2005	-0.001	0.001	-0.002	0.006	-0.014	-0.017*	0.001	-0.003	-0.010	-0.004	-0.008	0.005	-0.023*	-0.011	-0.012	-0.009
	[0.010]	[0.008]	[0.006]	[0.007]	[0.012]	[0.010]	[0.008]	[0.008]	[0.018]	[0.016]	[0.014]	[0.014]	[0.013]	[0.010]	[0.009]	[0.009]
Percentage in Con. x 2006	-0.012	-0.003	-0.008*	-0.002	-0.005	-0.002	0.002	-0.004	-0.012	-0.016	-0.0004	-0.007	-0.014	-0.013*	-0.003	0.0001
	[0.007]	[0.006]	[0.004]	[0.005]	[0.012]	[0.011]	[0.007]	[0.008]	[0.018]	[0.016]	[0.014]	[0.013]	[0.013]	[0.008]	[0.011]	[0.011]
Percentage in Con. x 2007	**0.011**	**-0.003**	**0.014***	**0.023****	**-0.001**	**-0.005**	**0.009**	**0.001**	**0.011**	**-0.002**	**0.019**	**0.021**	**0.001**	**-0.001**	**0.006**	**0.011**
	[0.011]	**[0.008]**	**[0.008]**	**[0.009]**	**[0.014]**	**[0.011]**	**[0.010]**	**[0.009]**	**[0.019]**	**[0.017]**	**[0.017]**	**[0.016]**	**[0.014]**	**[0.011]**	**[0.013]**	**[0.012]**
Percentage in Con. x 2008	**0.015**	**0.009**	**0.009**	**0.007**	**-0.018**	**-0.018***	**-0.0001**	**-0.009**	**-0.005**	**-0.009**	**0.005**	**0.006**	**0.026**	**0.016**	**0.025***	**0.023***
	[0.011]	**[0.009]**	**[0.007]**	**[0.006]**	**[0.011]**	**[0.010]**	**[0.007]**	**[0.006]**	**[0.019]**	**[0.017]**	**[0.017]**	**[0.016]**	**[0.017]**	**[0.014]**	**[0.013]**	**[0.013]**
Percentage in Con. x 2009	***-0.012***	***-0.004***	***-0.006***	***-0.001***	***0.003***	***-0.002***	***0.007***	***0.006***	***0.025***	***0.002***	***0.035****	***0.022***	***0.061*****	***0.036****	***0.049*****	***0.052*****
	[0.008]	***[0.007]***	***[0.005]***	***[0.005]***	***[0.013]***	***[0.011]***	***[0.008]***	***[0.008]***	***[0.019]***	***[0.016]***	***[0.017]***	***[0.016]***	***[0.018]***	***[0.016]***	***[0.017]***	***[0.016]***
Percentage in Con. x 2010	***-0.019****	***-0.017*****	***-0.004***	***-0.003***	***-0.009***	***-0.002***	***-0.004***	***-0.009***	***-0.011***	***-0.01***	***-0.005***	***-0.003***	***0.016***	***0.001***	***0.029****	***0.040****
	[0.007]	***[0.005]***	***[0.005]***	***[0.005]***	***[0.012]***	***[0.011]***	***[0.006]***	***[0.006]***	***[0.019]***	***[0.017]***	***[0.016]***	***[0.015]***	***[0.018]***	***[0.017]***	***[0.017]***	***[0.016]***
Employment Interactions	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Block Group Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099	11,099

Notes: Dependent variables are ln(people charged with felonies committed in year/1000 population). Employment interactions include tourism employment share interacted with Hardberger and BRAC dummies as well as health care employment share interacted with Hardberger and BRAC dummies. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01. See Appendix Tables A2-A9 for mean crime rates by criminal history.

Appendix

Table A1: Socio-Economic Outcomes and Construction Workers in Bexar County, 2000 to 2005-2009

