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Quashing Demand Criminalizing Clients? Evidence from the UK

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ABSTRACT

Quashing Demand Criminalizing Clients? Evidence from the UK

We discuss changes in the demand for paid sex accompanying the criminalization of prostitution in the United Kingdom, which moved from a relatively permissive regime under the Wolfenden Report of 1960, to a much harder line of aiming to crack down on prostitution with the Prostitution (Public Places) Scotland Act 2007 and the Policing and Crime Act of 2009 in England and Wales. We make use of two waves of a representative survey, the British National Survey of Sexual Attitudes and Lifestyles (Natsal2, conducted in 2000-2001 and Natsal3, conducted in 2010-2012) to illustrate the changes in demand that have taken place across the two waves. We do not find demand decreasing in our sample and find a shift in the composition of demand towards more risky clients, which we discuss in the context of the current trends towards criminalization of prostitution.

JEL Classification: C35, J16, J22, K42

Keywords: criminalization, prostitution, demand

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1. Introduction

The question of how to regulate prostitution and whether it is or not a criminal activity has long been debated and diverse agendas about gender equality, the regulation of sexuality, personal self-determination, state protectionism, public nuisance and socio-economic disparity are all reflected in legal and policy responses at national state level, as well as the very name the activity takes (Della Giusta and Munro 2008; Scoular 2010). The language of 'prostitute' and 'prostitution' is typically aligned with abolitionist perspectives that see the sale of sex as entailing women's exploitation and the objectification, both by those who manage and create the opportunity for the sexual transaction as well as by those clients who make the purchase and maintain the demand. The language of 'sex workers' and 'sex work' has typically been preferred by those who emphasize women's agency in entering into commercial sex transactions (albeit under conditions of constraint) and who call for the regulation of the sale of sex as akin to sale of non-sexual labor or services. We deliberately use the two terms interchangeably in our work, as taking positions in the ideological debate is not our scope (Weitzer, 2005, presents an excellent summary of the arguments of both sides). Whilst moral philosophers and sociologists have for some time engaged in debates on commodification (see e.g. Sandel, 2012), economists have traditionally kept to their consequentialist moral stance and focused on finding the best way to make 'morally repugnant' transactions that have a benefit happen without eliciting such repugnance (Healy and Krawiec, 2017). Historical examples are the debates on blood donations (Titmuss, 1971; Arrow, 1972; Singer, 1973) and more recently on incentives to donate human organs (Cohen 1989; Hansmann 1989; Blair and Kaserman 1991; Kaserman and Barnett 2002), all of which, Healy and Krawiec point out, have stalled in the face of the difficulty of attributing moral costs against the benefits flowing from the trade, so that the more recent literature has instead focused on reducing the repugnance itself through adequate institutional design (e.g. Roth's in kind kidney exchange system; Roth,

2007), or reframing (Fiske and Tetlock 1997), management of negative effects through relational work or outright obfuscation (Rossman 2014). In the case of prostitution, it is interesting to note that the regulation is usually connected with democracy and economic and political rights for women, with the latter being associated with more permissive regimes towards non organized forms of prostitution (Elias et al. 2017). It is also true however that countries that view prostitution as female exploitation have moved towards increasingly punitive legislation towards male clients, expecting to see a reduction in demand and consequently in supply, but there is a huge debate regarding their success.

Euchner and Knill (2015) have attempted to characterize the evolution of regulation of prostitution in Western Europe since the 1960s, and noted that whilst until the late 1990s national rules converged on the paradigm that they define of 'permission without recognition' (prohibition of brothels and profit oriented third party activity but allowing activity in flats and on streets), a marked change has since occurred with countries diverging substantially. Germany, the Netherlands and Greece have moved towards acknowledging prostitution as a regular job on one side, and Sweden, Norway, Finland, France and Ireland have hardened their stance instead aiming to eradicate prostitution as a form of violence on the other side. In the first group of countries, the consideration of sex work as legitimate labor has led to shifting bans on outdoor and indoor prostitution subject to compliance with regulations (Netherlands since 2000, Germany since 2002). Sex workers are entitled to a number of employment related protections under the law and local authorities are required to ensure that brothels are suitably licensed and operating in accordance with relevant health and safety requirements. The abolitionist model, conversely, seeks to prohibit prostitution, facilitate exit and punish clients and has applied in varying degrees in the United States and, more recently, Sweden, Norway and Finland. In Sweden it is an offence, punishable by a fine or imprisonment for up to six months, to obtain a casual sexual relationship for payment. Both outdoor and indoor

prostitution are prohibited, although only the clients will be criminalized. As a result, the spotlight here shines squarely on the purchaser of commercial sex, and on criminalizing his role in creating demand for the sex industry. A key rationale behind this is that prostitution is a central manifestation of male violence against women, which in turn means that those who sell sex should not themselves be punished, since they are victims rather than criminals. True gender equality, it is argued, is attainable only when men are no longer permitted to buy, sell and exploit women in prostitution, and the Swedish government has coupled this legislative initiative with a number of outreach programs designed to assist women who wish to leave the industry (Kuosmanen et al. 2012).

The effects of the different regulatory regimes on the extent of the market and the welfare of those involved have been widely studied, although the lack of reliable data is often mentioned as a significant obstacle. The sale of sexual services is an activity carried out by women, men, and transgender individuals mostly, although not exclusively, to cater for male demand and has been widely studied in the social sciences along a variety of dimensions including identity and rights, violence, immigration, trafficking drug abuse, HIV risks, and sex tourism (Bettio, Della Giusta and Di Tommaso, 2017; Cunningham and Shah, 2016; Thorbek and Pattanaik 2002; Sánchez Taylor and O'Connell Davidson 2010; Pheterson 1995; Brewis and Linstead 2000). Supporters of the abolitionist approach cite its impact on demand, arguing that there has been a marked decline in the number of prostitutes working on Swedish streets, but there is also evidence that online prostitution has increased enormously and that there has been cross-border displacement too. One of the risks of abolitionism is that it may simply force relocation to less visible sites in which sex workers may be at increased risk of abuse, or drawn into a more competitive market in which they have to cut prices or offer riskier services to secure the business of a decreasing client base, and controversy rages over which effect has been prevalent in Sweden and neighboring countries, as reported in The Home Affairs

Committee Prostitution Enquiry Report published in July 2016[1]. Research on sexually exploited trafficked women (Di Tommaso et al., 2009, Bettio and Nandi 2010) shows that women who work in the streets are in some ways better off than sex workers in parlors, clubs or hotels. Street workers enjoy more freedom of movement, suffer less physical and sexual abuse, and are more likely to have access to health services than women who work in parlors, clubs or hotels. Agency is thus variable and it is critically affected by changes in regulation that move markets to less observable spaces. In the remainder of the paper we firstly discuss the role of stigma in prostitution, then we present policy predictions derived from a model of prostitution that includes stigma (Della Giusta et al. 2009) which suggests that increasing stigma will determine a change in the composition of clients towards those who are more risky for sex workers. We show that the increased stigmatization of prostitution that has taken place in the UK over the period 2000-2012, during which prostitution was progressively criminalized, indeed corresponds with no reduction in demand as the policy intended, and instead a change in the type of clients that are observed through successive waves of the British National Survey of Sexual Attitudes and Lifestyles, and conclude that this provides further support for the idea that criminalization is not likely to be conducive to decreases in demand as is hoped for, and might instead jeopardize the working conditions and safety of existing prostitutes.

