Asian Gold – Expected Returns to Crime and Thieves Behaviour

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Abstract

A rational criminal seeks to maximise the expected benefits from illegal activity. We investigate whether criminals reallocate efforts towards potential targets with higher expected payoffs following exogenous changes in goods prices. Our identification strategy relies on the common perception in the UK that families of South Asian descent keep a substantial amount of gold in their houses. The expected gains from targeting these households for burglaries consequently change with the gold price. Using a difference-in-difference approach we combine crime data from UK police forces with census information and official gold prices. Our analysis indicates that areas with a large share of South Asians face a disproportionate increase in property crime relative to other neighbourhoods in the same local authority when the price of gold increases.

JEL classification: K42; J19

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1 Introduction

The rational theory of crime proposed by Becker (1968) considers crime participation as an economic decision arising from a comparison of the expected returns between legal and illegal activity. This theory has generated a vast empirical literature, with a large focus on the influence of labour market conditions in the crime participation decision of the marginal individual.[1] Less attention has been given to the role played by the benefits of committing crime. Draca, Koutmeridis, and Machin (2015) note that, due to the difficulty in obtaining reliable information on the gains from committing a crime, quantifying these expected returns is challenging. Combining detailed administrative data from the London Metropolitan Police Service on monthly counts of burglaries, robberies and thefts committed in London over a 10-year period by type of goods stolen with product price data from the Office of National Statistics, Draca et al. (2015) empirically explore the role of changing values of the economic returns to crime. Their findings suggest that crime is indeed responsive to market prices, estimating that 10% increase in the price of a good, relative to prices of other goods, is associated with a 3.5% increase in crime. The estimates are stronger in a group of commodity related goods (fuel, jewellery and metal), and are estimated to be above unity in instrumental variable specifications which instrument UK domestic prices with world prices.

The result from Draca et al. (2015) that jewellery crime is strongly related to the retail gold price may have demographic implications for targets selected by criminals. When a certain commodity is more likely to be held by a specific demographic group and the price of that commodity relative to other goods increases, we may also expect crime in that demographic group to increase. In particular the preponderance of gold jewellery held by South Asians, as well as the high quality of gold preferred by these individuals (Lawrence, 2003) implies more lucrative returns for criminal offenders who select these targets. The 2011 census data indicate that over 5% of the population in England and Wales is of South Asian origin, i.e., individuals who identify their ethnic origin as Bangladeshi, Indian or Pakistani (Office for National Statistics, 2012). For cultural reasons these ethnic groups project a high proclivity towards storing wealth in gold jewellery.

[1] The expected return from employment, determined by the probability an individual can obtain work as well as the wage rate, can be understood to measure the benefits of legal activity. The findings of a number of studies point towards a significant relationship between labour market outcomes and crime rates, Raphael and Winter-Ebmer (2001) find a significant positive impact of US state-level unemployment rates on property crime rates. There are particularly robust findings for certain high-risk groups of individuals such as the young and the unskilled. Fougère, Kramarz, and Pouget (2009) using regional data from France find a positive association between crime and unemployment, with increases in youth unemployment in particular inducing increases in crime. A similar result obtains in analyses of wages. Grogger (1998) argues that increase in youth crime during the 1970s and 1980s in the US can be attributed to falling real wages. Focussing on unskilled workers, Machin and Meghir (2004) find that a decrease in wages at the bottom tail of the wage distribution lead to an increase in crime.

For over two centuries regions within Asia have had the largest demand of gold (O'Connor, Lucey, Batten, and Baur, 2015), a demand persisting today with India and Pakistan alone accounting for approximately one fifth of total global demand (Starr and Tran, 2008). In these regions gold jewellery is used not only an adornment, but also as a saving device. Lawrence (2003) notes the importance of gold jewellery in Hindu and Muslim cultures, particularly for women who may have no other recourse in terms of financial assets.[2] Gold is often used to signal a family's position in their local community, with great regard given to the purity of the gold held, such that 22-carat gold jewellery is most highly demanded (Fernandez, Veer, and Lastovicka, 2011).

