The Economic Returns to Good Looks and Risky Sex in the Bangladesh Commercial Sex Market*

Asadul Islam†

Russell Smyth

Department of Economics
Monash University

August 2010

Abstract

This study examines the economic returns to beauty and unprotected sex in the commercial sex market in Bangladesh. The results show that there is a beauty premium for commercial sex work, but it is within the bounds of the economic returns to beauty for women in occupations that do not involve sex work. We find that there is an earnings premium for sex workers who sell unprotected sex and that more attractive sex workers charge a higher premium for unprotected sex. This result is consistent with either attractive sex workers having more bargaining/negotiating power or attractiveness and risky sex being complements for males in the presence of attractive women. The results are robust to a number of empirical specifications including controls for sex workers' disposition, client characteristics and a number of fixed effects to control for other attributes of sex workers and their clients.

Keywords: sex workers, unprotected sex, beauty premium, Bangladesh.

JEL Classification: O12, J31

* We thank Nathalie McCaughey, Paresh Narayan, Ingrid Nielsen, Paul Raschky and Bob Slonim for helpful suggestions on earlier versions of this paper.
† *Corresponding author*: Asadul Islam, Department of Economics, Monash University, Caulfield Campus, VIC 3145, Australia. Email: Asadul.Islam@Buseco.monash.edu.au.

1. Introduction

Beginning with Hamermesh and Biddle (1994), there is a growing body of literature that estimates economic returns to beauty in different contexts (see eg. Biddle & Hamermesh, 1998; Hamermesh, 2006; Leigh & Borland, 2007; Price, 2008; Johnson, 2010). There are also a growing number of studies that estimate economic returns to commercial sex work (see Cameron *et al.,* 1999; Edlund & Korn, 2002; Rao *et al.,* 2003; Moffatt & Peters, 2004; Gertler *et al.,* 2005; Robinson & Yeh, 2006; Levitt & Venkatesh, 2007; Arunachalam & Shah, 2008, 2010; Edlund *et al.,* 2009; Della Giusta *et al.,* 2009, Logan & Shah, 2009). Hamermesh and Biddle (1994) pointed out that beauty should only matter in occupations in which looks are economically important. Commercial sex work should be one such occupation, given the nature of the service provided. However, to this point, the only study that has explicitly estimated the earnings premium for beauty in commercial sex work is Arunachalam and Shah (2010), who estimate the beauty premium for female commercial sex workers in Ecuador and Mexico. While one might expect the beauty premium for commercial sex work to be higher than for non-sex work, these authors find estimates that are similar in magnitude to the beauty premium for females not doing sex work. Considerable evidence from experiments suggests that attractive people are in a superior position when bargaining with others and that they are treated better because of their looks (see Mulford *et al.,* 1998; Eckel & Wilson, 2005; Solnick & Schweitzer, 1999). One possible explanation for this result might be that more attractive people are better negotiators (Rosenblat, 2008).

A feature of the commercial sex market, that is not evident in most occupations in which appearance matters, is that it is a high-risk occupation. HIV infection has been spreading rapidly among individuals engaging in high-risk sex practices and commercial sex workers are among the groups most at risk. Each day, over 20,000 people become infected with the

HIV virus worldwide, a large proportion of whom are infected through unprotected sex with sex workers (UNAIDS, 2009). Previous studies have found that sex workers receive a wage premium for engaging in unprotected sex (Rao *et al.*, 2003; Gertler *et al.*, 2005). That commercial sex work is a risky occupation, combined with the fact that attractiveness is potentially an important determinant of earnings potential, provides the opportunity to examine how attractiveness and risk interrelate to affect economic returns.

In lab experiments the stakes over which players bargain are relatively modest. In the commercial sex sector, given the risk of HIV infection and other STDs, the stakes are very high and potentially a matter of life and death. If attractive people have more bargaining power, perhaps because their negotiation skills are better, one would expect that more attractive sex workers would be able to charge a higher premium for supplying unprotected sex. One would expect the bargaining power of the attractive sex worker might be enhanced because of the setting in which the transaction takes place. Ditto *et al.* (2006) found that visceral cues indicating proximity to objects of desire can lead people to be disproportionately influenced by the anticipated rewards of immediate gratification, rather than the risks of consummatory behaviour. Males that are exposed to arousing sexual stimuli, such as the prospect of having sex with an attractive woman, having made the decision to engage a sex worker, are likely to overvalue the immediate returns of sexual gratification in order to gain what Buss and Schmitt (1993) call 'short-term opportunistic copulation'.

In a series of experiments Van den Bergh and Dewitte (2006) demonstrate that males exposed to arousing stimuli, such as viewing pictures of attractive women or handling lingerie, yielded lower minimum acceptance rates in subsequent ultimatum bargaining games. The authors argued that the presence of sex cues cause men to overvalue immediate rewards, and

thus become more willing to accept any offer at the expense of fairness norms. Wilson and Daly (2004) found that the prospect of sexual gratification generates steeper time discounting in males. Ariely and Lowenstein (2006) examined the effect of sexual arousal on decision-making of college-age males and found that, when aroused, males find a much wider range of sexual activities appealing; are more willing to engage in morally questionable behaviour to obtain sexual gratification; and are more willing to engage in unprotected sex.

In this paper we estimate the returns to physical attractiveness and risky sex for a sample of sex workers in Bangladesh. We find that there is a beauty premium for commercial sex work, but, consistent with Arunachalam and Shah (2010), it is within the bounds of the economic returns to beauty for women in other occupations. We find that the beauty premium is consistent with employer discrimination whereby the brothel madams contract for the services of better looking sex workers. Our results also indicate an earnings premium for sex workers who sell unprotected sex. More attractive sex workers receive a higher premium for selling unprotected sex. This result reflects the fact that more attractive sex workers have a higher opportunity cost of selling unprotected sex because their expected lifetime earnings are higher. Two potential explanations for this finding are that attractive sex workers have more bargaining power when negotiating the transaction price or that attractiveness and risky sex are complements in a client's utility function (Gertler *et al.*, 2005).

2. The Market for Commercial Sex in Bangladesh

Bangladesh is an interesting country to study the commercial sex market because HIV remains at relatively low levels for most-at-risk population groups. UNAIDS estimates that about 12,000 Bangladeshis were living with HIV at the end of 2007. This figure represents less than 0.1 per cent of the general population (World Bank, 2009). However, while the general prevalence of HIV is low, there are risk factors that could fuel the spread of HIV

among high-risk groups. Among the chief risk factors is Bangladesh's large commercial sex market. In 2000, the Bangladeshi High Court ruled that brothel-based female sex work is legal if the brothel is properly licensed, making Bangladesh one of the few Islamic countries that permits prostitution (BBC, 2000). There are 105,000 sex workers in Bangladesh; of whom about 100,000 are female sex workers. Most female sex workers are adolescents or young women, with the majority aged 15 to 18. In most cases, female sex workers will have retired by age 30 (Alam, 2010). More than 20,000 children live in brothels and red light districts in Bangladesh and many of the girls are expected to follow their mothers into prostitution. Younger children living in brothels help their mothers with household chores and serve refreshments to their mother's clients. Many girls enter prostitution in Bangladesh before the age of 12 (ECPAT, 2006). Based on ethnographic fieldwork, Brown (2005, 2007) and Orchard (2007) document the existence of successive generations of sex workers within the one family where mothers provide networks for their daughters introducing them to rich clients. Brown's (2005, 2007) research focused on elite prostitution in Lahore in Pakistan and Orchard's (2007) research centred on rural India, but the practice is similar in Bangladesh.

The two major categories of female sex workers in Bangladesh are those who work in brothels, and floating sex workers. Floating sex workers are either hotel-based or street-based. Brothel-based female sex workers see approximately 18 clients per week, while street-based and hotel-based sex workers see an average of 17 and 44 clients per week respectively (World Bank, 2009). There are 14 official brothels in Bangladesh and 18 official red light districts, which are mostly located in either the commercial centre of cities or at river junctions or seaports where there is a lot of through traffic and transient clients. Clusters of small rented rooms usually constitute a brothel, which is regulated by the local authority. There are typically large numbers of allies with cubicles on either side of the allies.

There is a clear hierarchy within the brothel (see Kotiswaran, 2008). At the top of the hierarchy are the local land owners (*jamidars*) who lease land to the homeowners (*bariwali*). The *bariwali* build housing that is rented to the brothel managers (*sardarnis*). The *sardarnis* employ *adhiya*, who in exchange for a place to stay, give half of their earnings to the *sardarnis*. The *sardarnis* will typically charge the *adhiya* sex worker extra for clothing, food and medical care and the *adhiya* bears the burden of illness. At the bottom of the hierarchy are bonded sex workers (*chukris*), who are bonded to the *sardarnis*. The *sardarnis* usually make a down payment to either agents who sell sex workers or the sex worker's relatives or associates for contracting the services of the sex worker. The *chukris* is required to work for the *sardarnis* until she earns enough for the latter to pay off the down payment. The conditions of work for the *chukris* are harsh as the *sardarnis* attempts to extract as much income as possible. The *chukris* has no time for leisure, often has no choice over clients or sexual practices and is unable to insist that the client uses a condom. When *chukris* sex workers have paid off their debts, they will often work for a *sardarnis* on an *adhiya* basis.