[1] http://www.publications.parliament.uk/pa/cm201617/cmselect/cmhaff/26/2607.htm#footnote-046

The Swedish Sex Purchase Act: Where Does it Stand? Charlotta Holmström og May-Len Skilbreihttps://www.idunn.no/oslo_law_review/2017/02/the_swedish_sex_purchase_act_where_does_it_stand

2. Stigma and prostitution

The literature has approached a number of issues related to both selling and buying sex: prices and supply characteristics (Samuel Cameron, Alan Collins and Neill Thew et al 1999; Peter Moffatt and Simon Peters 2001; Lena Edlund and Evelyn Korn 2002; Samuel Cameron, 2002), demand determinants (Samuel Cameron and Alan Collins 2003), health risks and the effect of condom use on sex workers' earnings (Vijayendra Rao, Indrani Gupta, Michael Lokshin and Smarajit Jana 2001; Paul Gertler, Manisha Shah and Stefano Bertozzi 2003), the evolution of paid sex markets and the ways in which urban spaces favor sexual transactions (Alan Collins 2004), the effect of men in transit on the demand for paid sex (Scott Cunningham and Todd Kendall, 2011), the connections with trafficking (Maura Laura Di Tommaso, Isilda Shima, Steinar Strøm and Francesca Bettio 2009), the role of asymmetric information and transaction costs in bargaining over price and working conditions (Debra Satz 2010; Neha Hui 2012; Amy Farmer and Andrew Horowitz 2013), the effect of abolitionist policies on the composition of sex work (voluntary versus forced: Hendrik Sonnabend and Georg Stadtmann 2018).

Economic studies focusing on sex workers have engaged with compensation as partly reflecting compensation for social exclusion, risk (violence, disease, arrest, punishment), front loading in wage profile (informal pension scheme or insurance), boredom and physical effort, distaste (potential psychological and physical costs), loss of recreational sex pleasure, and anti-social and inconvenient hours. Economists have discussed prices, risks for both sex workers and clients, the role of taboos, and of agent fees (Cameron, 2002). More controversially, the wages of sex workers have been described as 'high' for a 'low skill' occupation and explained by the loss of position in the marriage market (Edlund and Korn, 2002).

Not many studies have focused on the demand side in great detail. However, existing studies of clients suggest that personal characteristics (personal and family background, self-

perception, perceptions of women, sexual preferences), economic factors (education, income, work), as well as attitudes towards risk (health hazard and risk of being caught where sex work is illegal), lack of interest in conventional relationships, desire for variety in sexual acts or sexual partners, and viewing sex as a commodity, are all likely in different ways to affect demand. The connection between the effort and costs associated with finding a sexual partner who would readily satisfy their sexual preferences, and the straightforward and readily accessible option of sex work features in motivations of male sex workers' clients in the UK (Coy, Horvath and Kelly, 2007; Campbell, 1998 and Sanders 2008), and of men and women clients in Australia (Pitts et al, 2004). Conservative views and viewing sex workers as socially inferior feature in accounts of clients in the West as in those of both female and male sex tourists (Thorbek and Pattanaik, 2002; Sánchez Taylor, 2001; Marttila; 2003) and the phenomenon is obviously not limited to paid sex exchanges, being widely documented across a range of personal services (see e.g. Ehrenreich and Hochschild, 2003). The theme of inequality appears to be at the core of the relationship: prejudices that allow the stigmatization of another person as fundamentally "different" and inferior to oneself appear again and again in customers' accounts (Ben-Israel et al. 2005; Pitts et al 2004; Kern 2000; Blanchard 1994). Significantly, neither this research on Australia, nor our work on the US (Della Giusta et al., 2007) found significant differences between men who had paid for sex and those who had not, but these were selected samples. When analyzing representative samples of the population which contain both clients and non-clients, differences begin to emerge (Della Giusta et al., 2016a and 2016b), and one can see clearly that sociodemographics, degree of conservativism and risk attitudes all play an important role in identifying demand.

The general economic model of the market for prostitution developed in Della Giusta et al (2009) attempts to take these stylized facts into account, hypothesizes that paid sex and freely exchanged sex are not perfect substitutes, and gives stigma and the capacity to resist it a

central role. Stigma is modelled following the sociological tradition (Goffman, 1963) as a burden which makes the stigmatized person suffer both psychologically and physically through diminished health, isolation and loss of income (for a discussion of stigma in sex work see Benoite et al. 2018). This resistance to stigma (called reputational capacity in the original model and discussed as a parameter) can be easily linked to agency, since the latter is what on the one hand mitigates the effects of stigmatization and on the other allows to clearly identify the role of individual factors in determining the conditions of the transaction. The role of agency and resistance to stigma for sex workers has been extensively discussed in terms of both the characteristics of the workers themselves (gender, age, ethnicity, appearance, drug addiction, family status, etc.) and the segments and locations in which they operate (Della Giusta, 2010; Weitzer, 2005) Clients' agency, which in respect to consumption of paid sex refers specifically to their ability to deploy strategies to consume paid sex when this is stigmatized and how they change if stigmatization increases or decreases, has been less the focus of discussion, although there are papers discussing the effects of criminalization on clients (Sanders and Campbell, 2008). In the stigma model, all agents care about their reputations because they derive direct material and immaterial utility (it is desired *per se* and can be used to access other earning opportunities) from a positive evaluation by others in the social groups they belong to (Granovetter 1985; Mansky 2000), and secondly, because they are aware of the costs that social sanctions may impose on their material progress (Akerlof 1980; Arnott and Stiglitz 1991). The model considers both the case in which reputational endowments are exogenous (that is not affected by behavior within the sex industry) and the situation when those endowments are endogenous, that is a situation in which if a higher quantity of prostitution is sold or bought in the economy the stigma effect decreases, following Akerlof's theory of social custom (Akerlof 1980). The model predicts that client will participate in the 'market' for paid sex if their marginal willingness to pay for exceeds the price of paid sex, plus