The British Nationality Act of 1948 conferred Commonwealth citizens with unrestricted rights to enter the UK to live and work. Immigration was encouraged due to severe labour shortages as a consequence of the second world war and remained restriction-free, despite substantial public resistance to the high immigration numbers, until the passing of the Commonwealth Immigrants Acts of 1962 and 1968. Migration flows from India peaked in 1968 (Naujoks, 2009). Anti-immigrant sentiment may have contributed to the diasporic nature of many immigrant communities, which maintain strong links with their home culture and traditions. Fernandez et al. (2011) emphasises the importance of the traditional wedding ceremony in maintaining strong attachments to home culture, including the gifting and receiving of quantities of gold jewellery common in countries within South Asian. It is therefore expected that the proportion of assets held in gold jewellery to be higher amongst the South Asian community than other ethnic groups within the UK.

Consistent with the Becker (1968) model of rational crime an individual will consider the expected returns from committing a crime in terms of the proceedings of the crime, which is determined by both the amount of the goods expropriated and the price commanded by those goods. For a potential criminal seeking gold, South Asian households would provide an attractive target as they not only hold larger quantities of gold, but also as the purity of gold jewellery preferred tends to be higher, Asian gold receives a higher price.[3]

The costs incurred in the selection of attractive targets may be non-negligible; the criminal must first find a household with a suitable probability of containing the targeted good, and will also consider the difficulty of obtaining undetected entry to and exit from the property, as well as the chance of apprehension. An influential theory that describes how offenders select potential targets is found in the criminology literature. Based on insights from behavioural ecology, where animals are understood to forage for food by maximising the acquisition of resources whilst minimising search effort and the risk of attack, optimal foraging theory posits that

[2]Historically in Indian culture women have had limited rights over property. Upon marriage a woman was permitted *stridhan* (women's property) which could include "movable assets" such as jewellery (Halder and Jaishankar, 2008).

[3]Asian gold is generally 22 carats, whereas typical gold jewellery in the US ranges between 10-18 carats (Fernandez et al., 2011).

criminal offenders aim to maximise the proceeds of crime and minimise the time spent searching for a suitable target and committing the crime as well as the risk of being caught (Johnson and Bowers, 2004). Applying this theory, our expectation is that when the price of gold increases neighbourhoods which contain a high proportion of South Asians will present a target-rich environment to a potential criminal and thereby face an increased risk of burglary compared to other neighbourhoods in the same area.

In this paper we investigate whether burglars adjust their crimes in relation to the expected pay-off, as predicted by the rational theory of crime proposed by Becker (1968). Our hypothesis is that since South Asians store a greater share of their wealth in the form of gold jewellery, the return to stealing from such households increases when the price of gold increases. We aggregate police data on individual crime occurrences to lower-layer super output areas, a fine geographical disaggregation with each area containing approximately 650 households, to calculate monthly crime rates per 100 population using the small area population data from the 2011 census, from which we also obtain population shares by ethnic group and social class. We combine these data with monthly gold prices from the Bank of England. The analysis proceeds using a differences-in-differences methodology where we control for characteristics of the neighbourhood that are constant over time and may affect burglary rates, and monthly fixed effects which capture any nationwide trends in crime. We find that areas with a large share of South Asians face a disproportionate increase in property crime relative to other neighbourhoods in the same local authority when the price of gold increases, suggesting that criminals respond to exogenous changes in the potential returns to a crime by selecting areas with potentially more lucrative targets, consistent with optimal foraging theory.

We examine the robustness of this result in two ways. First we assess whether the effect of gold price variation affects other types of crime. We find no significant effect for those crimes that are the most likely substitute for burglary. Second we investigate whether our findings are driven by characteristics which may be correlated with the proportion of South Asian households in a neighbourhood, the concern being that if areas with a large proportion of South Asians are systematically poorer or more ethnically diverse than comparison areas then our results will simply represent changes in these areas. We find that our result remains robust with the inclusion of additional interactions for other ethnic groups and social class.