Condom use among clients of female sex workers in Bangladesh is variable. According to sixth round Behavioral Surveillance Survey (BSS, 2006-2007) data, condom use was 70 per cent for clients of brothels and ranged between 51 per cent and 81 per cent for clients of street workers. Condom use was lowest among hotel-based sex workers in Dhaka and Chittagong at 40 per cent and 36 per cent respectively. Hotel-based sex workers are particularly vulnerable to HIV as they have the largest number of clients. The higher rate of condom use in brothels reflects the fact that licensed brothels are legal, making it easier for health officials to distribute condoms (BBC, 2000). Consistent condom use with regular clients is lower for sex workers in brothels, hotels and on the street. Syphilis rates are relatively high among sex workers in all categories, but particularly among hotel and street-based workers, indicating the presence of risky sexual practices facilitating the spread of HIV (World Bank, 2009). One

estimate is that just 1 per cent of sex workers in Bangladesh are HIV positive (Hammond, 2008), although another estimate suggests as many as 40 per cent have an STD (Alam, 2010).

3. Data Description and Survey Design

The survey employed in this study was initially undertaken with the purpose of understanding the socio-economic profile and living circumstances of commercial sex workers in Bangladesh. It was administered by the Bangladesh Institute for Development Studies (BIDS) with financial assistance from UNDP in 2005, as a project under the auspices of the Ministry of Social Welfare in Bangladesh. The survey was administered with the assistance of NGOs working with the sex workers in the relevant geographic area. The first author was part of the research team which designed and administered the survey. The survey enumerators consisted of both males and females, each of whom was experienced in survey techniques. Separate sets of enumerators were used in each of the brothels and red light districts. Prior to conducting the interviews a training session was organized for the enumerators, focusing specifically on appropriate methods for interviewing sex workers. All interviews were conducted in a manner designed to engender a sense of confidence and self-respect in the sex workers and with particular recognition that some sex workers were underage. In addition to collecting information on a range of demographic and personal characteristics of the sex worker as well as detailed earnings and labour supply data, each enumerator was asked to assess the attractiveness of the sex worker from the perspective of a potential client on a scale of one to four. While acknowledging that this is a crude way of measuring beauty, given that it is likely to be a multidimensional construct by its very nature, unfortunately the survey does not contain a multidimensional measure of beauty. The measure used here is similar to that used in previous studies. For example, it is similar to the measure used in surveys of sex workers in Ecuador and Mexico, employed in the study by Arunachalam and Shah (2010).

The survey was administered in three official brothels and four official red light districts. The three brothels located in Daulatdia, Jessore and Mymensingh are among the largest brothels in Bangladesh. Daulatdia is the largest brothel in Bangladesh and one of the largest in the world. It is situated on the meeting point of two rivers, the Jamuna and the Ganges, about 100 kilometres from Dhaka. It is a hub for ferries and trucks queue here for two to three days to cross the river for the drive to Dhaka. The Daulatdia brothel is so large it is a village in its own right with a large number of alleyways containing 2,300 single-story rooms, used to service clients. In many respects it has the appearance of a normal village with a vast street market with lines of fruit and vegetable stalls. The only visible difference between Daulatdia and other villages in Bangladesh is the presence of large numbers of women on the street (Hammond, 2008). In Daulatdia there are more than 2,000 female sex workers who sell sex to approximately 3,000 men every day. Approximately 300 children live in Daulatdia with their mothers and most sex workers living in Daulatdia express the hope that their daughters will join them working in the brothel as soon as they are old enough (Hammond, 2008).

Jessore is located in South-west Bangladesh and encompasses three small brothels adjacent to each other; namely, Jhalai Patti, Marwari Mondir and Babu Bazar. Of these, Marwari Mondir is the largest and most profitable of the Jessore brothels. Jhalai Patti is in a state of disrepair and the least profitable, while Babu Bazar is in-between the two. The survey was administered in Jhalai Patti, Marwari Mondir and Babu Bazar. Mymensingh is located in the north of Bangladesh. It is relatively old and is situated at the centre of the city. The brothel at Mymensingh consists of eleven three-storied buildings and almost 100 tin-shed houses. There are approximately five hundred female sex workers living and working in Mymensingh.

The floating sex workers were mainly located in red light districts in Dhaka. Most had previously worked in brothels in Dhaka or in neighboring Narayangang Tanbazar and had

become floating after the brothels in which they had worked were dismantled by local authorities. There are several NGOs working with sex workers in these red light districts and the NGOs were crucial in securing the cooperation of the participating sex workers. The floating sex workers that participated in the study congregated in the red light districts in locations such as bus stops, parks railway stations, shrines and outside cinemas and markets. Most of these sex workers negotiated with their clients without the services of a pimp.

A total of 283 sex workers were interviewed, with about 40 sex workers from each of the brothels and red light districts. Hence, of the 283 sex workers surveyed, 123 were from the three brothels and the remainder were floating sex workers from the red light districts in Dhaka. The sampling was not completely random because the exact number and characteristics of sex workers in each location is not known. This is particularly true of floating sex workers, where a snowball sampling approach was used to select sex workers willing to be interviewed. Based on anecdotal accounts of the characteristics of this population, and independent surveys of sex workers in Bangladesh (see eg. Akm, 2005), we are relatively confident that this sample is fairly representative of sex workers in Bangladesh.

Table 1 presents descriptive statistics for the sample broken down according to whether the participants worked in a brothel or was floating. The mean age of sex workers in the brothels was 27.8, while the mean age of floating sex workers was 26.0. Hence, participants in the survey were slightly older than the average sex worker in Bangladesh. A plausible explanation for this phenomenon is that underage sex workers might not report their actual age. More than two-third of the sex workers in the sample are below 28 years old and the modal age is 23 years. The average length of time in the profession was 7.7 years for sex workers in the brothels and 12.3 years for floating sex workers. Hence, approximately 90 per cent SWs of the sample commenced sex work between the ages of 10 and 25, with about

three-quarters of the sex workers in the brothels commencing in the profession below the age of 18. The highest education level attained by the sex workers was generally low; 58.5 per cent had not completed primary school, 31.7 per cent had completed primary school, 7.5 per cent had completed secondary school and just 0.3 per cent had a post-secondary qualification. About one quarter (26 per cent) of floating sex workers were married or had been married in the past, while the corresponding figure for sex workers in brothels was much higher (67 per cent). About two-thirds of participants (66.5 per cent) had children. The mean number of children per participant was 1.15 and the mean age of the children was 9 years. Most of the sex workers in the sample were Muslim (96.1 per cent), with others being Hindu (2.1 per cent), Christian (0.7 per cent) and Buddhist (0.7 per cent). Overall, 6.4 per cent of participants reported that their mother had also been a sex worker, although for sex workers in brothels this number was 14 per cent, while for floating sex workers it was just 1 per cent.

Participants were asked to voluntarily report if they are infected with STDs such as gonorrhea, syphilis, hepatitis-B, genital warts or HIV -related illness. One quarter of sex workers in brothels and one-third of floating sex workers reported having had an STD. Just over one quarter of floating sex workers (27 per cent) and just under one half of sex workers in brothels (46 per cent) reported having regular health checks. About two-thirds of sex workers had been tested for HIV, while 80 per cent had regular blood tests. A high proportion of sex workers reported having had an abortion; 46 per cent of sex workers in brothels and 25 per cent of floating sex workers reported having had one or more abortions. The survey found that there were also several cases of miscarriage, although these were less than the number of abortions. On average, about 17 percent of sex workers had had one or more miscarriages.

In terms of beauty, on a scale of one to four where one is least attractive and four is most attractive, 19 per cent of sex workers were rated one, 43 per cent were rated two, 28 per cent were rated three and 10 per cent of sex workers were rated four. Sex workers in brothels were consistently rated more beautiful than floating sex workers. Floating sex workers see on average 4.4 clients per day, while sex workers in brothels see 4.05 clients per day. The average price per transaction charged by floating sex workers (96.4 taka or US$1.40 at 2005 exchange rates) is slightly higher than the average transaction price in brothels (82.9 taka or US$1.20 at 2005 exchange rates). Overall 69 per cent of sex workers reported that their clients regularly used a condom. Condom use in brothels (76 per cent) was higher than among floating sex workers (64 per cent). The average transaction price is higher for unprotected sex than for sex with a condom for both floating sex workers and sex workers in brothels. Floating sex workers work on average 20.4 days per month, while sex workers in brothels work 25.6 days per month. Hence, while sex workers in brothels charge less than floating sex workers per transaction, their monthly income from sex work is higher. Sex workers in brothels earned 7355 taka (US$113.3) per month, while floating sex workers earned 8776 takas (US$134.9) per month from sex work. Sex workers earn much more than females in the rest of the labour market. The median average monthly income for females in Bangladesh was less than 750 takas (or US$11.50) per month and just 1.5 per cent of females earned in excess of 7500 takas (or US$115.3) per month in 2005 (ADB, 2005).

The average number of clients per day that sex workers see and the age of the sex worker were inversely related. Sex workers aged 12-17 spend approximately 50 minutes with each client, while older sex workers spend more than one hour with each client. This result is consistent with findings for sex workers in the United States. Edlund *et al.* (2009) found that among high-end sex workers in the escort market, older sex workers who might otherwise be

considered less desirable, spent extra time with clients for each transaction. The average age of clients was 29.7 years with 86 per cent of clients aged 23-35. About 70 per cent of floating sex workers and 80 per cent of sex workers in brothels have permanent clients. In brothels, such as Daulatdia, the permanent clients often run shops within the brothel. The prevalence of unprotected sex with permanent clients is much higher than with casual clients.