the marginal costs of a worsened reputation. The higher their ability to resists stigma, the lower is the marginal cost from reputation effects of consuming prostitution, and the more likely it is that prostitution is consumed. On the supply side, an individual will start to sell sex if the price of paid sex exceeds its opportunity cost, again in terms of reputation and alternative uses of one's time: the higher the price of paid sex, the more likely it is that an individual will supply prostitution; the lower the availability of alternative income, the more likely it is that the individual will take part in the prostitution industry; and the lower the effect of stigma on sex workers (again depending on the level of stigma associated with the activity and their agency), the more likely it is that prostitution will be sold. The equilibrium amount of prostitution sold and bought in the market is a function of the exogenous parameters: ability to resist stigma of sex workers and clients and other sources of income for sex workers.

Taking the abolitionist line of reasoning to the stigma model, one immediately realizes that if the rate of substitution in demand between paid and unpaid sex is constant, policies that increase the stigma associated with prostitution decrease the marginal net gain of supplying prostitution, and the marginal willingness to pay for prostitution. Abolitionists hope that this would have the effect of decreasing the price of prostitution and, given availability of alternative earning opportunities (if there are constant intermediation margins), also the quantity supplied, thus eradicating prostitution. Alternative earning opportunities may however be scarce, and systems are not closed, meaning that typically displacement is observed with immigration of illegal workers and out-migration of clients (sex tourism), alongside a flourishing of an underground market in which working conditions deteriorate and violence increases.

What is crucial is that demand may not fall either, and clients are not homogeneous in their sensitiveness to stigmatization: the evidence available to date (see Della Giusta et al 2017, Lazarus et al. 2012) shows that some care about the effects of stigmatization and some do not.

Arguably it is the former type of client that will be mostly affected by a hardening of sanctions, whilst stigma insensitive or worse stigma loving clients might actually increase their demand. Similarly, not all sex workers are in the same situation in relation to stigma: some can afford to care about it and others who have little alterative earning opportunity (the most marginalized already) less so. The former will expect higher compensation given the increased risks. The latter are unlikely to reduce supply but also not likely to be able to bargain for higher prices thus the overall effect on the quantity of prostitution exchanged post criminalization will depend on the balance between these two effects, as simplified in the table below:

Table 1: Effect of criminalization

	Stigma sensitive clients	**Stigma insensitive clients**	**Stigma sensitive sex workers**	**Stigma insensitive sex workers**	**Overall effects**
Quantity	-	= or +	-	= or +	?
Price	?	= or -	+	= or -	?

Stigmatization effects are thus mediated by clients' ability to resist stigma: less risk averse clients may be less deterred by the hardened consequences of being caught, and crowd out more risk averse clients who might be displaced to other less risky forms of sex consumption. Similarly, sex workers might respond to increased stigmatization by either finding other less risky ways of supplying their clients (moving indoors, using internet and using profiling, as found in Cunningham and Todd, 2011b) whilst those less able to resist stigma (and more vulnerable) might find themselves exposed to much worse working and bargaining conditions (heightened risks from operating the selection of clients).

3. Criminalizing prostitution in the UK

The UK has moved from a relatively permissive regime under the Wolfenden Committee Report in the late 1950s, according to which prostitution itself was not illegal, although many of the activities that facilitate or flow from both its street and off-street manifestations (including soliciting, kerb-crawling, controlling prostitution for gain, etc.) were criminalised, to a much harder line of aiming to crack down on prostitution with the Policing and Crime Act of 2009. As discussed in Della Giusta and Munro (2008) and Della Giusta (2009), the regulatory framework within which prostitution takes place in England and Wales has undergone significant changes in recent years and taken a decisively abolitionist turn, as the Swedish approach became popular with British policy makers. In 2004 the government conducted the Paying the Price consultation and the resulting legislation sought to introduce a markedly more negative stance towards the industry and clients in particular, and a view of sex workers as essentially victims. The Home Office prostitution Strategy for England and Wales (2006) contained as a key element 'tackling demand', which was seen alongside 'reducing supply' as crucial to eradicating street prostitution and challenging the view that street prostitution is inevitable. The Strategy formally endorsed measures such as prosecutions under the kerb crawling legislation, local media campaigns including 'naming and shaming' and 'kerb crawler re-education programs'. The Strategy also gave room to the implementation, in several parts of the country, of a raft of prosecution for kerb crawling offences, under the Sexual Offences Act 1985. The Criminal Justice and Police Act 2001 strengthened the previous regulation and made the offence arrestable, giving the courts have the power to disqualify drivers. Similarly, in October 2007, the policing Minister in Northern Ireland announced that kerb crawling would be introduced into law as a specific offence. In Scotland, the Prostitution (Public Places) Scotland Act 2007 came into force in October 2007; it criminalised 'loitering or soliciting in any public place for the purpose of obtaining the services of someone engaged

in prostitution.' (Sanders and Campbell, 2008). Finally, the Policing and Crime Act of 2009 includes a number of provisions including criminalization of soliciting and making it illegal to pay for services from a prostitute whom a third person has subjected to force, threats, coercion or deception to perform those services, irrespective of whether the customer knew or could have known about this exploitation and of the country where the sexual services are provided. Campaigning is now calling for paying for sex to be made a crime. The policy emphasises the harms that are deemed to be inherent in prostitution and insists that those who sell sex should be seen primarily as victims – unless and until they fall foul of this categorisation by refusing assistance to 'exit' and opting instead (whether by choice or circumstance) to continue to sell sex. In addition, it is based on the abolitionist conviction that reduction of women's involvement in sex work can be achieved by stricter enforcement of kerb-crawling laws that target clients.

The effects on sex workers have been very significant: Sanders and Campbell (2008) illustrate the implications of this shift for the rights, safety and working conditions of sex workers and the increase in their stigmatization. Here we want to see what has happened to the officially intended target of the policy, that is demand. We exploit two waves of the nationally representative British National Survey of Sexual Attitudes and Lifestyles based on interviews in the period 2000-2001 (Natsal 2) and 2010–2012 (Natsal 3) and look for any changes in the extent and composition of demand that can be detected. We are not able to conduct a causal exercise here, but we have conversely the benefit of representative data, which we believe illustrates the same effect found in the US (in the opposite direction of course) for the United Kingdom and lends further support to both our theory, and the idea that stigmatization is a dangerous route to pursue.