The remainder of the paper is structured as follows. Section 2 describes the data used in the analysis and the empirical methodology. Section 3 presents the results, and section 4 concludes.

2 Empirical Strategy and data

Our aim is to evaluate to what extent criminals react to price changes when deciding which areas to target. Intuitively, our identification strategy relies on the common perception in the UK that families of South Asian descent keep a substantial amount of gold in their houses.[4] The expected gains from targeting these households for burglaries consequently change with the gold price. If gold prices are high, burglars should become more likely to shift their efforts towards areas containing a large number of South Asian households, which we define as those identifying themselves as Bangladeshi, Indian and Pakistani (BIP) households, i.e., a large number of potential targets. This setup leads to a difference-in-differences type of situation where the variation in the share of these households across areas creates cross-sectional variation, while changes in the gold-price lead to longitudinal variation in the intensity of treatment.

Specifically, we estimate regressions of the type

$$y_{ict} = \alpha_i + \gamma_{ct} + \tau * (BIP_i * GP_t) + \epsilon_{ict} \tag{1}$$

where i indexes neighbourhoods nested within local authorities, c,[5] and t indexes time, in our case month of year for the time period January 2011 to December 2015. The outcomes y_{ict} are measures of the prevalence of various types of crime for the respective neighbourhood in a given month and year. Our preferred and most comprehensive specification includes neighbourhood fixed effects α_i as well as local authority-time fixed effects γ_{ct}. Our effect of interest τ is identified using a combination of the South Asian share in the respective neighbourhood BIP_i and a variety of measures for the gold price in a month GP_t.

Our measure of a neighbourhood is a lower-layer super output area (LSOA). LSOAs are relatively small spatial units with a minimum population of 1,000 (with a mean of 1,500), equal to approximately 650 households. They are designed for the publication of census data and are stable over time. At present, there are 34,753 LSOAs in England and Wales.

It is important to be clear where the identifying variation in (1) is coming from and what potential biases might arise from this specification. Firstly, the share of South Asian households may be correlated with other factors such as local deprivation or education levels that in itself might influence crime rates. Given the relatively short observation period, these factors should be captured by the inclusion of a vector of LSOA fixed effects, α_i. Secondly, changes in the gold price will

[4] Media reporting of the gold holdings by South Asian is common, see e.g., The Guardian (2012); Surrey News (2014).

[5] Local authorities are the basic level of local government in the UK and are roughly equivalent to US counties. They usually consist of a city or amalgamations of smaller towns and rural areas. London as a special case is split into multiple boroughs. There are a total of 348 local authorities in England and Wales. The average local authority contains 100 LSOAs with a range from 1 (Isle of Scilly) to 639 (Birmingham).

likely be correlated with a range of variables changing over time, such as general economic conditions. To account for this possibility, we include local authority-time fixed effects γ_{ct}, which will also account for all changes in local labour market conditions. Our effect of interest τ is then identified using the differential impact of changes in the price of gold on crime across areas with different shares of South Asian households. Any threat to identification would come from changes over time that are (a) correlated with the development of gold prices and (b) with the neighbourhood share of South Asian households. Prime candidates would be any policies that are targeted at ethnic minorities or potentially just general welfare policies. To test for this possibility we check for the stability of our main estimate of interest when including interactions between the gold price and two alternative definitions of the treatment variable, namely the share of households with black ethnicity and the share of households in the two lowest social groups of the British social structure classification, namely groups D "Semi-skilled and unskilled manual workers", also often labelled "working class", and E "Casual or lowest grade workers, pensioners, and others who depend on the welfare state for their income".[6] Finally, we also test for potential delays in criminals' reaction to changes in the gold price using interactions between lags of the gold price and our indicator for treated areas.

Our outcome data comes from www.police.uk, a website created and maintained by the British police that provides crime maps down to the street level for the whole of England and Wales. In principle the location of a crime is recorded with exact coordinates, however, in the published data locations are slightly coarsened for anonymisation reasons. This potential measurement error is inconsequential in our case as the LSOA in which the crime was committed is exactly measured in the data.