4. Empirical Specification and Econometric Methodology

We regress log of monthly earnings from sex work on a variable depicting whether the sex worker is attractive (on a scale of one to four where 1= "not attractive" and 4= "most attractive") as assessed by the enumerator from the perspective of a potential client, a dummy variable equal to one if the sex worker practices safe sex and a series of control variables:

$$Ln\ W_i = \beta_1 X_i + \beta_2 Beauty_i + \gamma Condom_i + \varepsilon_{1i} \quad (1)$$

Here W_i is the average monthly earnings from sex work of sex worker *i*, $Condom_i$ is a dummy variable denoting if a particular sex worker practices safe sex, proxied by whether clients 'regularly use condoms', $\boldsymbol{X_i}$ is a vector of characteristics of the sex worker, β_1 and γ are vectors of unknown parameters, and ε_{1i} is an error term. The beauty term helps control for an important source of unobserved heterogeneity. Alternatively, it can be regarded as a measure of unobserved productivity in our context. We use average monthly earnings, rather than average hourly earnings, because sex workers in Bangladesh charge per act, rather than per hour. However, in estimating equation (1) we control for the average number of clients per day and number of days worked per month. We focus on average monthly earnings from sex work rather than price per act because discussions with sex workers indicated that price per act is fairly competitive. There is not a lot of variation in price per act between sex workers with different characteristics, in order to keep the price per act within the range of what the average client can afford. The main variation between sex workers with different

characteristics is in terms of the number of clients wanting to see them each day and the number of days they are in demand each month. In robust analysis, reported below, we also estimate Equation (1) with the price per act as the dependent variable. Estimating Equation (1) with price per act as the dependent variable is an important robust check because theoretically beauty might, in part, proxy for health measures not captured by our health variables, such as stamina, and healthy workers may be better placed to work longer hours. However, when we take price per act as the dependent variable, the main conclusions with respect to the earnings premium for attractiveness and unprotected sex remain the same.

In Equation (1) the vector of characteristics of the sex worker are human capital characteristics (age, education, experience, health status - have regular health check- ups, test for HIV, blood test, have an STD); labour supply and personal characteristics (marital status, children, religion, sterilized, use oral contraception, had abortion, miscarried, income from other sources, clients per day, days worked, number of partners in private sex life, sex worker is happy, sex worker suffers discrimination, sex worker is abused by police and whether the sex worker works in a brothel or is floating); sex worker's familial situation (mother was a sex worker, parents approve of their daughter being a sex worker) and client characteristics (has permanent clients, clients are rich, clients are attractive, clients use condom, sex worker charges less if clients use condom, client age and sex worker is abused by clients). The regressions also control for the sex worker's place of birth, occupation of her clients and type of sex act (anal, hand simulation, oral, vaginal or hugging and kissing). The regression results reported below also use fixed effects to control for specific brothels and red light areas. As separate enumerators were employed to interview sex workers in each brothel and red light district, this approach accounts for enumerators' unobserved characteristics. This is important

since enumerators may assess beauty in different ways and not controlling for enumerator fixed effects in this manner could potentially bias the attractiveness variable.

We expect the coefficient on beauty to be positive, consistent with the existence of an earnings premium for beauty. We expect the coefficient on condom use to be negative. Unprotected sex is a compensating wage differential for riskier work activities. Risks associated with the client not using a condom include STDs and HIV infection. Among the control variables, we expect the coefficient on age to be negative. Edlund and Korn (2002) hypothesis that sex workers' earnings follow a hump-shape pattern, reflecting foregone marriage market opportunities. Edlund *et al.* (2009) found support for this hypothesis in a sample of sex workers in the United States with wages peaking in the 26-30 age bracket, which coincides with the most intensive marriage ages in the United States. However, in Bangladesh, female sex workers commence working at much younger ages. Clients pay a premium for sex with adolescent and teenage girls with earnings dropping off once a sex worker is into her twenties. For example, Hammond (2008) reports that in Daulatida, underage sex workers can earn as much as 10 times more than sex workers in their twenties.

We expect a positive sign on the coefficient for education. Better educated sex workers have a higher opportunity cost. Education is likely to be positively correlated with communication skills and language proficiency and there is evidence that clients prefer literate and multilingual sex workers (Brown, 2007). Rao *et al.* (2003) found that sex workers in Calcutta who could speak English received an earnings premium. We expect there to be a positive correlation between good health and earnings as clients will be willing to pay a premium to reduce the risk of contracting an STD or HIV (Gertler *et al.,* 2005). We expect a positive sign on the coefficient for experience if one or more of the following is true: more experienced sex

workers are better at bargaining over price, there are selection effects over time (ie. the best performers remain in the profession), there is a learning by doing effect or older sex workers compensate for declining looks through increased effort (Edlund *et al.*, 2009).

We expect that sex workers who have been married will earn more than sex workers who have never been married. Most married sex workers in Bangladesh are in the profession because of an exogenous shock, such as fleeing a violent husband or because their husband has died (Wahed & Bhuiya, 2007). This suggests they may have attributes considered more desirable by potential clients than sex workers who have perhaps joined the profession because they failed in the marriage market (Rao *et al.*, 2003). We expect that sex workers who have children will earn more than sex workers without children for two reasons. First, many sex workers who have children have, at least initially, been successful in the marriage market and are in the profession as a result of an exogenous shock in that they have fled violent relationships to protect their children. Second, several studies have found that having children is a major cause of weight gain among women (see studies reviewed in Weng *et al.*, 2004). Mechanisms proposed to explain the association between number of children and weight gain in women are metabolic changes associated with pregnancy and physiological changes associated with accommodating living with small children, such as changes in diet and physical exercise. In Bangladesh the most attractive sex workers are regarded as those who are slightly overweight, while retaining their girlish good looks.

We expect that those sex workers whose mother was a sex workers will earn more because their mothers will provide them with networks and introduce them to rich clients. While this is likely to be less important among floating sex workers and at the bottom end of the market, there is much evidence that intergenerational networks are important among top-end sex

workers (Brown 2005; 2007). We expect that the average number of clients per day and average number of days worked per month will be positively correlated with average monthly earnings from sex work. Income from other sources should be inversely related with average monthly earnings from sex work because this reduces the need to engage in sex work.

The problem with estimating Equation (1) using ordinary least squares is the possible endogeneity of condom use, ie. $Condom_i$ may be correlated with the error term, ε_{1i} (see Rao *et al.,* 2003; Gertler *et al.,* 2005). The correlation between unobservables and the error term could arise for a number of reasons. Controlling for physical attractiveness using the beauty variable helps us to control for the most important source of bias as in most studies this is regarded as an unobservable attribute. Thus, we are not concerned with the endogeneity that arises due to positive correlation between attractiveness, condom use and potential earnings. However, there can be additional sources of unobserved heterogeneity other than the attractiveness of the sex workers which may bias the estimates of condom use. That is, conditioning on X and physical attractiveness, unobservables which are correlated with condom use could also be correlated with the potential earnings of sex workers. We therefore use the instrumental variable (IV) method to deal with potential endogeniety of condom use. In order to have a valid IV, it must be correlated with condom use, but it should not affect sex workers' wages or price per act, conditional on X and beauty, other than through its influence on condom use. It must also be uncorrelated with the error term in Equation (1).

We use participation in a safe sex training program as an instrument for condom use. Our approach is the same as that employed by Rao *et al.* (2003) in their study of the compensating differential for condom use among Calcutta sex workers, where a similar safe sex training program is in operation. There are 30 national NGOs and *samities* (cooperatives) working

with sex workers in the brothels and red light districts from which participants in the current study are drawn. The activities of the NGOs and *samites* range from capacity building, rights based activities and advocacy to increasing awareness regarding STDs and HIV infection. The major tool which NGOs and *samites* employ to promote safe sex practices is a flip chart that uses a series of pictures to explain the nature and progression of the HIV virus and how condoms can be used to prevent the spread of HIV. When the NGOs show the flip chart as part of a safe sex training session, they also leave free condoms and encourage sex workers to use them. We exploit the random manner in which NGOs contact sex workers and show them flip charts, in order to identify the effect of condom use. Specifically, in order to correct for endogeneity of condom use we apply a two-stage procedure of IV regression where the first-stage involves estimating the probability of condom use with the flip chart variable as the excluded instrument. We assume that the equation determining whether the clients of the sex worker regularly use a condom in a linearized form is:

$$Condom_i = \beta_2 \boldsymbol{X_i} + \delta S_i + \varepsilon_{2i} \quad (2)$$

Here S_i is a binary variable indicating if the sex worker *i* has seen the flip chart, β_2 and δ are vectors of unknown parameters, and ε_{2i} is an extreme value error term.

In order to show that viewing the flip chart is not correlated with unobserved attributes of sex workers, the NGOs must be shown to have adopted a nonsystematic strategy to contact sex workers to show them the flip charts. Interviews with representatives from the relevant NGOs suggested this was the case. NGO workers informed the BIDS team administering the survey that they visited the brothels and red light districts in an ad hoc manner and on some of these visits showed sex workers flip charts to educate them about condom use and HIV. The size and geographical layout of the three brothels that were sites for the study is consistent with these claims. The sheer size of the brothels at Daulatdia and Mymensingh, combined with

their ad hoc lay out, mean that there are sex workers with a full range of productive characteristics (such as age, attractiveness and health status) and hence earnings potential working in close vicinity to each other. These sex workers participate in the NGO safe sex training sessions, regardless of their productive characteristics. At the series of brothels at Jessore there are high-end and low-end brothels operating side-by-side. The NGOs workers visit these brothels without regard to the prices that the sex workers charge. The same is true for the floating sex workers in the red light districts of Dhaka where sex workers with different productive characteristics, and charging different prices, stand on the same street corner, or in the same park, with a view to soliciting clients. NGOs are interested in rights-advocacy and increasing HIV awareness among sex workers as a population and do not discriminate on the basis of the sex worker's income, age or other productive characteristics.