4. Changes in the demand for paid sexual services 2001-2012.

The National Surveys of Sexual Attitudes and Lifestyles ('Natsal') are stratified probability sample surveys of the general population, resident in Britain[2]. There have been three Natsal in 1990, 2000, and 2010, conducted by UCL in partnership with the National Centre for Social Research and the London School of Hygiene and Tropical Medicine. The first Natsal survey, conducted 1990-1991, was one of the largest of its kind internationally. 18,876 men and women aged 16-59 years were interviewed for 'Natsal-1', with results published in 'Sexual Attitudes and Lifestyles' (Johnson et al., 1994). A second Natsal survey was conducted in 1999-2001 ('Natsal-2'): 11,161 people aged 16-44 years were interviewed as a 'core' sample, and an additional 949 people of Black African, Black Caribbean, Indian, and Pakistani ethnicity interviewed as part of an ethnic minority boost sample. The third Natsal survey ('Natsal-3') was conducted in 2010-2012. More than 15,000 people aged 16-74 years were interviewed. We make use of the sample aged 25-44 for both Natsal2 and Natsal3, given Natsal2 had an upper age limit of 44. We focus on respondents aged 25+ as they should have finished their education. Respondents are asked if they have ever paid for sex (homosexual or heterosexual) and asked when they last paid for sex, grouped into: the last year, in the last five years, and longer than 5 years ago. We divide those who have ever paid sex into experimenters (only ever paid for sex with 1 partner) and regulars (paid for sex with more than 1 partner). For the age range we have sample size of 3,523 for Natsal2 and 2,149 for Natsal3. The sample size is larger for Natsal2 due to the fact only those aged 16-44 were interviewed, whilst Natsal 3 asked those aged 16-74. Weights are provided for unequal selection probability, and we make use of these where possible as robustness checks. We run separate models for Natsal2 and Natsal3 as the sampling methods were different. We want to exploit the policy change in 2009 – however since the policy change was universal we do not have a control group who did not experience

[2] http://www.ucl.ac.uk/iph/research/sexualhealthandhiv/tabs01/tab01

the policy change and hence cannot use a difference-in-differences approach. We therefore compare models before and after the policy change using Natsal2 prior to the policy change, and Natsal3 after the policy change. We also in some cases compare the 25-44 Natsal2 sample with a sample of men aged 35-54 (so the same age cohort from 2000-2001) in Natsal3 (sample size 1,478).

Adjusting means for the sample weights (so our estimates are representative of the UK population), the proportion of men (aged 25-44) reporting having ever paid for sex in Natsal 2 was 10.9% (unweighted 12.44) in Natsal2 and 13% (unweighted 13.37%) in Natsal3. Focusing on the five years prior to the interview, 4.64% (unweighted 6.04%) of men aged 25-44 had paid in the last 5 years in Natsal2 and 4.57% (unweighted 5.24%) in Natsal3. If we concentrate on men aged 35-54 in Natsal 3 this is 3.57% (unweighted 4.41%), so the recent demand for this cohort has decreased, but it is not possible to say if this is due to the policy or an ageing effect. Overall, however, the proportion having ever paid for sex has increased rather than fallen as the policy was intended to achieve.

Table 2. Demand changes in NATSAL

	NATSAL2	**NATSAL3**	**NATSAL3**	**NATSAL3**
	25-44	**25-44**	**35-54**	**25+**
NUMBER OF OBSERVATIONS	3.523	2.149	1.268	4.119
% EVER PAID FOR SEX	12,6	13,8	14,2	13,5
WEIGHTED % EVER PAID FOR SEX	*10,9*	*13,0*	*13,0*	*12,7*
NUMBER EVER PAID FOR SEX	*444*	*297*	*210*	*556*
1 TAILED T-TEST OF NATSAL2 AND NATSAL3 DIFF				
T-STAT	-1,3074	-1,505		
P-VALUE	0,0956	0,0662		

Note: the 35-54 t-test compares the 25-44 in natsal2.

Given our focus is on demand, and with the benefit of a representative sample, we can also investigate changes in types of clients: Table 3 below separates three groups: those who have

never paid for sex, those who have had just one paid partner, and those who have had several paid partners. The table shows a clearly significant difference between the groups across the two waves, suggesting a change in demand composition.

Table 3. Types of demand

	NATSAL2	NATSAL3		
	25-44	**25-44**	**35-54**	**25+**
OBS	3.523	2.149	1.268	4.119
% EVER PAID FOR SEX	6,07	5,35	4,33	4,49
WEIGHTED % EVER PAID FOR SEX	*4,65*	*4,58*	*3,57*	*3,81*
N EVER PAID FOR SEX	*214*	*115*	*64*	*185*
1 TAILED T-TEST OF NATSAL2 AND NATSAL3 DIFF				
T-STAT	1,1464	2,6221		
P-VALUE	0,1258	0,0044		

We now want to specifically see in what way such composition changes might be important to the trade (given we cannot observe supply or prices). We are interested in particular on the characteristics that we described in our theoretical model and namely the roles of education and stigma, the substitution between paid and unpaid sex, and the effect of attitudes and risky behaviours on demand. We model the three groups including: age dummies, current marital status (currently married, currently cohabiting, previously married/cohabiting), number of natural children (including stillborn and children who have died), ethnicity (white versus non-white), education (degree, A-level, O-level or none), socio-economic background (using the 2000 occupational definition for consistency between Natsal2 and Natsal3), whether religious, whether hold conservative views (sex between two men is always/mostly wrong; one-night stands are always/mostly wrong; adultery whilst married is always/mostly wrong), alcohol consumption (none, low, moderate/high), smoking (non-smoker, ex-smoker, light smoker, heavy smoker), whether had unsafe sex in last year, whether ever inject drugs, age first had

intercourse (those who have never had sex are omitted- 126 in Natsal2 and 74 in Natsal3), region (North East and North West combined with Yorkshire, West and East Midlands combined). Table A and A1 in the appendix show changes report of demand measured by 'whether paid for sex in last 5 years', comparing Natsal2 and 3 for the age range 25-44 and also Natsal3 restricted to the 25+, Natsal3 with income (which was sadly not included in Natsal2) and Natsal3 for the 34-54 sample (those who were therefore 25-44 at the time of Natsal2). We also report weighted results for robustness (results are not altered), presenting the means of our variables by client type to assess changes in relative proportions within each wave. Table 4 presents a Multinomial probit model of client types, with average marginal effects (an average across marginal effects for each individual), which provide the effect of a change in an explanatory variable on each of the categories.