Outcomes are measured on a monthly basis by the counts of recorded offences in several categories, specifically "anti-social behaviour"[7], "burglary", "criminal damage and arson", "drugs", "other theft", "other crime", "public disorder and weapons", "robbery, shoplifting", "vehicle crime" and "violent crime". Not all of the categories are measured consistently over the observation period. "Criminal damage and arson", "drugs", "other theft" and "shoplifting" have been separate categories only since mid-2011 and were part of "other crime" before. "Public disorder and weapons" also underwent several changes - until mid-2011 it was

[6] This classification is derived from census data by the Office for National Statistics and splits the UK population into 6 groups based on the employment of the household head. The remaining four groups are A "Higher managerial, administrative or professional" (often labelled "upper middle class"), B "Intermediate managerial, administrative or professional" ("middle class"), C1 "Supervisory or clerical and junior managerial, administrative or professional" ("lower middle class") and C2 "Skilled manual workers" ("skilled working class").

[7] The notion of anti-social behaviour was introduced in the Crime and Disorder Act 1998 with some later changes through the Anti-social Behaviour Act 2003. It basically describes acting "in a manner that caused or was likely to cause harassment, alarm or distress to one or more persons not of the same household as himself" (the perpetrator) (Part I, Chapter 1, Section 1 of the Crime and Disorder Act 1998).

part of "other crime" and since mid 2013 it has been split up into two separate categories "public disorder" and "possession of weapons". Theft also undergoes several changes with "bicycle theft" and "theft from the person" being split from "other theft" towards the end of 2013. We mainly focus on burglaries, which is consistently measured across the observation period. In addition, we also provide some results for "anti-social behaviour", "violent crime", "vehicle crime", "total crime" and "non-violent crime other than burglary" (including robberies). We convert crime counts to crime rates per 100 population using small area population data from the 2011 census.

The share of South Asian households in an area is taken from the 2011 census, which is the only source for population data on the LSOA level available in the UK. Criminological theories of burglaries, namely optimal foraging, suggest that burglars first pick an an area that they consider to be attractive and then commit a series of burglaries in that area before moving on. Given this we would not expect burglaries to depend on the share of South Asian households in a linear manner. Instead we can expect that there is a certain visibility threshold that suggests to a prospective burglar that there is a high enough share of potential target households in a neighbourhood. In most specifications, we simply operationalise this as a LSOA having a South Asian share above the 90th percentile in England and Wales. Given that this classification is admittedly arbitrary, we also provide evidence where we split areas into four groups, namely those with a South Asian share below the median, between the median the 75^{th} percentile, between the 75^{th} and 90^{th} percentile and above the 90^{th} percentile.

Finally, we use various measures of gold prices. Our first measure is simply the Bank of England (BoE) headline figure in Pound Sterling. While this measure is reliable, regularly published in newspapers and consequently easily available to members of the public, we cannot know whether potential criminals inform themselves of current gold prices from this source. Furthermore, the BoE headline price may not accurately reflect prices commanded away from the official gold markets. We therefore use a further measure based on google search trends, namely the number of searches in a given month and year for "cash for gold", as an indicator of interest in resale prices of gold jewellery. Figure 1 plots the corresponding time series. As we can see the series for the BoE headline figure and the number of google searches appear to follow a similar trend with a correlation coefficient of 0.74.

(Figure 1 about here.)

Table 1 provides descriptive statistics for our estimation sample. To highlight a few important points: Both our gold price measures vary significantly over time. We also contrast the share of South Asian households in all LSOAs with the corresponding share in areas that we consider to be treated in our preferred specification. In our treated areas the share of South Asian households is on average 30% (with a range from 12% to 98%), which suggests that a high enough presence of these households to make these areas identifiable as being rich in target households by

a potential burglar. Crime rates are generally fairly small in absolute numbers, which is not surprising given the small areas we consider in this paper.

(Table 1 about here.)