5. Results

Table 2 presents the first stage results for the determinants of condom use using Equation (2). The coefficient on the flip chart variable is positive and significant and this result is robust for various specifications including various combinations of control variables and fixed effects. Of the other variables, those sex workers who are health conscious – have regular blood tests and health check-ups – are more likely to have clients who regularly use condoms. Sex workers who reported that they charged less if their clients use condoms were less likely to have clients who regularly use condoms. Use of oral contraception has no impact on condom use, suggesting that condoms are not used for contraception, but for HIV prevention.

As we are using a single instrument, there is no formal test to check whether the IV is orthogonal to the error term. We use the predicted value of the condom use variable in the second stage, together with the flip chart variable, to examine whether viewing the flip chart

variable has any direct effect on earnings from sex work. The results, which are reported in Table 3, indicate that viewing the flip chart has no effect of the earnings of sex workers.

Table 4 presents the results from the IV estimates for Equation (1), including a range of control variables and fixed effects. The fixed effects include the sex worker's district of birth, specific brothels and red light districts, the occupation of the client (student, blue collar, white collar, unemployed) and the type of sexual transaction (eg. anal, hand simulation, oral, vaginal or hugging and kissing). Condom use has a strong negative relationship with average monthly earnings. Relative to sex workers whose clients regularly use condoms, the average monthly income of sex workers who have clients who do not regularly use condoms was between 81 per cent and 154 per cent higher depending on the exact empirical specification. The coefficient on beauty is positive and significant in each specification. The earnings premium for beauty is in the range 15 per cent to 20 per cent. This result is similar to what Arunachalam and Shah (2010) found for sex workers in Ecuador and Mexico and is in the same range as the earnings premium for beauty for females in non-sex work.

Of the control variables, the coefficient on education is positive and significant in the first specification, but this is not robust for the inclusion of additional control variables. Based on specifications (2) to (5), sex workers who have children earn 20 per cent to 26 per cent more than sex workers who do not have children. Sex workers who reported charging less if their clients use condoms earn between 45 per cent and 58 per cent less. For each additional client a sex worker sees on an average day, she earns 10 per cent to 11 per cent more, while for each additional day a sex worker works, she earns 6 per cent to 7 per cent more over the course of the month. There is an earnings premium for sex workers who are health conscious.

Sex workers who have regular blood tests earn between 45 per cent and 54 per cent more while sex workers who have regular health check-ups earn 38 per cent to 52 per cent more.

Beauty is potentially serving as a proxy for self-confidence or other characteristics that potentially command a premium in the labour market. Previous studies that have attempted to control for such characteristics have generally found that they have little or no effect on the beauty premium for non-sex work (see eg. Hamermesh & Biddle, 1994; Leigh & Borland, 2007). However, Arunachalam and Shah (2010) control for the sex worker's communication skills, personality and physical attributes, such as height and weight, and find that the beauty premium is reduced for sex workers in Ecuador and Mexico. We do not have data on physical characteristics of the participants, but in specifications (4) and (5) we include variables measuring self-reported happiness, discrimination and if the sex worker reports being abused by clients and the police. Respondents who report higher happiness, feel less discrimination and suffer less abuse by clients and the police are likely to have more pleasant demeanours or dispositions when interacting with clients. Of these variables, the only variable that is significant is police abuse. In specification (5) sex workers who report being abused by the police earn 32 per cent less than those who do not suffer police abuse. The beauty premium, though, is similar with the addition of these variables. This result suggests that to the extent that these variables proxy for the demeanour or disposition of the sex worker, controlling for this characteristic has little effect on the returns to attractiveness.

That the number clients a sex worker has is a major predictor of average monthly earnings suggests that there is an excess supply of sex workers. This is consistent with the point made above that that the sex worker industry is very competitive. It follows that competition may force the less attractive sex workers to exit the profession. If this is correct, the beauty

premium could manifest itself not only in wages, but also in who is in the industry at the time of the survey. As a result, the least attractive sex workers will not be sampled if they have already exited the industry. If this is the case, this may suggest a much higher premium to beauty than can be estimated with current sex workers. One way to examine this issue is to compare the beauty premium for sex workers whose mothers were, and were not, sex workers. If competition is forcing less attractive sex workers out of the industry, we would expect that beauty would be more important for sex workers who entered the industry without their mother's connections. However, this does not seem to be the case. Of the 283 sex workers, just 18 have mothers who were also sex workers. We do not find that sex workers without mothers in the industry were more attractive than sex workers whose mothers were also sex workers. Rather, we find that sex workers with mothers in the industry were more attractive (average attractiveness on a scale of 1-4 was 2.72 for sex workers with mothers in the industry as opposed to 2.25 for sex workers whose mothers were not in the industry). An explanation for this result could that in general more attractive girls will have more success in the marriage market, while less attractive girls will become sex workers, but girls whose mothers are sex workers will have less marriage opportunities because of the social stigma.

In Table 5 we present two-stage least squares (2SLS) estimates for Equation (1) in which we consider characteristics of the sex worker interacted with the flip chart variable as instruments for condom use rather than simply using the binary flipchart variable as an instrument. Based on the specification tests reported in Table 5, we conclude that the instruments satisfy the relevance and exogeneity conditions and, as such, are valid instruments. Interacting sex worker characteristics with the flip chart variable allows differences in characteristics of the sex worker to affect condom use through the flip chart variable. In addition to the control variables in Table 4, we interact the dummy variable for

brothel with both the beauty and condom variables to allow for differences between sex workers in brothels and floating sex workers. The average monthly income of sex workers who have clients who regularly use condoms was between 20 per cent and 30 per cent less depending on the specification. The interaction term brothel×beauty is statistically insignificant indicating that beauty has no differential effect based of whether one works in a brothel or as a floating sex worker. The results imply that the earnings premium for beauty is in the range 16 per cent to 23 per cent, which is similar to the results in Table 4.

Table 6 reports the IV estimates for Equation (1) where the dependent variable is the average transaction price, rather than average monthly earnings. While we only report the coefficients on beauty and condom use, the full specifications in each column correspond to the columns reported in Table 4. The coefficient on the earnings premium for beauty is positive and significant, indicating that this result is robust to the measure of economic return. The results suggest that the beauty premium per transaction is 11 per cent to 15 per cent. The coefficient on condom use is negative and significant in the first specification. The coefficient on condom use in specification (1) suggests that sex workers whose clients regularly use a condom earn 42 per cent less per transaction. This figure is a mid-point between the 24 per cent penalty for condom use reported in Gertler *et al.* (2005) and the 79 per cent penalty for condom use reported in Rao *et al.* (2003). The finding for condom use, however, is not robust to the inclusion of additional variables. Overall, the results for condom use in Table 5 indicate that sex workers whose clients regularly use condoms have fewer clients. We observe more significant results for economic returns to unprotected sex using monthly earnings which are determined by both average transaction price and number of clients/transactions.

Next we examine whether the earnings premium for beauty is due to employer discrimination (ie. employers derive a taste based utility for interacting with beautiful employees). If the earnings premium for beauty reflects solely employer discrimination, there should be no premium for the self-employed (Biddle & Hamermesh, 1998). In Bangladesh most floating sex workers make arrangements with clients without going through intermediaries (pimps), and, as such, can be regarded as self-employed. Sex workers in brothels (*adhiya* and *chukris)* are in a labour relation with the *sardarnis* and, as such, can be regarded as employed (Kotiswaran, 2008). In the case of the *adhiya,* the *sardarnis* take half the price per transaction in return for providing them with a room, while in the case of the *chukris*, the *sardarnis* contracts with an agent or the girl's relatives for the sex worker's services.

Table 7 presents beauty ratings and condom use according to whether the sex worker works in a brothel or is floating. Floating sex workers score lower on beauty. This finding is consistent with Arunachalam and Shah's (2010) findings for sex workers in Ecuador and Mexico. It suggests that the *sardarnis* might be discriminating against less attractive sex workers when employing *adhiya* or contracting for the services of *chukris.* There is weak evidence that floating sex workers earn more than sex workers in brothels. The coefficient on the dummy variable for brothels is negative and weakly significant in specification 4 in Table 3 and specifications 3 and 4 in Table 5, but it is insignificant in the other specifications. Moreover, when beauty is interacted with the dummy variable for brothel in Table 5, the interaction term is statistically insignificant, suggesting that the beauty premium for brothel sex workers and floating sex workers is not statistically different. Overall, these results are consistent with employer discrimination explaining the beauty premium.

Table 7 suggests that the prevalence of condom use is statistically higher for sex workers in brothels than among floating sex workers. On the surface, this might reflect different client

characteristics, but it cannot be explained on the basis of the extent to which sex workers in brothels and floating sex workers see permanent clients. Sex workers in brothels have more permanent clients than do floating sex workers (see Table 1). Moreover, when condom use is interacted with brothel in Table 5, the results suggest that average monthly income of sex workers in brothels whose clients regularly used condoms was considerably higher than floating sex workers whose clients regularly used condoms. This result is robust to the inclusion of a range of controls including client characteristics. This result might suggest greater acceptance of wearing a condom among men who frequent brothels compared with men who pay for sex with floating prostitutes; or it might mean that sex workers in brothels have more bargaining power than their floating counterparts when negotiating with clients over safe sex either because they are more attractive and, as such, are better bargainers or because brothels are a more controlled environment in which to complete the transaction.