	Poverty Rate (%)	Log Median HH Income	Emp. to Pop. Ratio (%)	Log Median House Value	HHs with 2+ Vehicles (%)	Log Population	Log Housing Units	Housing Units Occupied (%)	HHs Moving in > 5 Years Ago (%)
Percentage in Construction	**-0.314*** **	**0.003***	**0.396*** **	**0.004** **	**0.235*** **	**-0.007*** **	**-0.005** **	**-0.059**	**-0.047**
x BRAC/Hardberger	**[0.082]**	**[0.002]**	**[0.061]**	**[0.002]**	**[0.090]**	**[0.002]**	**[0.002]**	**[0.057]**	**[0.087]**
Percentage in Construction	0.122**	-0.001	-0.121***	-0.001	-0.042	0.004**	0.004***	-0.015	0.054
	[0.061]	[0.001]	[0.036]	[0.002]	[0.063]	[0.002]	[0.001]	[0.038]	[0.065]
Percentage in Tourism	0.002	0.002	-0.011	0.007***	0.150*	-0.008**	-0.007***	0.047	-0.102
x BRAC/Hardberger	[0.082]	[0.002]	[0.067]	[0.002]	[0.091]	[0.003]	[0.003]	[0.060]	[0.109]
Percentage in Tourism	0.057	0.000	-0.020	-0.003	-0.098*	0.002	0.004**	0.060	0.179***
	[0.056]	[0.001]	[0.033]	[0.002]	[0.058]	[0.002]	[0.002]	[0.044]	[0.068]
Percentage in Health Care	-0.177*	0.003*	0.224***	0.002	0.140	-0.004	-0.002	-0.035	-0.184
x BRAC/Hardberger	[0.098]	[0.002]	[0.066]	[0.002]	[0.092]	[0.004]	[0.004]	[0.066]	[0.125]
Percentage in Health Care	-0.018	-0.0001	-0.012	0.003	0.018	-0.001	-0.00002	0.061	0.130*
	[0.058]	[0.002]	[0.037]	[0.002]	[0.061]	[0.002]	[0.002]	[0.039]	[0.067]
Demographic & Housing Controls	Y	Y	Y	Y	Y	Y	Y	Y	Y
Tract Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	1982	1982	1982	1964	1982	1982	1982	1982	1982
R-Squared	0.669	0.861	0.645	0.917	0.729	0.878	0.914	0.455	0.718

Notes: Demographic and housing controls measured in 2000 at the block group level include log population, share black, share Hispanic, share male, share under age 30, share age 65+, share of households that speak Spanish, share foreign born, share who lived in the same house 1 year ago, share with only a HS degree, share with some college, share with a college degree, unemployment rate, labor force participation rate, log household income, log number of housing units, share of units vacant, share of units owner occupied, median house age, and log house value. The relevant dependent variable is excluded from the set of controls. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01.

Appendix

Table A2: Fixed Effects Estimates of Burglary and Construction Workers in Bexar County, 2000-2010

	Burglary											
	All			First Time			Accused Felons			Felons		
Percentage in Construction x Hardberger	-0.002	-0.008	-0.014	-0.006	-0.010	-0.013	-0.003	-0.008	-0.013	0.011	0.006	0.001
	[0.013]	[0.013]	[0.013]	[0.010]	[0.011]	[0.011]	[0.011]	[0.011]	[0.011]	[0.011]	[0.011]	[0.011]
Percentage in Construction x BRAC	**0.021***	**0.015**	**0.015**	**0.011**	**0.008**	**0.011**	**0.022****	**0.019***	**0.016**	**0.022****	**0.019***	**0.016**
	[0.012]	**[0.013]**	**[0.013]**	**[0.010]**	**[0.010]**	**[0.010]**	**[0.010]**	**[0.010]**	**[0.011]**	**[0.010]**	**[0.010]**	**[0.010]**
Percentage in Construction	-0.009			0			-0.009			-0.011		
	[0.011]			[0.008]			[0.009]			[0.008]		
Percentage in Tourism x Hardberger	-0.013	-0.015	-0.021	-0.012	-0.012	-0.015	0.005	0.005	-0.002	0.008	0.008	0.001
	[0.014]	[0.014]	[0.013]	[0.011]	[0.011]	[0.011]	[0.012]	[0.012]	[0.012]	[0.012]	[0.012]	[0.011]
Percentage in Tourism x BRAC	**0.006**	**0.002**	**0.002**	**-0.011**	**-0.010**	**-0.006**	**0.015**	**0.009**	**0.004**	**0.012**	**0.007**	**0.003**
	[0.012]	**[0.012]**	**[0.013]**	**[0.010]**	**[0.010]**	**[0.010]**	**[0.010]**	**[0.011]**	**[0.011]**	**[0.010]**	**[0.010]**	**[0.010]**
Percentage in Tourism	-0.006			0.012			-0.017**			-0.016**		
	[0.010]			[0.008]			[0.008]			[0.007]		
Percentage in Health Care x Hardberger	-0.009	-0.009	-0.017	0.004	0.001	-0.005	-0.01	-0.009	-0.014	-0.012	-0.010	-0.016
	[0.014]	[0.015]	[0.014]	[0.011]	[0.012]	[0.012]	[0.011]	[0.012]	[0.011]	[0.011]	[0.012]	[0.011]
Percentage in Health Care x BRAC	**-0.012**	**-0.006**	**-0.010**	**-0.004**	**-0.003**	**-0.005**	**-0.012**	**-0.006**	**-0.009**	**-0.009**	**-0.004**	**-0.006**
	[0.013]	**[0.014]**	**[0.013]**	**[0.011]**	**[0.011]**	**[0.010]**	**[0.011]**	**[0.011]**	**[0.011]**	**[0.010]**	**[0.010]**	**[0.010]**
Percentage in Health Care	0			-0.002			0.001			0.003		
	[0.011]			[0.008]			[0.008]			[0.007]		
Mean Rate, 2000-2010		0.621			0.297			0.324			0.282	
Year Fixed Effects		Y			Y			Y			Y	
Demo. & Housing Controls	Y			Y			Y			Y		
Tract Fixed Effects	Y			Y			Y			Y		
Block Group Fixed Effects		Y	Y		Y	Y		Y	Y		Y	Y
2000-2006 Crime Trend x Year Fixed Effects			Y			Y			Y			Y
Observations	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099
R-Squared	0.165	0.259	0.276	0.103	0.185	0.198	0.128	0.217	0.234	0.124	0.208	0.225