Table 4: Non clients, one paid partner, many paid partners

	Natsal 2			Natsal3		
	never	One	many	never	one	many
Age group (ref: 25-34)						
Aged 35-44	-0.044***	0.004	0.040***	-0.019	-0.019*	0.039***
	[0.012]	[0.008]	[0.009]	[0.017]	[0.011]	[0.014]
Marital status (single and never married/cohabiting)						
Currently married	0.022	0.003	-0.025*	0.022	-0.013	-0.009
	[0.018]	[0.013]	[0.014]	[0.023]	[0.015]	[0.020]
Currently cohabiting	0.058***	-0.003	-0.055***	0.084***	-0.050***	-0.034
	[0.021]	[0.014]	[0.017]	[0.026]	[0.017]	[0.021]
Previously married/cohabiting	0.006	0.010	-0.015	-0.003	0.001	0.002
	[0.017]	[0.012]	[0.013]	[0.023]	[0.014]	[0.019]
Number of natural children (incl. stillborn and died)	0.017***	-0.008*	-0.009**	0.014*	-0.005	-0.009
	[0.006]	[0.004]	[0.004]	[0.008]	[0.005]	[0.007]
White	0.015	0.009	-0.024*	0.051**	-0.006	-0.045**
	[0.017]	[0.012]	[0.013]	[0.024]	[0.015]	[0.020]
Highest Qualification (ref: None)						
Degree	-0.054***	0.021	0.033**	0.020	0.000	-0.020
	[0.021]	[0.014]	[0.016]	[0.029]	[0.019]	[0.024]
A-level or equiv.	-0.072***	0.033**	0.039**	0.000	0.005	-0.005
	[0.021]	[0.014]	[0.017]	[0.030]	[0.020]	[0.025]
O-level or equivalent	-0.033*	0.011	0.022	0.002	0.006	-0.008
	[0.017]	[0.012]	[0.013]	[0.025]	[0.016]	[0.020]
Socio-economic class (ref: elementary, process, service and never worked)						
Managers and senior officials	0.002	-0.004	0.003	-0.024	0.001	0.022
	[0.017]	[0.012]	[0.013]	[0.024]	[0.016]	[0.020]
Professional	0.027	-0.018	-0.009	0.016	-0.009	-0.007
	[0.022]	[0.016]	[0.017]	[0.029]	[0.019]	[0.025]
Associate professional/administration	-0.005	0.010	-0.004	-0.032	0.015	0.017
	[0.017]	[0.011]	[0.013]	[0.021]	[0.013]	[0.018]
Skilled trade	0.000	0.007	-0.007	-0.035	0.017	0.018
	[0.016]	[0.011]	[0.013]	[0.021]	[0.013]	[0.018]
Conservative Opinions						
Religious	-0.020*	0.016**	0.003	-0.035**	0.007	0.028**
	[0.012]	[0.008]	[0.009]	[0.016]	[0.010]	[0.013]
Sex between two men mostly/always wrong	-0.019	0.007	0.012	-0.001	-0.010	0.011
	[0.012]	[0.008]	[0.009]	[0.016]	[0.011]	[0.013]
One-night stands mostly/always wrong	0.078***	-0.027***	-0.051***	0.034**	-0.002	-0.033**
	[0.013]	[0.009]	[0.011]	[0.017]	[0.011]	[0.014]
Adultery whilst married mostly/always wrong	0.009	-0.006	-0.003	0.071***	-0.018	-0.053***
	[0.013]	[0.009]	[0.010]	[0.019]	[0.012]	[0.015]
Risky Behaviour						
Average weekly alcohol consumption (ref: none)]						
Low	0.024	-0.015	-0.009	-0.043**	0.004	0.040**
	[0.018]	[0.012]	[0.014]	[0.020]	[0.013]	[0.017]

Moderate/high	-0.006	-0.012	0.018	-0.081***	0.004	0.077***
	[0.022]	[0.015]	[0.017]	[0.029]	[0.019]	[0.024]
Smoking (ref: never smoked)						
Ex-smoker	-0.009	-0.017	0.026**	-0.018	0.031**	-0.013
	[0.016]	[0.012]	[0.012]	[0.020]	[0.012]	[0.017]
Light smoker	-0.018	0.016	0.002	-0.036*	0.020	0.016
	[0.015]	[0.010]	[0.012]	[0.019]	[0.012]	[0.016]
Heavy smoker	-0.031**	0.025**	0.006	-0.048**	0.011	0.037**
	[0.015]	[0.010]	[0.012]	[0.024]	[0.016]	[0.019]
Unsafe sex in last year	-0.095***	0.030***	0.065***	-0.013	-0.009	0.022
	[0.015]	[0.010]	[0.011]	[0.027]	[0.019]	[0.021]
Ever injected drugs	-0.044*	0.000	0.044**	-0.064	0.037*	0.026
	[0.026]	[0.019]	[0.019]	[0.039]	[0.023]	[0.033]
Age first had intercourse (ref: 16-17)						
Aged 13-15	-0.051***	0.007	0.044***	-0.050***	0.007	0.043***
	[0.014]	[0.009]	[0.011]	[0.018]	[0.011]	[0.015]
Aged 18-19	-0.005	-0.013	0.018	0.006	-0.008	0.002
	[0.016]	[0.011]	[0.012]	[0.021]	[0.013]	[0.017]
Aged 20+	-0.010	-0.016	0.027*	0.066**	-0.037**	-0.029
	[0.018]	[0.013]	[0.014]	[0.027]	[0.018]	[0.023]
Region (ref: North and Yorkshire)						
Midlands	0.000	0.004	-0.004	0.030	0.000	-0.031
	[0.019]	[0.013]	[0.015]	[0.024]	[0.016]	[0.020]
East	0.011	0.003	-0.014	-0.001	0.021	-0.020
	[0.025]	[0.017]	[0.020]	[0.027]	[0.017]	[0.023]
London	-0.030*	0.013	0.017	-0.055**	0.039**	0.016
	[0.016]	[0.011]	[0.013]	[0.025]	[0.016]	[0.021]
South East	0.028	-0.001	-0.027	-0.038	0.027*	0.011
	[0.021]	[0.014]	[0.017]	[0.024]	[0.015]	[0.020]
South West	-0.003	-0.020	0.023	0.007	0.018	-0.024
	[0.024]	[0.018]	[0.018]	[0.030]	[0.019]	[0.026]
Wales	0.049	-0.009	-0.040	-0.027	-0.004	0.031
	[0.033]	[0.022]	[0.028]	[0.036]	[0.027]	[0.028]
Scotland	0.047*	-0.018	-0.029	-0.039	0.023	0.016
	[0.026]	[0.018]	[0.021]	[0.028]	[0.018]	[0.023]
Observations	3,523	3,523	3,523	2,147	2,147	2,147
Log likelihood	-1499	-1499	-1499	-965.3	-965.3	-965.3
LR Chi2	249.1	249.1	249.1	157.3	157.3	157.3

Standard errors in brackets
*** p<0.01, ** p<0.05, * p<0.1

Clients after the policy change are more likely (as compared to Natsal2) to have many partners, be older, religious, consume alcohol and to have had intercourse at a younger age. Those who have just paid for one partner are fewer, not cohabiting, more likely to be ex-smokers and more likely to be in London.