In lab experiments, from which most of the evidence on the relationship between attractiveness and bargaining comes, the stakes are relatively minor. This is not the case in the commercial sex market in which the risk of being infected with HIV makes the stakes extremely high. If attractive people have more bargaining power, perhaps because they are better negotiators, it would follow that more attractive sex workers would be able to charge a higher premium for the risk of engaging in unprotected sex. Table 8 reports results where, in addition to beauty, condom use and the usual controls, we include as an additional regressor an interaction term between beauty and unprotected sex. The results for the interaction term between beauty and unprotected sex indicate that attractive sex workers receive an earnings premium in the range 23 per cent to 37 per cent for having unprotected sex.

There are at least two possible explanations for this result. One is that attractive sex workers have more bargaining power when negotiating the transaction price with clients. In this respect, more attractive people have been shown to be better placed to bargain with others, possibly because more attractive people are better negotiators (Rosenblat, 2008). Several arguments have been proffered linking one's looks with negotiating skills (Rosenblat, 2008). First, physical attractiveness and vocal attractiveness are correlated (Zuckerman & Driver, 1989). Hence, physically attractive people are likely to be regarded as more effective communicators. Second, physically attractive people receive more attention from parents, friends and co-workers, which can enhance their acquisition of social skills in childhood and adolescence (Hatfield & Sprecher, 1986). Because perceptions of physical attractiveness are stable through childhood and adulthood (Adams, 1977a, 1977b), it is likely that people considered to be good looking will have better communications skills when bargaining (Rosenblat, 2008). Third, attractiveness is a strong predictor of self-esteem, which, in turn, influences dominance behaviour, manifest in acting in an assertive manner when bargaining (Santor & Walker, 1999). Fourth, employers might regard attractive employees as more persuasive, even if the message that they are delivering has similar content to employees who are less attractive because a 'beauty-is-good' stereotype acts as a cue that enhances the effectiveness of attractive people as negotiators (Langlois *et al.*, 2000).

In the sociology literature, Hakim (2010) has recently introduced the term 'erotic capital'. While both men and women can have erotic capital, Hakim (2010) argues that women have more erotic capital and that this gives them a significant advantage in negotiations with men. While there are different aspects of erotic capital, beauty is a central feature. The main argument is that in choosing a mate men prefer women who are physically attractive, while women choose men who are desirable mates overall. Moreover, women are aware that being

attractive ‘buys’ desirable males. Hakim (2010) applies the concept of erotic capital to bargaining between partners in a couple. She argues that sexual access is typically wives’ principal bargaining tool. A wife might withhold or offer sex in order to persuade her spouse to give her what she wants (Arndt, 2009). This works because men’s demand for sexual activity exceeds that of women. Based on an extensive survey of myriad sources, Baumeister *et al.* (2001) concluded that male sex drive is more intense and uncompromising than female sex drive. While the transaction over sex in the marriage market is likely to be subtle, it is explicit in the commercial sex market. Hakim (2010) suggests that sex work is a prime example of an occupation in which attractive females are able to exploit their erotic capital.

Andreoni and Petrie (2008) found that attractive people are expected to be more cooperative; On the surface, this finding would suggest that clients would expect attractive sex workers to agree to unprotected sex over and above unattractive sex workers; making it, all-things-being-equal, more difficult for an attractive sex worker to charge a premium for engaging in the risky act because clients expect them to be cooperative. But all things are not equal and if attractiveness increases negotiating power, this might explain why attractive people can get away with being less cooperative. While it is not an issue we can address here, the relationship between being cooperative and negotiating power deserves further investigation. Alternatively, it may be that attractive sex workers are not, in fact, cooperative at all. Van Kleef *et al.* (2007) found that people with a peripheral group status within an attractive group send less cooperative messages to opponents than prototypical group members. If one considers that the very attractive are the peripheral of the sex worker group, then it follows that beautiful sex workers are more likely to demand 'uncooperative' higher premiums.

In the results it is difficult to isolate the returns to beauty because more attractive sex workers are selling a better product from the returns to beauty because more attractive sex workers are better negotiators. In brothels, both the *adhiya* and the *chukris* negotiate directly with the client. In a typical brothel, there are cubicles on either side of a throughway with sex workers out the front of each cubicle. The sex workers will attempt to persuade the potential client to enter into a transaction. Some additional information will sometimes be provided by madams or pimps to attempt to persuade the client (such as 'this girl is new to this brothel' or 'this is a good price'), but normally the madam will not get involved until the price is agreed. In the case of the *chukris*, though, the madam may get involved earlier and the ability of the *chukris* to negotiate is reduced because of the power relationship between the madam and sex worker. Floating sex workers in Bangladesh do not normally use pimps, so all negotiation with the client is done by the sex worker. Hence, it might be argued that negotiation by the sex worker is less important in agreeing on the price in brothels than on the street, particularly in brothels with a large number of *chukris*. On this basis, the results in Table 5 provide an indirect, and inexact, way to separate out the returns to productivity from the returns to superior negotiation. Consider two sex workers that are equally attractive, but one works in a brothel and the other on the street. One would expect returns to be greater on the street than in the brothel. On the street there is a given return to beauty from productivity plus a return to beauty from negotiation. In the brothel, there is a given return to beauty from productivity plus a lesser return to beauty from negotiation, assuming that direct negotiation between the sex worker and client is less important in the brothel. In Table 5, the coefficient on brothel interacted with beauty is negative, consistent with this conjecture, but the sign is statistically insignificant. However, it is not clear whether the sign is insignificant because returns to beauty from negotiation are not important over and above beautiful sex workers selling a

better product or because the brothel/floating sex worker distinction does not adequately capture the difference in economic returns between the productivity and negotiation effect.

Another explanation for this result is that attractiveness and risky sex are complements in the client's utility function (Gertler *et al.*, 2005). Evidence from experiments is consistent with the results here and suggests that risk taking behaviour among males increases in the presence of attractive females. Bertrand *et al.* (2009) found that males were much more willing to borrow money when the bank's advertising material included a photo of an attractive female. Including a photo of an attractive female in the advertising material was found to increase loan demand by males by an amount equivalent to about a 25 per cent reduction in the interest rate. Wilson and Daly (2004) also found that males discount future monetary outcomes more steeply in the presence of attractive females. Their study initially assessed participants' temporal discounting rates using choices between smaller sooner amounts of money and larger but more delayed amounts. Participants then viewed pictures of attractive or unattractive members of the opposite sex, while a control group viewed pictures of appealing or unappealing cars. Participants then re-evaluated immediate and delayed monetary choices and a second, post-task, discount rate was calculated. Only men who viewed attractive women displayed a significant increase in impatience and were more likely to accept smaller immediate outcomes. Females and controls did not exhibit this effect.

Wilson and Daly (2004) argued that their result was because attractive females activate a mating mindset in males causing them to overvalue immediate rewards. If risk-taking behaviour is a desirable characteristic in a mate, then males may become more risk-tolerant in the presence of attractive females as a signal to potential mates (cf. McAlvanah, 2009). Clients would not be exhibiting risky behaviour as a signalling device to the sex worker in

order to impress her to get her to mate with him. However, the mating mindset dictates that individuals will look for characteristics in the opposite sex that suggest they may have 'good genes' (Gangestad & Simpson, 2000). For women, male attributes which suggest 'good genes' tend to centre on strength and stature. For men, female attributes which suggest 'good genes' centre on physical attractiveness. Evolutionary psychologists have suggested that men place much more emphasis than women on physical attractiveness in looking for a mate to pass on his gene pool. Men will want to mate with women who are attractive and who will produce attractive offspring who, in turn, will find it easier to carry on their genetic line (Buss, 1999). Men who frequent brothels and red light districts are not consciously doing so with the intention of impregnating attractive sex workers. The mating mindset, though, works at a subconscious level. As Scruton (2004, p. 18) puts it: *"*Human beings are animals…we are governed by the laws of biology, and even our thoughts and emotions are the result of electrochemical processes in the brain*"*. That, for men, the evolutionary mechanism is subconsciously associated with impregnating an attractive female, suggests that female attractiveness and risky sex will be complements when purchasing sex from sex workers.

6. Conclusion

In this study we have examined the economic returns to attractiveness and risky sex in the Bangladesh commercial sex market. Given the intimate and personal nature of the service transacted, commercial sex work is a good labour market in which to test for a beauty premium. We find that a beauty premium exists in the commercial sex market, but the size of the premium is within the bounds of the beauty premium for females not performing sex work. We also find that the beauty premium is being driven by employer discrimination. This is consistent with the *sardarnis* contracting with more attractive women, or their agents or families, to fill the *adhiya* and *chukri* roles, while less attractive women wanting to enter the profession become floating sex workers. A feature of the commercial sex market is that the

transactions potentially carry high risk if a condom is not used. Our results suggest that there is an earnings premium for sex workers who sell unprotected sex. Moreover, more attractive sex workers charge a higher premium for selling unprotected sex. This result is consistent with either attractive sex workers having more bargaining/negotiating power or attractiveness and risky sex being complements for males in the presence of attractive women.