Notes: Dependent variables are ln(people charged with felonies committed in year/1000 population). Demographic and housing controls are listed in the notes to Table A1. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01.

Appendix

Table A3: Fixed Effects Estimates of Car Theft and Construction Workers in Bexar County, 2000-2010

	Car Theft											
	All			First Time			Accused Felons			Felons		
Percentage in Construction x Hardberger	-0.007	-0.005	-0.010	-0.004	-0.005	-0.009	-0.002	0	-0.001	0.004	0.007	0.005
	[0.009]	[0.009]	[0.009]	[0.007]	[0.006]	[0.006]	[0.008]	[0.008]	[0.008]	[0.008]	[0.008]	[0.008]
Percentage in Construction x BRAC	**0.021****	**0.018****	**0.015***	**0.003**	**0.001**	**0**	**0.022*****	**0.021*****	**0.017****	**0.023*****	**0.022*****	**0.020*****
	[0.009]	**[0.009]**	**[0.009]**	**[0.006]**	**[0.006]**	**[0.006]**	**[0.008]**	**[0.008]**	**[0.008]**	**[0.007]**	**[0.007]**	**[0.007]**
Percentage in Construction	-0.008			0			-0.011**			-0.009*		
	[0.007]			[0.004]			[0.005]			[0.005]		
Percentage in Tourism x Hardberger	0.022**	0.018*	0.014	0.004	0.004	0.001	0.019**	0.018**	0.016*	0.013*	0.013	0.011
	[0.010]	[0.011]	[0.011]	[0.007]	[0.007]	[0.007]	[0.009]	[0.009]	[0.009]	[0.008]	[0.008]	[0.009]
Percentage in Tourism x BRAC	**0.002**	**-0.003**	**-0.006**	**0.008**	**0.006**	**0.005**	**-0.003**	**-0.005**	**-0.007**	**-0.005**	**-0.006**	**-0.008**
	[0.009]	**[0.010]**	**[0.010]**	**[0.006]**	**[0.006]**	**[0.006]**	**[0.007]**	**[0.008]**	**[0.008]**	**[0.007]**	**[0.007]**	**[0.007]**
Percentage in Tourism	0.003			0.003			0.001			0.001		
	[0.006]			[0.004]			[0.005]			[0.004]		
Percentage in Health Care x Hardberger	0.014	0.014	0.010	0.010	0.010	0.008	0.004	0.004	0.001	0.003	0.003	0
	[0.011]	[0.011]	[0.011]	[0.008]	[0.008]	[0.008]	[0.009]	[0.009]	[0.008]	[0.008]	[0.008]	[0.008]
Percentage in Health Care x BRAC	**0.022****	**0.022****	**0.019****	**0.018****	**0.017****	**0.015****	**0.011**	**0.012***	**0.010**	**0.011**	**0.012***	**0.010**
	[0.009]	**[0.009]**	**[0.009]**	**[0.007]**	**[0.007]**	**[0.008]**	**[0.007]**	**[0.007]**	**[0.007]**	**[0.006]**	**[0.006]**	**[0.006]**
Percentage in Health Care	-0.007			-0.009**			0.002			-0.002		
	[0.006]			[0.004]			[0.004]			[0.004]		
Mean Rate, 2000-2010		0.152			0.067			0.085			0.076	
Year Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demo. & Housing Controls	Y			Y			Y			Y		
Tract Fixed Effects	Y			Y			Y			Y		
Block Group Fixed Effects		Y	Y		Y	Y		Y	Y		Y	Y
2000-2006 Crime Trend x Year Fixed Effects			Y			Y			Y			Y
Observations	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099
R-Squared	0.092	0.179	0.191	0.057	0.13	0.14	0.075	0.167	0.178	0.066	0.162	0.172

Notes: Dependent variables are ln(people charged with felonies committed in year/1000 population). Demographic and housing controls are listed in the notes to Table A1. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01.