All in all, although of course we cannot establish causal links, we can certainly observe that after the policy change in 2009 demand has, if anything, slightly increased and the profile of clients has changed to one who paid for many partners, who also have a risky profile that raises concerns (alcohol use and intercourse at early age), and has in fact already been discussed in the context of public health in Jones et al (2014).

Conclusions

As economists, we believe that public policy ought to be based on relative welfare considerations. In other words, under which arrangements are the actors, and the public, better off? Criminalisation typically hopes to quash demand, but the evidence is mixed, and ours, though not causal, not supportive. As more countries follow the model of criminalisation it will become possible to have a more careful assessment of its effects on welfare, but the case for it is certainly not clear cut. Sex workers, or prostitutes, face risks to their health, risks of violent assault, and risk of fraud (not getting paid for their services). Clients face also health risks, reputational risks and, where prostitution occurs in criminal environments, risks of violence too. These risks are going to be higher where prostitution is criminalised, partly because criminalisation makes collaboration with both medical personnel and law enforcement more difficult. Criminalisation of sex work also makes the detection of under-age or trafficked people more difficult. For both clients and for sex workers, demand-side and supply-side, criminalisation pushes the market into secluded and, for the workers, isolating places. Flats, clubs and massage parlours are more separate from the rest of society. The welfare of sexually

trafficked women decreases in these dangerous environments. Our analysis of the move towards criminalisation in the UK suggests that this has not decreased demand and possibly changed the profile of clients in ways that may worry those who are concerned about the welfare of prostitutes as well as public health. By and large, clients of sex workers tend to be risk-takers. There is a high correlation between paying for sex and engaging in other risky behaviours. To some of these men, criminalised prostitution is actually more attractive than decriminalised or legal sex work, and these are not the ones we necessarily want to encourage.

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Appendix

Table A1: Demand for paid sexual partners in Natsal2 and Natsal3

	Natsal2			Natsal3		
Variable	none	one	many	none	one	many
Age group						
25-34	0.51	0.55	0.45	0.65	0.75	0.59
35-44	0.49	0.45	0.55	0.35	0.25	0.41
Marital status						
Currently married	0.48	0.37	0.37	0.42	0.35	0.37
Currently cohabiting	0.16	0.14	0.09	0.22	0.10	0.15
Previously married/cohabiting	0.23	0.33	0.33	0.21	0.32	0.31
Single and never married	0.14	0.16	0.22	0.16	0.22	0.18
number of natural children (incl. stillborn and died)	1.20	0.87	0.87	0.91	0.70	0.87
White	0.85	0.84	0.79	0.87	0.85	0.83
exams2						
Degree	0.27	0.28	0.33	0.35	0.31	0.28
A level	0.11	0.17	0.15	0.14	0.16	0.15
O-level	0.43	0.40	0.39	0.41	0.42	0.43
None	0.18	0.15	0.13	0.10	0.10	0.14
Social economic background						
Managers and senior officials	0.19	0.18	0.21	0.15	0.14	0.16
Professional	0.12	0.07	0.12	0.14	0.08	0.08
Associate professional/administration	0.19	0.24	0.21	0.21	0.27	0.23
Skilled trade	0.20	0.21	0.17	0.17	0.22	0.20
elementary, process, service and never worked	0.31	0.29	0.30	0.33	0.30	0.33
Religious	0.44	0.48	0.45	0.38	0.41	0.44
Sex between two men mostly/always wrong	0.54	0.53	0.53	0.54	0.34	0.39
One-night stands mostly/always wrong	0.38	0.23	0.20	0.35	0.27	0.23
Adultery whilst married mostly/always wrong	0.81	0.76	0.75	0.88	0.80	0.75
Alcohol						
None	0.12	0.13	0.12	0.20	0.17	0.14
Low	0.74	0.70	0.67	0.72	0.73	0.71
Moderate/high	0.13	0.18	0.21	0.08	0.10	0.15
Smoking						
non-smoker	0.46	0.37	0.39	0.50	0.33	0.39
ex-smoker	0.17	0.11	0.23	0.19	0.27	0.16
light smoker	0.18	0.24	0.19	0.21	0.29	0.26
heavy smoker	0.20	0.28	0.20	0.11	0.11	0.18
Unsafe sex in last year	0.10	0.21	0.27	0.06	0.07	0.11
Ever injected drugs	0.03	0.04	0.07	0.02	0.06	0.04
Age first had intercourse						
13-15	0.25	0.33	0.35	0.27	0.34	0.43
16-17	0.39	0.39	0.28	0.36	0.40	0.31
18-19	0.20	0.17	0.21	0.21	0.19	0.18
20+	0.16	0.11	0.16	0.16	0.07	0.08

Region						
North and.	0.21	0.20	0.19	0.28	0.21	0.29
Midlands	0.15	0.15	0.13	0.18	0.11	0.12
Eastern	0.07	0.06	0.05	0.10	0.11	0.08
London	0.26	0.36	0.41	0.10	0.21	0.15
South East	0.12	0.11	0.07	0.12	0.15	0.14
South West	0.07	0.04	0.09	0.09	0.08	0.06
Wales	0.04	0.03	0.02	0.04	0.03	0.06
Scotland	0.08	0.05	0.04	0.08	0.10	0.10
No of obs.	3,079	187	257	1,852	105	190

Table A2: Paid for sex in last 5 years (unweighted)