3 Results

3.1 Main Results

First we assume that areas in the top decile of the share of South Asian nationwide are treated. Table 2 reports estimates for the interaction between a LSOA with a high density of South Asians, the treatment, and approximations for the returns to stolen gold goods. The share South Asians, measured by individuals identifying themselves as Bangladeshi, Indian or Pakistani in the 2011 census, is assumed fixed over the five-year period covered by the data. All specifications allow for LSOA fixed effects and thus control for characteristics of the LSOA that are constant over time and may affect burglary rates. Note that this includes the share of South Asians in the population, so our estimates identify whether the price of gold affect burglary rates in LSOAs with a high concentration of South Asians, not whether those areas have permanently different levels of burglaries. Similarly, we control for month/year fixed effects which capture any nationwide trends in crime. These time effects would capture, among other things, whether the gold price has an overall impact on burglary rates To summarise, the interaction between gold price and an indicator of high South Asian density captures the behaviour of criminals, and in particular, whether they relocate their efforts towards areas with higher expected pay-offs when prices for the expected stolen goods increase.

(Table 2 about here.)

The top panel of Table 2 uses the Bank of England gold price as an indicator of the resale value of gold jewellery. As far as a potential burglar is concerned, this price is exogenously given and not affected by the local preference for gold in the LSOA. As such the estimate can be interpreted as the causal effect of gold price on the additional risk of suffering a burglary in a neighbourhood with a high density of South Asians. We find that an increase in the price of gold by £100 per ounce of gold (approximately one standard deviation), increases the burglary rate by an additional 0.003 per 100 individuals in areas with a high South Asian density. This increase is equal to approximately 5% of the mean burglary rate in our sample.

We have so far assumed that time trends are uniform across the country. We now assume a less restrictive assumption and allow time trends to differ by local authority. As such, we now account for area specific time effects and only use variations in the ethnic compositions between LSOAs within a local authority. Since the local authority specific trends account for a large amount of the variation in

crime over time, the estimates on the effect of the interaction of gold price and ethnic composition are much reduced. An increase in the price of an ounce of gold by £100 increases the burglary rate in neighbourhoods with a large South Asian population by 0.1 crime per 100 individuals over the crime rate observed in other LSOAs of the same local authority. This represents an increase equal to 1.5% of the mean burglary rate. In the third column we also report the corresponding specification using only data from the UK's largest city, London. The point estimate is identical to the one found on the full sample.

The bottom panel of Table 2 presents the corresponding estimates using google searches. Estimates are much smaller but we find a very similar general pattern that an increase in the number of search for "cash for gold" disproportionally increases the number of burglary in LSOAs with a larger share of South Asians.

To summarise, we have found evidence that areas with a large share of South Asians face a disproportionate increase in burglary risks relative to other neighbourhoods in the same local authority when the price of gold increases. This supports the hypothesis that offenders are sensitive to variation in the return to crime and target households most likely to hold large quantities of high quality gold jewellery when the gold price is high.

3.2 Robustness Checks

We now assess the robustness of the findings that criminals react to exogenous change in the price of their expected loot. In Table 3) we report on estimates of the effect of gold price variation on other crimes in neighbourhood with a large share of South Asians. Our hypothesis is that changes in the gold price do not affect the expected returns to these criminal activities. We would expect there to be no relationship between gold prices and other crimes or potentially even a negative effect if criminals reallocate their effort away from these crimes and toward burglaries. Focusing on columns (2), which is our preferred specification including local authority-time effects, we indeed find no effect for vehicle crime, and a negative effect for anti-social behaviour, violent crime and even crime overall. The later is surprising, since an increase in the returns to some specific crime should not reduce crime overall. When focusing on crimes that are the most likely substitute for burglary, all non-violent crimes except burglary, we do indeed find no significant effect. The increase in crime in South Asian neighbourhoods when the gold price increases is observed only for burglary, which supports the hypothesis that offenders reallocate their efforts toward crimes whose returns have increased and not just towards neighbourhoods with an high proportion of ethnic minorities.

(Table 3 about here.)