Appendix

Table A4: Fixed Effects Estimates of Larceny and Construction Workers in Bexar County, 2000-2010

	Larceny											
	All			First Time			Accused Felons			Felons		
Percentage in Construction	0.006	0.005	0.007	0.004	0.003	0.005	0.001	0.001	0.001	0.001	0.002	0.002
x Hardberger	[0.013]	[0.014]	[0.014]	[0.011]	[0.011]	[0.011]	[0.012]	[0.013]	[0.013]	[0.012]	[0.013]	[0.013]
Percentage in	**0.031****	**0.029****	**0.032*****	**0.015**	**0.014**	**0.014**	**0.028****	**0.027****	**0.029*****	**0.029*****	**0.028****	**0.029*****
Construction x BRAC	**[0.012]**	**[0.012]**	**[0.012]**	**[0.010]**	**[0.010]**	**[0.010]**	**[0.011]**	**[0.011]**	**[0.011]**	**[0.011]**	**[0.011]**	**[0.011]**
Percentage in Construction	-0.019*			-0.018**			-0.015			-0.015		
	[0.011]			[0.007]			[0.011]			[0.011]		
Percentage in Tourism x	-0.015	-0.017	-0.017	-0.014	-0.017	-0.017	-0.004	-0.003	-0.003	-0.004	-0.003	-0.003
Hardberger	[0.014]	[0.013]	[0.014]	[0.012]	[0.012]	[0.013]	[0.013]	[0.013]	[0.013]	[0.013]	[0.013]	[0.012]
Percentage in Tourism x	**0.002**	**-0.002**	**0**	**-0.012**	**-0.013**	**-0.014**	**0.014**	**0.012**	**0.013**	**0.018**	**0.015**	**0.015**
BRAC	**[0.013]**	**[0.013]**	**[0.013]**	**[0.010]**	**[0.010]**	**[0.010]**	**[0.013]**	**[0.012]**	**[0.012]**	**[0.013]**	**[0.012]**	**[0.013]**
Percentage in Tourism	-0.001			0.004			-0.006			-0.005		
	[0.011]			[0.007]			[0.010]			[0.010]		
Percentage in Health Care x	-0.017	-0.013	-0.020	-0.009	-0.009	-0.011	-0.012	-0.009	-0.015	-0.004	-0.003	-0.007
Hardberger	[0.016]	[0.016]	[0.017]	[0.014]	[0.014]	[0.014]	[0.013]	[0.013]	[0.014]	[0.013]	[0.013]	[0.013]
Percentage in Health	**0.013**	**0.016**	**0.012**	**0.006**	**0.006**	**0.004**	**0.004**	**0.008**	**0.005**	**0.004**	**0.008**	**0.005**
Care x BRAC	**[0.014]**	**[0.014]**	**[0.014]**	**[0.011]**	**[0.011]**	**[0.011]**	**[0.013]**	**[0.013]**	**[0.013]**	**[0.013]**	**[0.013]**	**[0.014]**
Percentage in Health Care	-0.015			-0.007			-0.012			-0.010		
	[0.012]			[0.008]			[0.011]			[0.011]		
Mean Rate, 2000-2010		0.780			0.290			0.490			0.449	
Year Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demo. & Housing Controls	Y			Y			Y			Y		
Tract Fixed Effects	Y			Y			Y			Y		
Block Group Fixed Effects		Y	Y		Y	Y		Y	Y		Y	Y
2000-2006 Crime Trend x Year Fixed Effects			Y			Y			Y			Y
Observations	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099
R-Squared	0.189	0.304	0.323	0.103	0.189	0.201	0.184	0.314	0.329	0.182	0.316	0.33

Notes: Dependent variables are ln(people charged with felonies committed in year/1000 population). Demographic and housing controls are listed in the notes to Table A1. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01.

