

A THEORY OF PROSTITUTION

Adolfo Sachsida*

Tito Belchior Silva Moreira**

Abstract: This paper builds a theoretical model where individuals maximize inter temporal consumption-leisure utility function to explain the differential wage received by prostitutes. The model did not rely in any assumption about the skill level of the prostitutes. However, it is sufficiently general to explain the existence of both high-level (call girls) and low-level (street) prostitutes. The theoretical model is able to replicate quite well some stylized facts from the prostitution market. Furthermore, we use an inedited dataset about street prostitutes in Brasília city to corroborate the theoretical predictions of our model. The econometric evidence supports compensation wage theory: prostitutes that work under more difficult conditions receive higher monthly wages.

Keywords: Economics of prostitution. Compensation wage. Stigma effect.

JEL code: J24, J33

Resumo: Esse artigo constrói um modelo teórico onde cada indivíduo maximiza sua função de utilidade intertemporal consumo-lazer para explicar o diferenciais de salário recebido pelas prostitutas. O modelo não considera qualquer hipótese sobre o nível de habilidade das prostitutas. Contudo, o modelo é suficientemente geral para explicar a existência de garotas de programa de alto nível (contato via fone) e de baixo nível (prostitutas de rua). O modelo teórico está apto para replicar muito bem alguns fatos estilizados do mercado de prostituição. Além disso, nós usamos uma inédita base de dados sobre prostitutas de rua na cidade de Brasília para corroborar as predições teóricas de nosso modelo. A evidência econométrica suporta a teoria de salários compensatórios: prostitutas que trabalham sob condições mais difíceis recebem maior remuneração mensal.

Palavras-chave: Economia da prostituição. Salário compensatório. Efeito estigma.

Código JEL: J24, J33

* Universidade Católica de Brasília e IPEA – sachside@pos.ucb.br

** Universidade Católica de Brasília – tito@pos.ucb.br

1 Introduction

Prostitution has been a controversial issue in social science. Studies have analyzed prostitution's social characteristics (Plange, 1990), its psychological determinants (Exner et al., 1977 and De Schamphelre, 1990), and its influence in feminist writings (Forward, 1999). Economic theory usually examines prostitution in the context either of the marriage market (Edlund and Korn, 2002), reputation and social stigma (Della Giusta et al., 2004), or extra marital affairs (Fair, 1978).

The prostitution market has recently gained the attention of economists due to the incredible amount of resources that this market attracts. Prostitution poses a puzzle to economic theory; that is, how a labor intensive, low-skilled job can garner such high wages. According to Edlund and Korn (2002) this compensation arises from the fact that prostitutes are not marriageable and so should be compensated for the absence of a husband's rents. Gertler et al (2003) and Rao et al (2003) identify the source for their wage compensation as being the health risk factor (unprotected sex). This theory suggests that prostitutes who engage in sex without condoms receive a higher compensation. Looking to the demand side, Cameron et al (1999) and Moffatt and Peters (2004) verify the determinants of prostitution service prices.

The objective of this paper is to propose a general theoretical explanation for the high wages received by prostitutes. After that we use a data set about Brasilia's city (Brazil) street prostitutes to test the predictions of our model. In a theoretical sense, this paper adds to the existing literature by not assuming that prostitutes are low-skilled workers (as has been previously assumed). In this way, we are able to explain the existence of both highly educated prostitutes (call girls) and less educated prostitutes (street prostitutes). Furthermore, our

theoretical model is sufficiently general to accommodate both empirical evidence and past theoretical research. In an empirical approach this article contributes to a growing literature that studies specific professions and their relation to labor market theories. Our study provides evidence in favor of the occurrence of compensation wages differentials in the prostitution market. Section 2 of this article introduces some stylized facts about prostitutes. Section 3 develops the theoretical model. Section 4 presents the dataset. Section 5 shows the econometric results and section 6 concludes the article.

2 Stylized Facts¹⁷

Prostitution is commonly associated with poverty and the absence of other job opportunities. For example, Chakraborty et al (1994) show that in Calcutta, India, 84 percent of the prostitutes were illiterate and the remainder had only primary school education. Furthermore, the authors argue that 49 percent of the prostitutes enter this market motivated by their extreme poverty. In a study of Fiji, Plange (1990) argues that unemployment, divorce and desertion are important determinants to explain female prostitution. In the same way, Sinclair (1992) in a study of Papua – New Guinea found that female sex workers have a low level of schooling and are unable to find jobs in the formal sector of the economy.

For Hirschi (1962), however, there is no reason to believe that prostitutes are not happy with their occupational choice. Moreover, Esselstyn (1972) argues that the choice to be a prostitute is based on a rational framework. To these authors, the argument that all prostitutes are poor and do not have access to other labor markets does not make sense. However, many articles use poverty and scarcity of labor options to justify the

¹⁷ More details about the stylized facts of the prostitution market can be found in Ahlburg and Jensen (1998).

entrance of women in the prostitution market (Perkins and Bennett, 1985; Basu, 1995). The origin of this apparent puzzle is that the prostitution market is not homogenous enough to facilitate an aggregate data study.