A potential limitation of the results reported here is that while we assume that unprotected sex to be perceived as a risky activity by sex workers, surveys of sex workers have found that they view health risks, such as the potential to contract HIV, as a low priority relative to other risks such as violence (Sanders, 2004; Busza, 2005). This issue would seem to be particularly relevant to Bangladesh where Jenkins and Rahman (2002) note that the overall safety (in terms of violence) in Bangladeshi brothels is declining. This can be seen in terms of proximal versus distal perceptions of risk. From the sex worker's perspective, if she contracts HIV, the median survival time is approximately 10 years; however, in the worst cases of physical violence immediate death is a distinct possibility. Hence the propensity to engage in unprotected sex might not be interpreted with the same risk saliency by sex workers and non sex-workers, with the former viewing it as 'not risky' because it is low on a continuum of risk.

References

Adams, G. (1977a) 'Physical Attractiveness, Personality and Social Reactions to Peer Pressure', *Journal of Psychology*, 96, 287-296.

Adams, G. (1977b) 'Physical Attractiveness Research: Towards a Developmental Social Psychology of Beauty', *Human Development*, 20, 217-239.

Akm, A.U. (2005) 'Prostitution in Bangladesh: An Empirical Profile of Sex Workers', *Journal of International Women's Studies,* 7(2), 111-122.

Alam, K. (2010) 'Girl Prostitution is Booming in Bangladesh', available at http://priyo.com/blog/women-trafficking/28050.html (last accessed 22/05/2010).

Andreoni, J. and Petrie, R. (2008) 'Beauty, Gender and Stereotypes: Evidence from Laboratory Experiments', *Journal of Economic Psychology*, 29(1), 79-93.

Ariely, D. and Loewenstein, G. (2006) 'The Heat of the Moment: The Effect of Sexual Arousal on Sexual Decision Making', *Journal of Behavioral Decision Making*, 19, 87-98.

Arndt, B. (2009) *The Sex Diaries*, London: Hamlyn.

Arunachalam, R. and Shah, M. (2008) 'Prostitutes *and* Brides?' *American Economic Review: Papers and Proceedings*, 98(2), 516-522.

Arunachalam, R. and Shah, M. (2010) 'The Prostitute's Allure: The Return to Beauty in Commercial Sex Work', Unpublished Manuscript, University of Michigan and UC Irvine.

Asian Development Bank (ADB) (2005) *Bangladesh: Gender, Poverty and the MDGs*, Manilla: Asian Development Bank.

Baumeister, R.F, Cantanese, K.R. and Vohs, K.D. (2001) Is There a Gender Difference in Strength if Sex Drive? Theoretical Views, Conceptual Distinctions and a Review of Relevant Evidence. *Personality & Social Psychology Review*, 5, 242-273.

BBC News Online (BBC) (2000) 'Bangladesh Says Prostitution Legal', March 14. Available at http://news.bbc.co.uk/2/hi/south_asia/677280.stm (last accessed 22/05/2010),

Bertrand, M., Karlan, D., Mullainathan, S., Shafir, E. and Zinman, J. (2009) 'What's Advertising Content Worth? Evidence From a Consumer Credit Marketing Field Experiment', Mimeo.

Biddle, J. and Hamermesh, D. (1998) 'Beauty, Productivity and Discrimination: Lawyers' Looks and Lucre', *Journal of Labor Economics*, 16(1), 172-201.

Brown, L. (2005) *The Dancing Girls of Lahore*, New York: Fourth Estate.

Brown, L. (2007) 'Performance, Status and Hybridity in a Pakistani Red-Light District: The Cultural Production of the Courtesan', *Sexualities*, 10, 409-423.

Buss, D. M. (1999). *Evolutionary Psychology, The New Science of the Mind,* Boston: Allyn and Bacon.

Buss, D.M. and Schmitt, D.P. (1993) 'Sexual Strategies Theory: An Evolutionary Perspective on Hunan Mating', *Psychological Review,* 100, 204-232.

Busza, J. (2005) 'How Does a "Risk Group" Perceive Risk? Voices of Vietnamese Sex Workers in Cambodia', *Journal of Psychology and Human Sexuality,* 17(1-2), 65-82.

Cameron, S., Collins, A. and Thew, N. (1999) 'Prostitution Services: An Exploratory Empirical Analysis', *Applied Economics,* 31, 1523-1529.

Della Giusta, M.D., Di Tommaso, M.L. and Strom, S. (2009) 'Who's Watching? The Market for Prostitution Services', *Journal of Population Economics,* 22, 501-516.

Ditto, P. H., Pizarro, D.A., Epstein, E.B., Jacobson, J.A. and MacDonald, T.K. (2006) 'Visceral Influences on Risk-taking Behavior', *Journal of Behavioral Decision Making,* 19, 99-113.

Eckel, C. and Wilson, R. (2005) 'Detecting Trustworthiness: Does Beauty Confound Intuition', Unpublished Manuscript, Virginia Polytechnic Institute.

Edlund, L., Engelberg, J. and Parsons, C. (2009) 'The Wages of Sin', Discussion Paper No: 0809-16, Department of Economics, Columbia University.

Edlund, L. and Korn, E. (2002) 'A Theory of Prostitution', *Journal of Political Economy,* 110(1), 181-214.

End Child Prostitution, Child Pornography and the Trafficking of Children for Sexual Purposes (ECPAT) (2006) *Global Monitoring Report on the Status of Action Against Commercial Sexual Exploitation of Children: Bangladesh,* Bangkok: ECPAT.

Gangestad, S. and Simpson, J. (2000) 'The Evolution of Human Mating: Trade-offs and Strategic Pluralism", *Behavioral and Brain Sciences,* 23, 573-644.

Gertler, P., Shah, M. and Bertozzi, S. (2005) 'Risky Business: The Market for Unprotected Sex', *Journal of Political Economy,* 113(3): 518-550.

Hakim, C. (2010) 'Erotic Capital', *European Sociological Review* (in press).

Hamermesh, D. (2006) 'Changing Looks and Changing 'Discrimination': The Beauty of Economists', *Economics Letters,* 93, 405-412.

Hamermesh, D. and Biddle, J, (1994) 'Beauty and the Labor Market', *American Economic Review,* 84(5), 1174-1194.

Hammond, C. (2008) 'I'm Just Here For Survival', *The Guardian,* January 9.

Hatfield, E. and Sprecher, S. (1986) *Mirror, Mirror ..... The Importance of Looks in Everyday Life,* Albany: SUNY Press.

Jenkins, C. and Rahman, H. (2002) 'Rapidly Changing Conditions in the Brothels of Bangladesh: Impact on HIV/STD', *AIDS Education and Prevention,* 14(3), 97-106.

Johnson, D. (2010) 'Physical Appearance and Wages: Do Blondes Have More Fun?' *Economics Letters,* 108, 10-12.

Kotiswaran, P. (2008) 'Born Unto Brothels – Toward a Legal Ethnography of Sex Work in an Indian Red-Light Area', *Law and Social Inquiry,* 33, 579-629.

Langlois, J., Kalakanis, L., Rubenstein, A., Larson, A. and Hallam, M. (2000) 'Maxims of Myths of Beauty? A Meta-Analytic and Theoretical Review', *Psychological Bulletin,* 126(3), 390-423.

Leigh, A. and Borland, J. (2007) 'Unpacking the Beauty Premium: Is it Looks or Ego?' Unpublished Manuscript, Australian National University and University of Melbourne.

Levitt, S. and Venkatesh, S.A. (2007) 'An empirical analysis of street-level prostitution'. Unpublished Manuscript, University of Chicago and Columbia University.

Logan, T. and Shah. M. (2009) 'Face Value: Information and Signalling in an Illegal Market', National Bureau of Economic Research Working Paper 14841.

McAlvanah, P. (2009) 'Are People More Risk Taking in the Presence of the Opposite Sex?' *Journal of Economic Psychology*, 30, 136-146.

Moffatt, P.G. and Peters, S.A. (2004) 'Pricing Personal Services: An Empirical Study of Earnings in the UK Prostitution Industry', *Scottish Journal of Political Economy,* 51(5), 675-690.

Mulford, M., Orbell, J., Shatto, C. and Stockard, J. (1998) 'Physical Attractiveness, Opportunity and Success in Everyday Exchange', *American Journal of Sociology,* 103, 1565-1593.

Orchard, T.R. (2007) 'Girl, Woman, Lover, Mother: Towards a New Understanding of Child Prostitution Among Young *Devadasis* in Rural Karnataka, India', *Social Science and Medicine,* 64(12), 2379-2390.

Price, M. (2008) 'Fund-raising Success and a Solicitor's Beauty Capital: Do Blondes Raise More Funds?' *Economics Letters,* 100, 351-354.

Rao, V., Gupta, I., Lokshin, M and Jana, S. (2003) 'Sex Workers and the Cost of Safe Sex: The Compensating Differential for Condom Use Among Calcutta Prostitutes', *Journal of Development Economics,* 71, 585-603.

Robinson, J. and Yeh, E. (2006) 'Sex Work as a Response to Risk in Western Kenya', Unpublished Manuscript, Princeton University and UC Berkeley.

Rosenblat, T.S. (2008) 'The Beauty Premium: Physical Attractiveness and Gender in Dictator Games', *Negotiation Journal,* 24(4), 465-481.

Sanders, T. (2004) 'A Continuum of Risk? The Management of Health, Physical and Emotional Risks by Female Sex Workers', *Sociology of Health and Illness,* 26(5): 557-574.

Santor, D. and Walker, J. (1999) 'Garnering the Interest of Others: Mediating the Effects Among Physical Attractiveness, Self-worth and Dominance', *British Journal of Social Psychology,* 38(4) 461-477.