Appendix

Table A5: Fixed Effects Estimates of Robbery and Construction Workers in Bexar County, 2000-2010

	Robbery											
	All			First Time			Accused Felons			Felons		
Percentage in Construction	0.011	0.015	0.007	0.013	0.017*	0.010	0.001	0.001	-0.004	0	0	-0.007
x Hardberger	[0.012]	[0.012]	[0.012]	[0.010]	[0.010]	[0.010]	[0.009]	[0.009]	[0.009]	[0.009]	[0.009]	[0.009]
Percentage in Construction x BRAC	**0.025*** [0.010]**	**0.025** [0.010]**	**0.024** [0.010]**	**0.002 [0.009]**	**0.003 [0.008]**	**0.003 [0.009]**	**0.029*** [0.008]**	**0.027*** [0.008]**	**0.027*** [0.008]**	**0.031*** [0.007]**	**0.030*** [0.007]**	**0.030*** [0.008]**
Percentage in Construction	-0.020** [0.009]			-0.005 [0.007]			-0.013* [0.007]			-0.012* [0.007]		
Percentage in Tourism x Hardberger	0.008 [0.013]	0.011 [0.013]	0.003 [0.012]	-0.010 [0.010]	-0.009 [0.010]	-0.016 [0.010]	0.015 [0.010]	0.017* [0.010]	0.014 [0.010]	0.013 [0.010]	0.017* [0.010]	0.012 [0.009]
Percentage in Tourism x BRAC	**0.003 [0.012]**	**-0.001 [0.011]**	**-0.001 [0.012]**	**-0.001 [0.010]**	**-0.001 [0.009]**	**-0.002 [0.010]**	**0.010 [0.009]**	**0.007 [0.009]**	**0.006 [0.009]**	**0.012 [0.008]**	**0.007 [0.008]**	**0.008 [0.008]**
Percentage in Tourism	0 [0.008]			0.002 [0.006]			-0.001 [0.006]			-0.003 [0.006]		
Percentage in Health Care x Hardberger	0.010 [0.015]	0.012 [0.015]	0.006 [0.014]	-0.002 [0.012]	0.002 [0.012]	-0.003 [0.012]	0.008 [0.012]	0.008 [0.012]	0.005 [0.011]	0.004 [0.012]	0.003 [0.012]	0 [0.011]
Percentage in Health Care x BRAC	**0.013 [0.012]**	**0.014 [0.012]**	**0.011 [0.013]**	**0.004 [0.010]**	**0.005 [0.010]**	**0.004 [0.010]**	**0.014 [0.011]**	**0.014 [0.011]**	**0.012 [0.011]**	**0.009 [0.009]**	**0.010 [0.009]**	**0.009 [0.009]**
Percentage in Health Care	0.008 [0.009]			0.008 [0.007]			0.002 [0.007]			0.003 [0.007]		
Mean Rate, 2000-2010		0.400			0.192			0.208			0.179	
Year Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demo. & Housing Controls	Y			Y			Y			Y		
Tract Fixed Effects	Y			Y			Y			Y		
Block Group Fixed Effects		Y	Y		Y	Y		Y	Y		Y	Y
2000-2006 Crime Trend x Year Fixed Effects			Y			Y			Y			Y
Observations	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099
R-Squared	0.125	0.203	0.22	0.085	0.162	0.174	0.09	0.166	0.179	0.088	0.166	0.178

Notes: Dependent variables are ln(people charged with felonies committed in year/1000 population). Demographic and housing controls are listed in the notes to Table A1. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01.

Appendix

Table A6: Fixed Effects Estimates of Murder and Construction Workers in Bexar County, 2000-2010