Exner et al. (1977) divide sex workers into five different categories: call girls, brothel employees, street prostitutes, housewives, and drug addicts. Call girls serve few clients in their domiciles, charge a high price, and sometime have college degrees. Brothel prostitutes serve their clients in brothels and charge a lower price than do call girls. Street prostitutes work in the streets, attending a large number of clients for a low price (in relation to call girls and brothel prostitutes). Housewife prostitutes are married women who enter into the prostitution to help with the maintenance of the home. Finally, drug addicts are prostitutes who use prostitution wages to maintain their drug habits.

In a study of Bali, Indonesia, Wiraman et al (1993) divide the prostitution market into high and low price levels. At the high price level, sex workers have higher levels of education (10 years), serve few clients per day (mean of 1.4 clients) and charge a high price (US\$ 75.00 for a short time and US 125.00 for the whole night). However, the low price level prostitutes receive more customers (mean of 4.6 per day), have a lower level of education (6 years) and charge a low price (US\$ 2.50 for a short time and US\$ 12.50 for the whole night).

In relation to Thailand, Archavanitkul and Guest (1994) provide evidence in favor of a high compensatory wage received by prostitutes. They argue that while the average monthly wage received by prostitutes was 35.000 bath the average wage for women who work in other industries was 1.500.

The discussion above shows the existence of a group of women that enters in the prostitution market trying to obtain a large wage compensation for their services. For these women, the

traditional factors (poverty and scarcity of opportunities) used to explain prostitution play a small role in their occupational selection.

Another subject commonly associated with prostitution is the marriage market. Folbre and Nelson (2000) argue that when the labor market denies to females an alternative means of self-support, marriage is an economic necessity for young females. The authors cite feminists who claim that in the absence of labor market opportunities for women, the traditional marital structure may be partially viewed as a sex for money trade. Helsinger, Sheets and Veeder (1983) suggest that, for practical purposes, the law recognize two occupations for women: marriage and prostitution. The link between marriage and prostitution is not new: Hamilton discusses it in a 1909 paper. Forward (1999) also identifies in Mona Caird's novels some situations where marriage is seen as a kind of prostitution.

Using the marriage-prostitution link, Edlund and Korn (2002) build a theoretical model to explain the wage compensation received by prostitutes. The authors' main argument is that entering the prostitution market creates a barrier that eliminates the possibility of the prostitute's entering the marriage market. That is, the higher wage received by prostitutes is a compensation for their forfeiture of marriage and a husband's income. However, there is no empirical support to this idea. Some field research shows that a significant number of prostitutes are married or live with a partner. Omorodion (1993), in a study of Benin City, Nigeria, found that female long-distance traders augment their low earnings with sex work and that two-thirds of these sex workers were married. Exner et al (1977) also present evidence that many prostitutes are married or live with a partner. Furthermore, prostitutes can work for some years in a city and, after accumulating some savings, go to another city and begin a new life, where marriage will be an option.

3 The Model

In agreement with the stylized facts presented above, a theoretical model should be able to replicate the following characteristics present in the prostitution market:

- a) poverty and scarcity of labor market options are reasons that can motivate entrance in the prostitution market (street prostitutes);
- b) there is a class of highly educated prostitutes for whom poverty and scarcity of resources do not play a major role in occupational selection (call girls);
- c) controlling for schooling and other human capital variables, the prostitution market pays a higher wage than do non-prostitution markets;
- d) there is no reason to rule out the entrance of prostitutes in the marriage market;
- e) prostitutes are stigmatized;
- f) Prostitutes should receive compensation wages independently of whether they use condoms or not. Even if they receive a higher compensation in the absence of condom use, high compensation must also exist in the presence of condom use.

To address these stylized facts of the prostitution market, we propose a model where agents maximize the inter-temporal consumption-leisure utility function

$$U = \max \int u(c, l) e^{-\theta t} dt \quad (1)$$

Where c is consumption, l is leisure and θ is the time preference parameter. Furthermore, the agents confront two constraints:

$$\dot{k} = f(k, l_a, l_p) - c + g(l_p) \quad (2)$$

$$l = 1 - l_a - l_p \quad (3)$$

Equation (2) is a simple inter-temporal resource constraint, where k is the individual capital stock, and the dot above the variable denotes the time derivative. Equation (2) tells us that the evolution of the individual capital stock depends on two different production functions. The first of them, $f(k, l_a, l_p)$ denotes the returns in the legal markets of the economy. In this sense, it increases with k and with labor l_a . However, it decreases with the time spent in illegal activities (l_p) (prostitution). Here the decrease in the production function originated by l_p can be understood as a kind of stigma effect. That is, individuals who decide to enter the prostitution market are stigmatized in the formal markets and receive a punishment. The second production function, $g(l_p)$ represents the returns in the prostitution market. Finally, equation (3) is a time constraint.