Scruton, R. (2004). 'What it Means to be Human', *The Spectator*, 20 March: pp 18-20

Solnick, S.J. and Schweitzer, M.E. (1999) 'The Influence of Physical Attractiveness and Gender on Ultimatum Game Decisions', *Organizational Behavior and Human Decision Processes,* 79(3), 199-215.

UNAIDS (2009) *Report on the Global HIV/AIDS Epidemic,* Geneva: UNAIDS.

Van den Bergh, B. and Dewitte, S. (2006) 'Digit Ratio (2D:4D) Moderates the Impact of Sexual Cues on Men's Decisions in Ultimatum Games', *Proceedings of the Royal Society B: Biological Sciences,* 273, 2091-2095.

Van Kleef, G.A., Steinel1, W., van Knippenberg, D., Hogg, M.A. and Svensson, A. (2007) 'Group Member Prototypicality and Intergroup Negotiation: How One's Standing in the Group Affects Negotiation Behaviour', *British Journal of Social Psychology,* 46, 129-152.

Wahed, T. and Bhuiya, A. (2007) 'Battered Bodies and Shattered Minds: Violence Against Women in Bangladesh', *Indian Journal of Medical Research,* 126(4), 341-354.

Weng, H.H., Bastian, L.A., Taylor, D.H., Moser, B.K. and Ostbye, T. (2004) 'Number of Children Associated with Obesity in Middle-aged Women and Men: Results from the Health and Retirement Study', *Journal of Women's Health,* 13, 85-91.

Wilson, M. and Daly, M. (2004) 'Do Pretty Women Inspire Men to Discount the Future?' *Proceedings of the Royal Society B: Biological Sciences,* 271, S177-S179.

World Bank (2009) *HIV/AIDS in Bangladesh,* Washington DC: The World Bank.

Zuckerman, M., and Driver, R. (1989) 'What Sounds Beautiful is Good: The Vocal Attractiveness Stereotype', *Journal of Non-Verbal Behavior,* 13, 67-82.

Table 1: Descriptive Statistics

Variables		Floating		Brothel	
		Mean	S.D.	Mean	S.D.
Price	Average transaction price (in taka)[1]	96.41	104.74	82.93	42.29
Price (with condom)	Average transaction price with condom	91.48	76.69	73.86	32.87
Price (without condom)	Average transaction price without condom	119.37	92.93	90.81	36.36
Sex income	Monthly income from sex work (in taka)	7355.2	6383.6	8776.8	5956.7
Client numbers	Number of clients per day	4.42	2.54	4.05	1.64
Days worked	Number of days worked in a month	20.38	6.61	25.62	5.11
Charge less	Do you charge less with a condom? (yes=1)	0.53	0.5	0.35	0.48
Flipchart	Have you seen the flipchart? (yes=1)	0.91	0.28	0.93	0.25
Age	Age (years)	25.95	7.26	27.8	7.83
Experience	Years in profession	7.72	5.79	12.31	8.14
Married	Have you ever been married? (yes =1)	0.26	0.73	0.67	0.47
Education	Years of education	2.27	3.18	1.81	2.49
Child	Do you have children? (yes=1)	0.67	0.47	0.65	0.48
Muslim	Are you Muslim? (yes=1)	0.98	0.14	0.93	0.25
Mother sex worker	Was your mother a sex worker? (yes=1)	0.01	0.08	0.14	0.35
Parent attitudes	Do your parents approve of your profession? (yes=1)	0.73	0.94	0.59	0.86
Sterilized	Have you been sterilized? (yes=1)	0.9	0.3	0.96	0.2
Regular check-up	Do you have regular health checks? (yes=1)	0.27	0.45	0.46	0.5
HIV test	Have you been tested for HIV? (yes=1)	0.63	0.48	0.65	0.48
Blood test	Do you have regular blood tests? (yes=1)	0.87	0.33	0.74	0.44
STD	Do you have a STD? (yes=1)	0.33	0.47	0.25	0.44
Permanent client	Do you have permanent clients? (yes=1)	0.69	0.46	0.78	0.42
Rich client	Do you have rich clients? (yes=1)	0.3	0.46	0.48	0.5
Contraception	Do you take oral contraception? (yes=1)	0.37	0.48	0.23	0.42
Abortion	Have you had an abortion? (yes=1)	0.25	0.44	0.46	0.5
Miscarried	Have you had a miscarriage? (yes=1)	0.13	0.34	0.22	0.42
Private partners	Number of partners in private life	2.08	2.68	0.98	0.83
Other income	Income from other sources (in taka)	376.3	684.8	1108.5	4389.7
Police abuse	Have you been abused by police? (yes=1)	0.86	0.35	0.78	0.42
Discrimination	Do you feel discriminated against? (yes=1)	0.81	0.39	0.3	0.9
Client abuse	Have you been abused by clients?	0.8	0.4	0.70	0.46
Client attractive	Have you found a client attractive? (yes=1)	0.64	0.48	0.33	0.47
Client age	Average age of clients (years)	29.58	4.87	29.92	5.05
Happy	Are you satisfied with your life? (yes=1)	0.06	0.23	0.25	0.44
Number of obs.		160		123	

[1]In 2005, US$1 was 65 taka (approx)

Table 2: First-Stage Results

VARIABLES	(1)	(2)	(3)	(4)	(5)
Flipchart	0.364**	0.260*	0.260*	0.227+	0.194+
	(0.064)	(0.091)	(0.095)	(0.098)	(0.101)
Beauty	0.028	-0.002	0.005	0.013	0.007
	(0.027)	(0.030)	(0.028)	(0.033)	(0.027)
Age	0.008	0.005	0.005	0.004	0.007
	(0.012)	(0.007)	(0.007)	(0.007)	(0.007)
Experience	-0.012	-0.008	-0.010	-0.010	-0.012
	(0.011)	(0.008)	(0.007)	(0.007)	(0.007)
Married	-0.006	-0.017	-0.035	-0.041	-0.038
	(0.071)	(0.062)	(0.084)	(0.092)	(0.077)
Education	-0.005	-0.005	-0.006	-0.005	-0.007
	(0.011)	(0.015)	(0.014)	(0.013)	(0.013)
Child	0.082	0.087	0.110+	0.113+	0.094
	(0.085)	(0.056)	(0.055)	(0.056)	(0.054)
Muslim	-0.107	-0.069	-0.023	-0.039	0.016
	(0.163)	(0.109)	(0.113)	(0.133)	(0.113)
Mother sex worker	0.031	-0.027	-0.058	-0.053	-0.046
	(0.173)	(0.151)	(0.174)	(0.172)	(0.167)
Parent attitudes	0.026	0.032	0.024	0.024	0.033
	(0.038)	(0.030)	(0.030)	(0.029)	(0.027)
Sterilized	-0.027	-0.095	-0.108+	-0.077	-0.068
	(0.040)	(0.050)	(0.047)	(0.045)	(0.044)
Regular check-up	0.207**	0.205*	0.200*	0.202*	0.119+
	(0.039)	(0.067)	(0.065)	(0.067)	(0.059)
Charge less	-0.323**	-0.262*	-0.301**	-0.300**	-0.273*
	(0.074)	(0.089)	(0.077)	(0.076)	(0.082)
Other income	-0.000	-0.000	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Client numbers	-0.037+	-0.024	-0.029	-0.036	-0.045*
	(0.018)	(0.017)	(0.020)	(0.020)	(0.018)
Days worked	0.017	0.014	0.014	0.015	0.013
	(0.013)	(0.010)	(0.012)	(0.012)	(0.012)
HIV test		-0.062	-0.070	-0.095	-0.111
		(0.067)	(0.059)	(0.073)	(0.061)
Contraception		-0.093	-0.089	-0.092	-0.107
		(0.064)	(0.071)	(0.074)	(0.069)
Abortion		-0.046	-0.042	-0.045	-0.020
		(0.043)	(0.062)	(0.059)	(0.056)
Miscarried		0.207	0.210	0.208	0.238
		(0.141)	(0.143)	(0.154)	(0.150)
Blood test		0.312**	0.340**	0.354**	0.258*
		(0.070)	(0.082)	(0.086)	(0.101)
STD		0.000	-0.017	-0.011	-0.027
		(0.045)	(0.046)	(0.054)	(0.057)
Permanent client			-0.004	-0.012	0.015
			(0.058)	(0.066)	(0.075)
Rich client			-0.035	-0.042	-0.011
			(0.081)	(0.075)	(0.064)
Client abuse			0.047	0.070	0.122
			(0.086)	(0.077)	(0.071)
Client attractive			0.035	0.047	0.029
			(0.031)	(0.030)	(0.035)
Client age			0.006	0.007	0.005
			(0.009)	(0.010)	(0.009)
Police abuse				-0.038	-0.030
				(0.070)	(0.078)
Discrimination				0.025	0.048
				(0.077)	(0.075)
Private partners				0.005	-0.003
				(0.011)	(0.011)
Happy				0.017	0.015
				(0.086)	(0.081)
Brothel(=1)	-0.073	0.045	0.050	0.034	
	(0.176)	(0.126)	(0.114)	(0.115)	

Place of birth fixed effects?	Yes	Yes	Yes	Yes	Yes
Sex type fixed effects?	No	Yes	Yes	Yes	Yes
Client occupn. fixed effects?	No	No	Yes	Yes	Yes
Area fixed effects?	No	No	No	No	Yes
Observations	242	242	240	237	237
R-squared	0.531	0.618	0.632	0.628	0.650

Notes: Standard errors (in parentheses) are clustered at the sex worker's area of residence level. **, *, + indicate significance at the 1, 5 and 10%-level, respectively.