	Natsal2 25-44	Natsal3 25-44	Natsal3 25-44 - income	Natsal3 25+	Natsal3 35-54
Age group (ref: 25-34)					
Aged 35-44	-0.000	0.001	0.003	0.002	
	[0.009]	[0.011]	[0.011]	[0.009]	
Aged 45-54				-0.001	-0.002
				[0.010]	[0.011]
Aged 55-64				0.001	
				[0.011]	
aged 65-74				-0.020	
				[0.015]	
Marital status (single and never married/cohabiting)					
Currently married	-0.051***	-0.061***	-0.066***	-0.054***	-0.045**
	[0.012]	[0.015]	[0.016]	[0.010]	[0.020]
Currently cohabiting	-0.058***	-0.068***	-0.073***	-0.067***	-0.071**
	[0.014]	[0.017]	[0.018]	[0.013]	[0.029]
Previously married/cohabiting	-0.013	0.007	0.007	-0.011	-0.013
	[0.011]	[0.013]	[0.013]	[0.009]	[0.020]
Number of natural children (incl. stillborn and died)	-0.009**	-0.009	-0.008	-0.006**	-0.006
	[0.004]	[0.006]	[0.006]	[0.003]	[0.004]
White	-0.004	-0.024	-0.027*	-0.028***	-0.021
	[0.012]	[0.015]	[0.015]	[0.011]	[0.018]
Highest Qualification (ref: None)					
Degree	0.021	0.011	0.007	0.013	0.032
	[0.015]	[0.019]	[0.019]	[0.012]	[0.020]
A-level or equiv.	0.022	0.009	0.006	0.021*	0.051**
	[0.015]	[0.020]	[0.020]	[0.012]	[0.021]
O-level or equivalent	0.012	0.008	0.007	0.018*	0.023
	[0.012]	[0.017]	[0.017]	[0.010]	[0.017]
Socio-economic class (ref: elementary, process, service and never worked)					
Managers and senior officials	0.009	0.021	0.018	0.018*	0.033**
	[0.012]	[0.016]	[0.016]	[0.010]	[0.015]

Professional	-0.016	0.005	0.001	0.012	-0.022
	[0.016]	[0.018]	[0.019]	[0.012]	[0.023]
Associate professional/administration	0.003	0.020	0.017	0.007	0.006
	[0.012]	[0.014]	[0.014]	[0.009]	[0.016]
Skilled trade	-0.007	0.018	0.018	0.004	0.008
	[0.012]	[0.014]	[0.014]	[0.010]	[0.016]
Conservative Opinions					
Religious	0.002	0.023**	0.025**	0.012*	0.018
	[0.008]	[0.010]	[0.010]	[0.007]	[0.011]
Sex between two men mostly/always wrong	0.008	0.028***	0.028***	0.012*	0.029**
	[0.008]	[0.010]	[0.010]	[0.007]	[0.012]
One-night stands mostly/always wrong	-0.035***	-0.002	-0.001	-0.007	-0.011
	[0.010]	[0.011]	[0.011]	[0.007]	[0.011]
Adultery whilst married mostly/always wrong	-0.014	-0.026**	-0.029**	-0.024***	-0.030**
	[0.009]	[0.012]	[0.012]	[0.007]	[0.012]
Risky Behaviour					
Average weekly alcohol consumption (ref: none)]					
Low	-0.024*	0.020	0.018	0.018*	0.017
	[0.012]	[0.014]	[0.014]	[0.009]	[0.014]
Moderate/high	-0.011	0.026	0.023	0.030**	0.016
	[0.015]	[0.019]	[0.019]	[0.012]	[0.019]
Smoking (ref: never smoked)					
Ex-smoker	-0.004	-0.023	-0.021	-0.003	-0.013
	[0.012]	[0.015]	[0.015]	[0.008]	[0.014]
Light smoker	0.006	0.006	0.009	0.005	0.008
	[0.011]	[0.012]	[0.012]	[0.009]	[0.015]
Heavy smoker	0.014	0.013	0.017	0.002	0.008
	[0.011]	[0.015]	[0.015]	[0.010]	[0.016]
Unsafe sex in last year=1	0.066***	0.031**	0.036**	0.039***	0.015
	[0.010]	[0.015]	[0.015]	[0.009]	[0.016]
Ever injected drugs==1	0.035**	0.002	0.002	0.002	0.030
	[0.017]	[0.027]	[0.027]	[0.021]	[0.030]
Age first had intercourse (ref: 16-17)					
Aged 13-15	0.008	0.027**	0.026**	0.023***	0.023*
	[0.010]	[0.012]	[0.012]	[0.008]	[0.013]
Aged 18-19	0.001	-0.007	-0.006	0.005	0.006
	[0.011]	[0.014]	[0.014]	[0.009]	[0.015]
Aged 20+	0.016	-0.008	-0.007	-0.008	-0.010
	[0.012]	[0.016]	[0.016]	[0.011]	[0.018]
Region (ref: North and Yorkshire)					
Midlands	0.013	-0.032*	-0.033*	-0.009	-0.010
	[0.013]	[0.018]	[0.018]	[0.010]	[0.016]
East	0.012	0.010	0.007	0.008	0.002
	[0.017]	[0.017]	[0.017]	[0.011]	[0.017]
London	0.027**	0.009	0.007	0.009	0.012
	[0.012]	[0.016]	[0.016]	[0.011]	[0.019]

South East	-0.014	0.020	0.018	0.021**	-0.004
	[0.016]	[0.015]	[0.015]	[0.010]	[0.017]
South West	0.000	0.007	0.002	-0.003	-0.018
	[0.018]	[0.020]	[0.020]	[0.013]	[0.023]
Wales	-0.029	0.020	0.020	-0.005	-0.053
	[0.026]	[0.022]	[0.022]	[0.016]	[0.036]
Scotland	-0.032	0.017	0.016	0.010	-0.014
	[0.021]	[0.017]	[0.017]	[0.012]	[0.022]
Income group (ref: <10,000)					
10,000-19,999			-0.014		
			[0.020]		
20,000-29,999			0.003		
			[0.019]		
30,000-39,999			0.035*		
			[0.019]		
40,000-49,000			0.034*		
			[0.021]		
50,000+			0.014		
			[0.020]		
Not answered			0.029		
			[0.019]		
Observations	3,523	2,149	2,149	4,119	1478
Log likelihood	-699.6	-383.6	-377.9	-660.1	-228.2
LR Chi2	214.5	130	141.4	189.6	70.65
pseudo r-squared	0.133	0.145	0.158	0.126	0.134

Standard errors in brackets

*** p<0.01, ** p<0.05, * p<0.1

Table A3: Paid for sex in last 5 years (Weighted Version)