	Murder											
	All			First Time			Accused Felons			Felons		
Percentage in Construction	-0.009	-0.008	-0.010	-0.002	-0.001	-0.002	-0.007	-0.007*	-0.008*	0	0	-0.001
x Hardberger	[0.006]	[0.006]	[0.006]	[0.005]	[0.005]	[0.005]	[0.004]	[0.004]	[0.004]	[0.005]	[0.005]	[0.005]
Percentage in	**-0.003**	**-0.003**	**-0.003**	**-0.005**	**-0.004**	**-0.003**	**0.002**	**0.001**	**0.001**	**0.005**	**0.005**	**0.004**
Construction x BRAC	**[0.006]**	**[0.006]**	**[0.006]**	**[0.004]**	**[0.005]**	**[0.005]**	**[0.004]**	**[0.004]**	**[0.004]**	**[0.004]**	**[0.004]**	**[0.004]**
Percentage in Construction	-0.003			-0.004			0			-0.004		
	[0.004]			[0.003]			[0.003]			[0.003]		
Percentage in Tourism x	0.003	0.002	0	-0.001	0.001	0	0.007	0.003	0.002	0.010*	0.006	0.005
Hardberger	[0.008]	[0.008]	[0.008]	[0.005]	[0.005]	[0.005]	[0.006]	[0.006]	[0.006]	[0.006]	[0.006]	[0.006]
Percentage in Tourism x	**-0.003**	**-0.003**	**-0.003**	**-0.003**	**-0.001**	**0**	**0**	**-0.002**	**-0.003**	**0.001**	**-0.002**	**-0.003**
BRAC	**[0.006]**	**[0.006]**	**[0.006]**	**[0.004]**	**[0.004]**	**[0.004]**	**[0.004]**	**[0.004]**	**[0.004]**	**[0.004]**	**[0.004]**	**[0.004]**
Percentage in Tourism	0			-0.002			0.001			0		
	[0.004]			[0.003]			[0.003]			[0.003]		
Percentage in Health Care x	0.004	0.004	0.002	0	0	-0.002	0.005	0.006	0.005	0.003	0.003	0.002
Hardberger	[0.008]	[0.009]	[0.009]	[0.008]	[0.008]	[0.008]	[0.006]	[0.006]	[0.006]	[0.006]	[0.006]	[0.006]
Percentage in Health	**-0.007**	**-0.007**	**-0.008**	**-0.006**	**-0.007**	**-0.008**	**-0.002**	**-0.001**	**-0.001**	**-0.003**	**-0.003**	**-0.004**
Care x BRAC	**[0.006]**	**[0.007]**	**[0.007]**	**[0.005]**	**[0.005]**	**[0.005]**	**[0.004]**	**[0.004]**	**[0.004]**	**[0.004]**	**[0.004]**	**[0.004]**
Percentage in Health Care	0.001			0.002			-0.001			0		
	[0.005]			[0.004]			[0.003]			[0.003]		
Mean Rate, 2000-2010		0.079			0.044			0.035			0.034	
Year Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demo. & Housing Controls	Y			Y			Y			Y		
Tract Fixed Effects	Y			Y			Y			Y		
Block Group Fixed Effects		Y	Y		Y	Y		Y	Y		Y	Y
2000-2006 Crime Trend x Year Fixed Effects			Y			Y			Y			Y
Observations	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099
R-Squared	0.045	0.118	0.129	0.038	0.105	0.116	0.038	0.104	0.112	0.04	0.103	0.11

Notes: Dependent variables are ln(people charged with felonies committed in year/1000 population). Demographic and housing controls are listed in the notes to Table A1. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01.

Appendix

Table A7: Fixed Effects Estimates of Rape and Construction Workers in Bexar County, 2000-2010

	Rape											
	All			First Time			Accused Felons			Felons		
Percentage in Construction	-0.011	-0.011	-0.011	-0.013	-0.012	-0.013	0.004	0.002	0.003	-0.003	-0.004	-0.003
x Hardberger	[0.010]	[0.010]	[0.010]	[0.008]	[0.008]	[0.008]	[0.006]	[0.006]	[0.006]	[0.006]	[0.006]	[0.006]
Percentage in Construction x BRAC	**-0.008**	**-0.008**	**-0.008**	**-0.010**	**-0.010**	**-0.010**	**0.003**	**0.003**	**0.003**	**-0.003**	**-0.003**	**-0.003**
	[0.008]	**[0.007]**	**[0.008]**	**[0.007]**	**[0.007]**	**[0.007]**	**[0.005]**	**[0.005]**	**[0.005]**	**[0.005]**	**[0.005]**	**[0.005]**
Percentage in Construction	0.011*			0.009			0.002			0.005		
	[0.007]			[0.006]			[0.004]			[0.005]		
Percentage in Tourism x	0.003	0	0	-0.003	-0.004	-0.005	0.007	0.005	0.005	0.008	0.007	0.007
Hardberger	[0.011]	[0.011]	[0.011]	[0.009]	[0.009]	[0.009]	[0.006]	[0.006]	[0.007]	[0.006]	[0.006]	[0.007]
Percentage in Tourism x BRAC	**-0.009**	**-0.004**	**-0.005**	**-0.010**	**-0.005**	**-0.005**	**0**	**0**	**0**	**-0.005**	**-0.006**	**-0.005**
	[0.009]	**[0.009]**	**[0.009]**	**[0.007]**	**[0.008]**	**[0.008]**	**[0.005]**	**[0.004]**	**[0.005]**	**[0.004]**	**[0.004]**	**[0.004]**
Percentage in Tourism	0.01			0.01			0.001			-0.001		
	[0.007]			[0.006]			[0.003]			[0.003]		
Percentage in Health Care x	0	0	-0.002	0	0.002	0	-0.004	-0.005	-0.006	-0.007	-0.006	-0.007
Hardberger	[0.011]	[0.011]	[0.011]	[0.009]	[0.009]	[0.009]	[0.006]	[0.006]	[0.006]	[0.007]	[0.007]	[0.007]
Percentage in Health Care x BRAC	**-0.009**	**-0.008**	**-0.010**	**-0.003**	**-0.003**	**-0.004**	**-0.010****	**-0.010****	**-0.010****	**-0.014*****	**-0.014****	**-0.014*****
	[0.009]	**[0.009]**	**[0.009]**	**[0.008]**	**[0.008]**	**[0.008]**	**[0.005]**	**[0.005]**	**[0.005]**	**[0.005]**	**[0.005]**	**[0.006]**
Percentage in Health Care	0.009			0.004			0.007**			0.009**		
	[0.006]			[0.006]			[0.004]			[0.004]		
Mean Rate, 2000-2010		0.162			0.112			0.050			0.048	
Year Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demo. & Housing Controls	Y			Y			Y			Y		
Tract Fixed Effects	Y			Y			Y			Y		
Block Group Fixed Effects		Y	Y		Y	Y		Y	Y		Y	Y
2000-2006 Crime Trend x Year Fixed Effects			Y			Y			Y			Y
Observations	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099
R-Squared	0.08	0.156	0.164	0.062	0.134	0.141	0.049	0.121	0.13	0.052	0.124	0.133