There are some remaining concerns with our specification. The first is that the threshold of an area being in the top percentile distributions of South Asians is

somewhat arbitrary. While it seems plausible to assume that we need a visibly high share of South Asians in an area for that area to be considered attractive by potential burglars, it is not obvious whether that visibility threshold is reached at at the top percentile or at some other threshold. To test for this possiblity, we construct three dummies representing LSOAs in the top 10%, top 25% and top 50% of the distributions of South East Asians respectively. Table 4 reports the estimates from the interactions of these dummies with the price of gold. In the baseline model, there is a clear and increasing relationship between the share of South Asians in the LSOA and burglary rates when the gold price increases. Neighbourhoods in the top decile in the density of South Asians experience an additional increase in burglaries of 0.4 per 100 inhabitants when the price of an ounce of gold increases by £100. Areas in the top 25% and top 50% see increases of 0.26 and 0.1 respectively. When controlling for local authority specific time trends, the effect is dampened but remained significant for the LSOAs with the highest concentration of South East Asians.

(Table 4 about here.)

A second concern is that areas with a large population of South Asians are simply poor or particularly ethnically diverse neighbourhoods and that our results simply represent changes in burglary rates in these areas. To test for this possibility, we check for the stability of our effect of interest when additionally allowing for interactions between the gold price and indicators for areas being in the top percentile in terms of their black population as well as in terms of the population belonging to the two lowest social classes in the UK. Table 5 reports the results for our main coefficient of interest. For both specifications, we see that the our coefficient of interest remains essentially unchanged from the 0.0011 displayed in Table 2 when we include these additional interactions. Focusing again on our preferred specification, in column (2) we see that burglaries in neighbourhoods with a high share of South Asians increase by 0.0009 following a £100 increase in the gold price when including a corresponding interaction with the share black, by 0.0007 when including interactions with an area having a high share of lower social classes and by 0.0007 when including both. These results suggest that our main estimates represent a genuine increase in the burglary risks for South Asian neighbourhoods and do not just pick up burglary changes in ethnically diverse or poor areas.

(Table 5 about here.)

Finally, Table 6 allows for delays between the changes in the gold price and changes in the burglary rate. Both specifications for England and Wales show a pattern where changes in both the contemporaneous gold price as well as the gold price lagged by two months increase burglaries in South Asian neighbourhoods, while we obtain mixed results for other lags.

(Table 6 about here.)

4 Conclusion

This paper investigates whether criminals reallocate efforts towards potential targets with higher expected payoffs following exogenous changes in the potential price for stolen goods. Optimal foraging theory asserts that offenders concentrate efforts towards areas which are target-rich environments, in order to maximise the expected benefits from crime whilst minimising search effort and time. Our identification strategy relies on the common perception in the UK that families of South Asian descent keep a substantial amount of gold in their houses. The expected gains from targeting these households for burglaries consequently change with the gold price.

Our analysis indicates that areas with a large share of South Asians face a disproportionate increase in property crime relative to other neighbourhoods in the same local authority when the price of gold increases. This result suggests that criminals respond to exogenous changes in the potential returns to a crime by selecting areas with potentially more lucrative targets, behaviour consistent with optimal foraging theory. From a policy perspective our findings may be useful in the design of policing strategies to deter crime. When prices are high, overtly visible police patrols specifically around areas rich in potential targets may prove a successful deterrent.