	Natsal2 25-44	Natsal3 25-44	Natsal3 25-44 - income	Natsal3 25+	Natsal3 35-54
Age group (ref: 25-34)					
Aged 35-44	0.001	-0.003	-0.002	-0.000	
	[0.007]	[0.011]	[0.011]	[0.009]	
Aged 45-54				0.022	-0.001
				[0.017]	[0.018]
Aged 55-64				0.041**	
				[0.019]	
aged 65-74				0.016	
				[0.023]	
Marital status (single and never married/cohabiting)					
Currently married	-0.032***	-0.053***	-0.056***	-0.045***	-0.031*
	[0.010]	[0.014]	[0.014]	[0.009]	[0.017]
Currently cohabiting	-0.038***	-0.061***	-0.064***	-0.059***	-0.052**

	[0.012]	[0.015]	[0.015]	[0.012]	[0.021]
Previously married/cohabiting	-0.002	0.003	0.004	-0.010	-0.005
	[0.011]	[0.012]	[0.012]	[0.009]	[0.017]
Number of natural children (incl. stillborn and died)	-0.009**	-0.006	-0.005	-0.006**	-0.007*
	[0.004]	[0.005]	[0.005]	[0.002]	[0.004]
White	0.008	-0.024*	-0.026*	-0.030***	-0.031**
	[0.010]	[0.014]	[0.014]	[0.010]	[0.015]
Highest Qualification (ref: None)					
Degree	0.021	0.020	0.017	0.010	0.025
	[0.013]	[0.017]	[0.017]	[0.011]	[0.018]
A-level or equiv.	0.021	0.024	0.022	0.023*	0.039**
	[0.014]	[0.019]	[0.018]	[0.012]	[0.019]
O-level or equivalent	0.011	0.017	0.017	0.015	0.022
	[0.010]	[0.016]	[0.016]	[0.009]	[0.016]
Socio-economic class (ref: elementary, process, service and never worked)					
Managers and senior officials	0.004	0.008	0.004	0.016*	0.031**
	[0.011]	[0.014]	[0.015]	[0.010]	[0.014]
Professional	-0.020	0.003	-0.002	0.010	-0.016
	[0.015]	[0.017]	[0.017]	[0.011]	[0.018]
Associate professional/administration	-0.003	0.015	0.011	0.004	0.008
	[0.010]	[0.013]	[0.013]	[0.009]	[0.013]
Skilled trade	-0.004	0.001	0.000	-0.002	-0.001
	[0.010]	[0.014]	[0.014]	[0.009]	[0.014]
Conservative Opinions					
Religious	0.009	0.016*	0.018**	0.009	0.014
	[0.008]	[0.009]	[0.009]	[0.006]	[0.009]
Sex between two men mostly/always wrong	0.005	0.030***	0.030***	0.010	0.025***
	[0.008]	[0.010]	[0.010]	[0.006]	[0.009]
One-night stands mostly/always wrong	-0.024***	-0.006	-0.006	-0.009	-0.011
	[0.009]	[0.010]	[0.010]	[0.007]	[0.010]
Adultery whilst married mostly/always wrong	-0.011	-0.025**	-0.027**	-0.021***	-0.021**
	[0.008]	[0.012]	[0.012]	[0.007]	[0.011]
Risky Behaviour					
Average weekly alcohol consumption (ref: none)]					
Low	-0.023**	0.014	0.012	0.012	0.015
	[0.011]	[0.012]	[0.012]	[0.008]	[0.011]
Moderate/high	-0.008	0.010	0.007	0.020*	0.015
	[0.013]	[0.017]	[0.017]	[0.011]	[0.016]
Smoking (ref: never smoked)					
Ex-smoker	-0.004	-0.023	-0.022	-0.005	-0.012
	[0.012]	[0.015]	[0.015]	[0.008]	[0.013]
Light smoker	0.010	0.003	0.004	-0.000	-0.002
	[0.010]	[0.011]	[0.011]	[0.008]	[0.012]
Heavy smoker	0.010	0.021	0.024	0.002	0.008
	[0.009]	[0.016]	[0.016]	[0.011]	[0.015]
Unsafe sex in last year=1	0.065***	0.019	0.021	0.043***	0.022

	[0.010]	[0.014]	[0.014]	[0.010]	[0.016]
Ever injected drugs==1	0.025	-0.003	-0.003	-0.002	0.023
	[0.017]	[0.025]	[0.025]	[0.018]	[0.021]
Age first had intercourse (ref: 16-17)					
Aged 13-15	0.002	0.027**	0.026**	0.024***	0.026**
	[0.009]	[0.011]	[0.011]	[0.008]	[0.011]
Aged 18-19	-0.009	0.000	0.002	0.008	0.007
	[0.010]	[0.013]	[0.013]	[0.008]	[0.012]
Aged 20+	0.017	-0.017	-0.016	-0.007	-0.012
	[0.011]	[0.015]	[0.015]	[0.010]	[0.015]
Region (ref: North and Yorkshire)					
Midlands	0.012	-0.038**	-0.039**	-0.007	-0.012
	[0.011]	[0.016]	[0.016]	[0.009]	[0.014]
East	0.009	0.004	0.000	0.001	-0.004
	[0.016]	[0.016]	[0.016]	[0.010]	[0.015]
London	0.026***	0.002	0.000	0.005	0.007
	[0.010]	[0.016]	[0.015]	[0.011]	[0.017]
South East	-0.009	0.011	0.010	0.019**	-0.000
	[0.013]	[0.015]	[0.014]	[0.009]	[0.015]
South West	0.004	0.001	-0.002	-0.006	-0.024
	[0.016]	[0.017]	[0.017]	[0.012]	[0.018]
Wales	-0.014	-0.010	-0.009	-0.021	-0.056*
	[0.021]	[0.019]	[0.019]	[0.015]	[0.030]
Scotland	-0.018	0.012	0.012	0.011	-0.002
	[0.018]	[0.017]	[0.017]	[0.012]	[0.017]
Income group (ref: <10,000)					
10,000-19,999			-0.014		
			[0.020]		
20,000-29,999			-0.005		
			[0.018]		
30,000-39,999			0.017		
			[0.018]		
40,000-49,000			0.011		
			[0.020]		
50,000+			0.013		
			[0.021]		
Not answered			0.014		
			[0.018]		
Observations	3,523	2,149	2,149	4,119	1478
Log likelihood	-682.1	-407.9	-405.1	-790.6	-344.8
LR Chi2	226.4	172.7	191.6	214.3	90.7
pseudo r-squared	0.147	0.151	0.157	0.14	0.147

Standard errors in brackets

*** p<0.01, ** p<0.05, * p<0.1