Notes: Dependent variables are ln(people charged with felonies committed in year/1000 population). Demographic and housing controls are listed in the notes to Table A1. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01.

Appendix

Table A8: Fixed Effects Estimates of Assault and Construction Workers in Bexar County, 2000-2010

	Assault											
	All			First Time			Accused Felons			Felons		
Percentage in Construction x Hardberger	-0.001	-0.009	-0.013	-0.006	-0.006	-0.012	0.002	-0.003	-0.003	0.005	-0.001	-0.001
	[0.013]	[0.014]	[0.014]	[0.012]	[0.012]	[0.012]	[0.010]	[0.011]	[0.011]	[0.009]	[0.011]	[0.011]
Percentage in Construction x BRAC	**0.014**	**0.008**	**0.008**	**-0.001**	**0**	**0**	**0.022****	**0.014**	**0.013**	**0.018****	**0.011**	**0.010**
	[0.012]	**[0.013]**	**[0.013]**	**[0.011]**	**[0.011]**	**[0.011]**	**[0.009]**	**[0.011]**	**[0.011]**	**[0.008]**	**[0.011]**	**[0.011]**
Percentage in Construction	-0.011			-0.001			-0.008			-0.006		
	[0.009]			[0.008]			[0.007]			[0.007]		
Percentage in Tourism x Hardberger	-0.018	-0.020	-0.026**	0	0	-0.006	-0.023**	-0.023**	-0.025**	-0.016	-0.019*	-0.019*
	[0.013]	[0.013]	[0.012]	[0.012]	[0.011]	[0.011]	[0.011]	[0.011]	[0.010]	[0.010]	[0.010]	[0.010]
Percentage in Tourism x BRAC	**-0.003**	**-0.002**	**-0.004**	**-0.012**	**-0.011**	**-0.012**	**0.015**	**0.015**	**0.013**	**0.019****	**0.015***	**0.013**
	[0.011]	**[0.011]**	**[0.011]**	**[0.011]**	**[0.010]**	**[0.010]**	**[0.009]**	**[0.010]**	**[0.009]**	**[0.009]**	**[0.009]**	**[0.009]**
Percentage in Tourism	0.011			0.004			0.005			0.007		
	[0.009]			[0.008]			[0.007]			[0.007]		
Percentage in Health Care x Hardberger	0.014	0.015	0.007	0.020	0.020	0.015	-0.006	-0.004	-0.009	0.006	0.007	0.003
	[0.013]	[0.014]	[0.013]	[0.012]	[0.013]	[0.013]	[0.012]	[0.012]	[0.012]	[0.011]	[0.011]	[0.011]
Percentage in Health Care x BRAC	**0.017**	**0.018**	**0.016**	**0.017**	**0.019***	**0.018**	**0.007**	**0.007**	**0.005**	**0.010**	**0.010**	**0.007**
	[0.012]	**[0.012]**	**[0.012]**	**[0.011]**	**[0.011]**	**[0.011]**	**[0.009]**	**[0.010]**	**[0.010]**	**[0.010]**	**[0.010]**	**[0.010]**
Percentage in Health Care	-0.011			-0.008			-0.004			-0.008		
	[0.009]			[0.008]			[0.007]			[0.007]		
Mean Rate, 2000-2010		0.578			0.332			0.245			0.220	
Year Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demo. & Housing Controls	Y			Y			Y			Y		
Tract Fixed Effects	Y			Y			Y			Y		
Block Group Fixed Effects		Y	Y		Y	Y		Y	Y		Y	Y
2000-2006 Crime Trend x Year Fixed Effects			Y			Y			Y			Y
Observations	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099
R-Squared	0.148	0.233	0.252	0.105	0.189	0.204	0.11	0.191	0.205	0.1	0.183	0.197

Notes: Dependent variables are ln(people charged with felonies committed in year/1000 population). Demographic and housing controls are listed in the notes to Table A1. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01.