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5 Figures and tables

Figure 1: Gold price measures over time

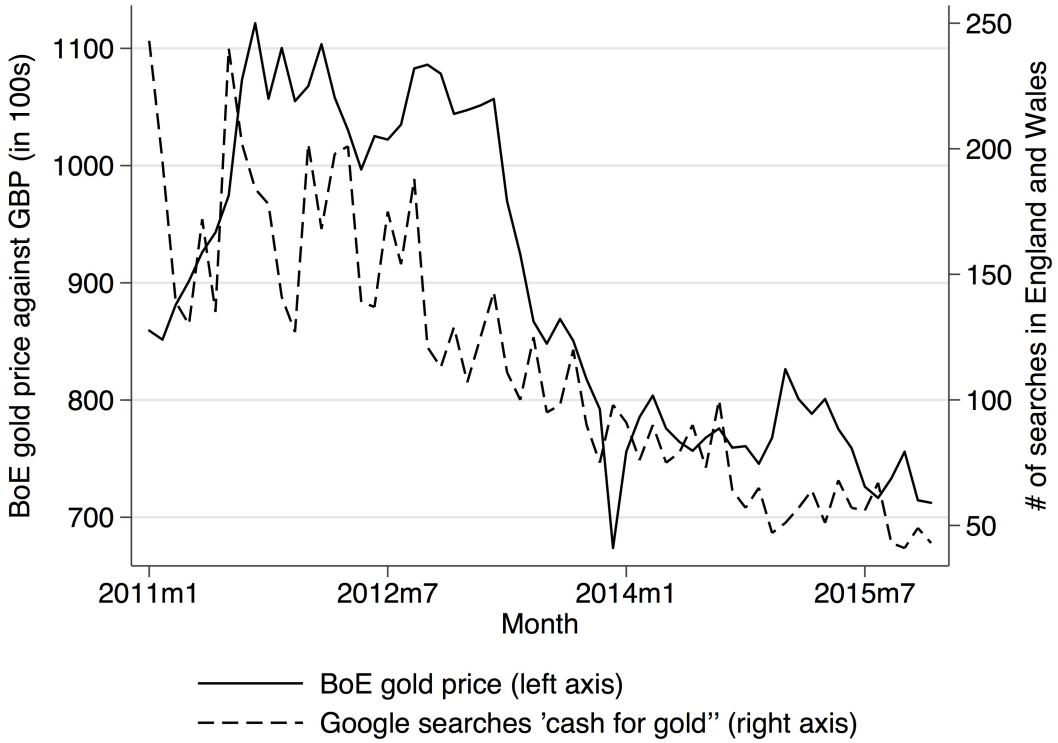

Table 1: Descriptive statistics

Variable	Mean	Std. Dev.	Min	Max
BoE gold price against Sterling (£100)	891.2	135.5	673.7	1121.5
Google searches "gold price"	140.5	33.3	100	249
Google searches "cash for gold"	114.2	53.3	41	243
Share of Bangladeshi, Indian and Pakistani households	4.97	10.79	0	97.5
Share of BIP households (areas above 90^{th} percentile)	31.42	18.05	12.4	97.5
Crime rates per 100 population				
Burglaries	.066	.091	0	4.61
Anti-social behaviour	.324	.454	0	24.12
Violent crime	.111	.189	0	11.53
Vehicle crime	.055	.084	0	3.79
Total crime	.855	1.226	0	73.45
Non-violent crime other than burglary	.270	.611	0	54.13
Observations ($N \times T$)		2,085,180		
# time periods		60		
# LSOAs		34,753		

Table 2: Main estimates, dependent variable: Burglaries per 100 population

	England and Wales		London
Treated area ×	0.0031***	0.0010***	0.0010**
BoE gold price (£100)	(0.0002)	(0.0002)	(0.0004)
Treated area ×	0.0008***	0.0002***	-0.0000
# Google searches for "cash for gold" (in 10s)	(0.0001)	(0.0001)	(0.0001)
LSOA fixed effects	Yes	Yes	Yes
Local authority-time FEs	No	Yes	Yes
Observations ($N \times T$)	2,085,180		290,100
# time periods	60		60
# LSOAs	34,753		4,835

Coefficients, standard errors adjusted for clustering on the LSOA-level in parentheses. */**/*** denote statistical significance on the 10%, 5% and 1% level respectively.