Table 3: Reduced form Regression (Dependent Variable: Log of Monthly Earnings)

VARIABLES	OLS Estimates
Beauty	0.153+
	(0.067)
Predicted Condom	-0.856**
	(0.118)
Flipchart	-0.105
	(0.101)
Observations	237
R-squared	0.742

Notes: Regression in both stages include the full specification as in column (5) of IV/first-stage regression. Standard errors (in parentheses) are clustered at the sex worker's area of residence level. **, *, + indicates significance at the 1, 5 and 10%-level, respectively.

Table 4: IV Estimates (Dependent Variable: Log of Monthly Earnings from Sex Work)

(Condom use is instrumented by flipchart)

VARIABLES	(1)	(2)	(3)	(4)	(5)
Condom	-0.813*	-1.143**	-0.944**	-1.199*	-1.541*
	(0.323)	(0.421)	(0.343)	(0.521)	(0.648)
Beauty	0.195**	0.166*	0.159**	0.183*	0.152*
	(0.061)	(0.065)	(0.061)	(0.074)	(0.075)
Age	-0.004	-0.005	-0.000	-0.005	0.001
	(0.009)	(0.006)	(0.006)	(0.008)	(0.009)
Experience	-0.009	-0.011	-0.018*	-0.015+	-0.023*
	(0.010)	(0.009)	(0.007)	(0.008)	(0.011)
Married	0.010	-0.014	-0.095	-0.114	-0.107
	(0.120)	(0.112)	(0.104)	(0.111)	(0.120)
Education	0.026*	0.015	0.014	0.011	0.003
	(0.011)	(0.017)	(0.016)	(0.018)	(0.022)
Child	0.157	0.203+	0.209*	0.268*	0.264+
	(0.116)	(0.111)	(0.089)	(0.120)	(0.135)
Muslim	0.162	0.133	0.191	0.053	0.141
	(0.147)	(0.173)	(0.144)	(0.171)	(0.165)
Mother sex worker	0.026	-0.049	-0.074	-0.043	-0.093
	(0.185)	(0.194)	(0.154)	(0.190)	(0.221)
Parent attitudes	0.006	0.013	-0.016	-0.001	0.046
	(0.047)	(0.036)	(0.036)	(0.036)	(0.043)
Sterilized	0.107	0.045	0.063	0.055	0.031
	(0.122)	(0.198)	(0.181)	(0.175)	(0.178)
Regular check-up	0.462**	0.496**	0.459**	0.516**	0.375*
	(0.110)	(0.187)	(0.152)	(0.200)	(0.154)
Charge less	-0.457*	-0.468*	-0.444*	-0.503*	-0.575*
	(0.191)	(0.205)	(0.174)	(0.220)	(0.242)
Other income	0.000+	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Client numbers	0.121*	0.119**	0.114**	0.105*	0.071
	(0.052)	(0.042)	(0.039)	(0.050)	(0.045)
Days worked	0.063**	0.060**	0.059**	0.066**	0.072**
	(0.021)	(0.021)	(0.018)	(0.021)	(0.022)
HIV test		-0.070	-0.088	-0.097	-0.160
		(0.130)	(0.105)	(0.137)	(0.126)
Contraception		-0.164	-0.203	-0.237+	-0.246+
		(0.127)	(0.142)	(0.143)	(0.129)
Abortion		-0.112	-0.104	-0.129	-0.084
		(0.079)	(0.090)	(0.100)	(0.108)
Miscarried		0.218	0.104	0.165	0.284
		(0.170)	(0.111)	(0.195)	(0.285)
Blood test		0.515**	0.448**	0.540*	0.509+
		(0.186)	(0.159)	(0.235)	(0.266)
STD		0.082	0.074	0.090	0.038
		(0.111)	(0.092)	(0.105)	(0.120)
Permanent client			-0.032	-0.018	-0.025
			(0.049)	(0.071)	(0.117)
Rich client			0.039	0.036	0.128
			(0.080)	(0.097)	(0.097)
Client abuse			-0.004	0.113	0.100
			(0.028)	(0.080)	(0.133)
Client attractive			0.025	0.033	0.044
			(0.051)	(0.066)	(0.071)
Client age			0.003	0.006	-0.002
			(0.010)	(0.012)	(0.013)
Police abuse				-0.253	-0.320+
				(0.181)	(0.167)
Discrimination				-0.064	-0.024
				(0.103)	(0.126)
Private partners				-0.001	-0.011
				(0.017)	(0.022)
Happy				-0.119	-0.039
				(0.131)	(0.132)
Brothel (=1)	-0.276	-0.076	-0.140	-0.181+	

	(0.172)	(0.164)	(0.102)	(0.108)	
Place of birth fixed effects?	Yes	Yes	Yes	Yes	Yes
Sex type fixed effects?	No	Yes	Yes	Yes	Yes
Client occupn. fixed effects?	No	No	Yes	Yes	Yes
Area fixed effects?	No	No	No	No	Yes
Observations	242	242	240	237	237
R-squared	0.474	0.415	0.545	0.461	0.350

Notes: Standard errors (in parentheses) are clustered at the sex worker's area of residence level. **, *, + indicate significance at the 1, 5 and 10%-level, respectively.

Table 5: 2SLS Estimates Using Individual Characteristics Interacted with Flipchart as Instruments

VARIABLES	(1)	(2)	(3)	(4)	(5)
Condom	-0.635+	-0.846**	-0.856**	-1.098**	-1.196**
	(0.343)	(0.297)	(0.253)	(0.314)	(0.301)
Beauty	0.225**	0.193**	0.167*	0.205*	0.210*
	(0.031)	(0.049)	(0.067)	(0.084)	(0.092)
Brothel	-0.384	-0.355	-0.551+	-0.644+	-0.490
	(0.316)	(0.374)	(0.305)	(0.330)	(0.392)
brothel ×beauty	-0.074	-0.048	-0.033	-0.083	-0.156
	(0.086)	(0.097)	(0.101)	(0.113)	(0.141)
brothel × condom	0.445	0.475+	0.642**	0.857**	0.926**
	(0.283)	(0.244)	(0.215)	(0.288)	(0.309)
Angrist-Pischke Test [a]	0.0053	0.0049	0.0040	0.0083	0.0125
Kleibergen-Paap F statistic	14.23	14.60	15.91	11.80	9.93
Sargan-Hansen Test [a]	0.4302	0.6671	0.9115	0.8281	0.5778
Anderson-Rubin Wald test [a]	0.0040	0.0001	0.0001	0.0046	0.0000
Observations	242	242	240	237	237
R-squared	0.557	0.541	0.596	0.544	0.539

Notes: [a] p-values. Each column corresponds to the specification in Table 4. Standard errors (in parentheses) are clustered at the sex worker's area of residence level. **, *, + indicate significance at the 1, 5 and 10%-level, respectively. Condom is a dummy variable equal to 1 if the sex worker practices safe sex, beauty is a categorical variable, measured on a scale of 1 to 4.

Table 6: IV Estimates when the Dependent variable is the (log of) Average Transaction Price

VARIABLES	(1)	(2)	(3)	(4)	(5)
Condom	-0.415*	-0.546	-0.430	-0.584	-0.777
	(0.207)	(0.358)	(0.326)	(0.416)	(0.578)
Beauty	0.153**	0.137**	0.128**	0.136**	0.112*
	(0.045)	(0.042)	(0.041)	(0.049)	(0.053)
Observations	242	242	240	237	237
R-squared	0.443	0.456	0.544	0.498	0.462

Notes: Each column corresponds to the specification in Table 4. Standard errors (in parentheses) are clustered at the sex worker's area of residence level. **, *, + indicate significance at the 1, 5 and 10%-level, respectively.

Table 7: Beauty and Condom Use by Sector

	(1)	(2)	(3)	(4=|2-3|)
	Overall	Floating	Brothel	Difference
Condom use (=1)	0.69	0.64	0.76	0.12**
Beauty (on a scale 1-4)	2.28	2.13	2.49	0.36***
not beautiful (=1)	19.08	23.13	13.82	9.31***
overall okay (=2)	43.46	48.13	37.4	10.73***
beautiful (=3)	27.56	21.88	34.96	13.08***
very beautiful (=4)	9.89	6.88	13.82	6.94***
Number of Obs.	283	160	123	

Notes: *** indicates difference is statistically significant at 1% level, ** at 5% level

Table 8: The Beauty Premium for Unprotected Sex

	(1)	(2)	(3)	(4)	(5)
VARIABLES	OLS	OLS	OLS	OLS	OLS
Condom	-0.675	-0.711+	-0.576+	-0.674+	-0.765*
	(0.367)	(0.310)	(0.288)	(0.319)	(0.264)
Beauty	0.255	0.214	0.190	0.228	0.180
	(0.136)	(0.132)	(0.145)	(0.154)	(0.141)
beauty* non-condom use	0.233+	0.328*	0.355*	0.321+	0.370+
	(0.112)	(0.130)	(0.144)	(0.148)	(0.166)
Include controls	Yes	Yes	Yes	Yes	Yes
Place of birth FE	Yes	Yes	Yes	Yes	Yes
Sex type FE	No	Yes	Yes	Yes	Yes
Client type FE	No	No	Yes	Yes	Yes
Area FE	No	No	No	No	Yes
R-squared	0.541	0.699	0.734	0.747	0.763

Notes: Standard errors are clustered at the sex worker's place of residence level and reported in parentheses. ***, **, + indicate significance at the 1, 5 and 10%-level, respectively. Non condom use is a dummy variable set equal to 1 if the sex worker does not practice safe sex.