Appendix

Table A9: Fixed Effects Estimates of Intra-Family Assault and Construction Workers in Bexar County, 2000-2010

	Assault											
	All			First Time			Accused Felons			Felons		
Percentage in Construction x Hardberger	-0.014	-0.013	-0.012	-0.010	-0.009	-0.008	-0.004	-0.005	-0.005	-0.002	-0.003	-0.004
	[0.010]	[0.010]	[0.010]	[0.007]	[0.007]	[0.007]	[0.007]	[0.007]	[0.007]	[0.007]	[0.007]	[0.007]
Percentage in Construction x BRAC	**0.033*****	**0.031*****	**0.027*****	**0.016****	**0.017****	**0.014***	**0.034*****	**0.030*****	**0.026*****	**0.037*****	**0.034*****	**0.030*****
	[0.010]	**[0.010]**	**[0.010]**	**[0.008]**	**[0.008]**	**[0.008]**	**[0.009]**	**[0.009]**	**[0.009]**	**[0.009]**	**[0.009]**	**[0.009]**
Percentage in Construction	-0.009			0			-0.012**			-0.008		
	[0.008]			[0.005]			[0.005]			[0.005]		
Percentage in Tourism x Hardberger	0.005	0.006	0.007	-0.002	0	0	0.005	0.004	0.004	0.005	0.007	0.006
	[0.011]	[0.011]	[0.011]	[0.008]	[0.008]	[0.008]	[0.007]	[0.007]	[0.007]	[0.007]	[0.008]	[0.008]
Percentage in Tourism x BRAC	**0.031*****	**0.029****	**0.024****	**0.021****	**0.019****	**0.016***	**0.028*****	**0.026*****	**0.023****	**0.025*****	**0.025*****	**0.022****
	[0.012]	**[0.012]**	**[0.011]**	**[0.009]**	**[0.009]**	**[0.009]**	**[0.010]**	**[0.010]**	**[0.010]**	**[0.009]**	**[0.009]**	**[0.009]**
Percentage in Tourism	-0.018**			-0.004			-0.018***			-0.016***		
	[0.007]			[0.005]			[0.006]			[0.005]		
Percentage in Health Care x Hardberger	0.006	0.005	0.001	0.008	0.009	0.007	-0.002	-0.003	-0.006	-0.002	-0.004	-0.007
	[0.012]	[0.012]	[0.012]	[0.008]	[0.008]	[0.007]	[0.008]	[0.008]	[0.008]	[0.008]	[0.008]	[0.008]
Percentage in Health Care x BRAC	**0.007**	**0.008**	**0.005**	**-0.012**	**-0.010**	**-0.011**	**0.021***	**0.020***	**0.018***	**0.019***	**0.019***	**0.017**
	[0.014]	**[0.014]**	**[0.014]**	**[0.010]**	**[0.010]**	**[0.010]**	**[0.011]**	**[0.011]**	**[0.011]**	**[0.011]**	**[0.011]**	**[0.011]**
Percentage in Health Care	-0.009			-0.003			-0.009			-0.006		
	-0.014	-0.013	-0.012	-0.01	-0.009	-0.008	-0.004	-0.005	-0.005	-0.002	-0.003	-0.004
Mean Rate, 2000-2010		0.298			0.133			0.165			0.143	
Year Fixed Effects	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Demo. & Housing Controls	Y			Y			Y			Y		
Tract Fixed Effects	Y			Y			Y			Y		
Block Group Fixed Effects		Y	Y		Y	Y		Y	Y		Y	Y
2000-2006 Crime Trend x Year Fixed Effects			Y			Y			Y			Y
Observations	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099	10,901	11,099	11,099
R-Squared	0.212	0.294	0.304	0.127	0.195	0.203	0.16	0.238	0.245	0.141	0.224	0.233

Notes: Dependent variables are ln(people charged with felonies committed in year/1000 population). Demographic and housing controls are listed in the notes to Table A1. Standard errors in brackets allow for arbitrary correlation within block groups. *p<0.10, **p<0.05, ***p<0.01.