Table 3: Gold price and other crime, England and Wales

		Total crime	London
Treated area * BoE gold price	0.0074***	-0.0058***	-0.0055*
	(0.0018)	(0.0020)	(0.0033)
		Violent crime	
Treated area * BoE gold price	-0.0041***	-0.0047***	-0.0031***
	(0.0004)	(0.0005)	(0.0007)
		Non-violent crime other than burglary	
Treated area * BoE gold price	0.0038***	0.0001	-0.0052**
	(0.0009)	(0.0010)	(0.0021)
		Anti-social behaviour	
Treated area * BoE gold price	0.0025**	-0.0023**	0.0003
	(0.0010)	(0.0011)	(0.0016)
		Vehicle crime	
Treated area * BoE gold price	0.0012***	0.0004	0.0004
	(0.0002)	(0.0002)	(0.0004)
LSOA fixed effects	Yes	Yes	Yes
Local authority-time FEs	No	Yes	Yes
Observations ($N \times T$)		2,085,180	290,100
# time periods		60	60
# LSOAs		34,753	4,835

Coefficients, standard errors adjusted for clustering on the LSOA-level in parentheses. */**/*** denote statistical significance on the 10%, 5% and 1% level respectively.

Table 4: Alternative definitions of treated areas, Interactions with BoE gold price (in £100s)

	Burglary		
BIP share $\geq 90^{th}$ percentile	0.0039***	0.0011***	0.0007
	(0.0002)	(0.0003)	(0.0011)
BIP share $\geq 75^{th}$ & $< 90^{th}$ percentile	0.0026***	0.0002	-0.0003
	(0.0002)	(0.0002)	(0.0011)
BIP share $\geq 50^{th}$ & $< 75^{th}$ percentile	0.0012***	0.0001	-0.0005
	(0.0001)	(0.0001)	(0.0011)
LSOA fixed effects	Yes	Yes	Yes
Local authority-time FEs	No	Yes	Yes
Observations ($N \times T$)		2,085,180	290,100
# time periods		60	60
# LSOAs		34,753	4,835

Coefficients, standard errors adjusted for clustering on the LSOA-level in parentheses. Displayed is the coefficient for an interaction between a dummy for an area having a BIP share in trhe stated range and the BoE gold price against (in £100s) */**/*** denote statistical significance on the 10%, 5% and 1% level respectively.

Table 5: Estimates controlling for interactions with share black and share poor, BoE gold price (in £100s), dependent variable: Burglaries per 100 population

Controlling for interactions with Black share$\geq 90^{th}$ percentile		
Treated area BIP * BoE gold price	0.0023***	0.0009***
	(0.0002)	(0.0002)
Controlling for interactions with social classes D & E $\geq 90^{th}$ percentile		
Treated area BIP * BoE gold price	0.0030***	0.0007***
	(0.0002)	(0.0002)
Comparisons for both black and social classes		
Treated area BIP * BoE gold price	0.0022***	0.0007***
	(0.0002)	(0.0002)
LSOA fixed effects	Yes	Yes
Local authority-time FEs	No	Yes
Observations ($N \times T$)	2,085,180	
# time periods	60	
# LSOAs	34,753	

Coefficients, standard errors adjusted for clustering on the LSOA-level in parentheses. Displayed is the coefficient for an interaction between a dummy for an area having a BIP share in trhe stated range and the BoE gold price against (in £100s) */**/*** denote statistical significance on the 10%, 5% and 1% level respectively.

Table 6: Gold price lags and burglaries, England and Wales

	Total crime		London
Treated area * BoE gold price	0.0028***	0.0012**	0.0002
	(0.0006)	(0.0006)	(0.0011)
Treated area * BoE gold price (lagged 1 month)	-0.0008	-0.0013	-0.0008
	(0.0008)	(0.0008)	(0.0014)
Treated area * BoE gold price (lagged 2 month)	0.0031***	0.0032***	0.0030**
	(0.0008)	(0.0008)	(0.0014)
Treated area * BoE gold price (lagged 3 month)	-0.0018***	-0.0019***	-0.0011
	(0.0006)	(0.0006)	(0.0010)
LSOA fixed effects	Yes	Yes	Yes
Local authority-time FEs	No	Yes	Yes
Observations ($N \times T$)	2,085,180		290,100
# time periods	60		60
# LSOAs	34,753		4,835

Coefficients, standard errors adjusted for clustering on the LSOA-level in parentheses. Displayed is the coefficient for an interaction between a dummy for an area having a BIP share in trhe stated range and the BoE gold price against (in £100s) */**/*** denote statistical significance on the 10%, 5% and 1% level respectively.