Note that this kind of formulation encompasses that proposed by Edlund and Korn (2002). In their model, females could either be prostitutes or not. However, the empirical evidence suggests that many prostitutes both get married and work in legal markets. In this sense, our model is general enough to allow for prostitutes to receive rents from i) marriage; and ii) legal markets. After all, if we want to reduce our model to that proposed by Edlund and Korn (2002) we just have to restrict the female choice so that they should choose between $f(k, l_a)$ or $g(l_p)$ but not both.

The Hamiltonian for this kind of model can be written as

$$H = u(c, 1 - l_a - l_p) + \lambda [f(k, l_a, l_p) + g(l_p) - c] \quad (4)$$

The first order conditions for the maximum are

$$H_c : u_1(c, l) = \lambda \quad (5)$$

$$H_{l_a} : u_2(c, l) = \lambda [f_2(k, l_a, l_p)] \quad (6)$$

$$H_{l_p} : u_2(c, l) = \lambda [f_3(k, l_a, l_p) + g_1(l_p)] \quad (7)$$

$$\dot{\lambda} - \theta\lambda = -\lambda f_1(k, l_a, l_p) \text{ (Euler equation)} \quad (8)$$

$$\lim_{t \rightarrow \infty} \lambda k e^{-\theta t} = 0 \text{ (Transversality condition)} \quad (9)$$

where u_i , f_i and g_i are the derivatives of the function u , f and g in relation to the i -esim argument of the function.

The steady-state solution of the system is

$$f_1(k, l_a, l_p) = \theta \quad (10)$$

$$c = f(k, l_a, l_p) + g(l_p) \quad (11)$$

It is easy to see that (10) satisfies the golden rule for the case where the population growth rate is zero ($n = 0$). An obvious extension of the model is to include a growth rate for the prostitution population and verify its impact over the prostitution market. However, our focus in this paper is to investigate the origin of the differentials between wages of prostitutes and non-prostitutes. In this way, using the first order conditions in equations (6) and (7) we obtain that in equilibrium,

$$f_2(k, l_a, l_p) = f_3(k, l_a, l_p) + g_1(l_p) \quad (12)$$

Equation (12) represents the equilibrium condition between the returns in legal and illegal (prostitute) markets. Using the concept of stigmatization, we have that $f_3(k, l_a, l_p) < 0$. But this implies that

$$f_2(k, l_a, l_p) < g_1(l_p) \quad (13)$$

That is, in equilibrium the returns from prostitution should be higher than the returns from non-prostitution activities. Furthermore, $f_3(k, l_a, l_p)$ is the value of the compensation that prostitutes should receive. In words, in the absence of stigmatization [$f_3(k, l_a, l_p) = 0$] we should not expect any wage compensation in favor of the prostitutes.

The model proposed here to explain the wage differential between prostitutes and non-prostitutes is extremely simple. However, we are able to match four important stylized facts:

a) $f_2(k, l_a, l_p) < g_1(l_p)$, which means that the wages of prostitutes should be higher than the wages of non-prostitutes.

b) $f_3(k, l_a, l_p)$ is the amount of compensation that prostitutes should receive. Note that this compensation is not linked with the marriage market or with condom use. That is, prostitutes will receive wage compensation regardless of marriage or condom use. Any public policy that changes this value will have an impact on the prostitution wage. If we think that this compensation is driven by stigmatization, any public policy that decreases the stigmatization will decrease the compensation received by prostitutes, and vice-versa.

c) (a) and (b) are not determined by the educational level (or skill levels) of the prostitutes and non-prostitutes. In this way, we do not need any assumption about the distribution of skills. In this sense, our model allows for the existence of both highly educated prostitutes (call girls) and less educated prostitutes (street prostitutes). Moreover, we do not make the usual assumption that prostitutes are low-skilled workers (this avoid the criticism that prostitution demands high skills that are different from those required by other markets).

d) Our model is able to explain why highly educated prostitutes receive higher wages than do less educated prostitutes. Note that this distinction was not possible in Edlund and Korn (2002). The explanation is simple; the prostitute should receive the market wage plus compensation (equation (12)). In this sense, highly educated prostitutes will receive higher wages simply because their opportunity cost is higher than that of less educated prostitutes (again, a very simple explanation allowed by our theoretical model, but impossible to derive from some other studies). More than that, the stigmatization for high skilled

prostitutes can be higher than to low skilled ones, implying a higher wage compensation for the more educated prostitutes.

4 The Dataset

The objective of this section is to describe the dataset used in this paper and to provide background information about Brasilia city, the capital of Brazil.

Brasília is the capital of Brazil and is located in the Middle West region of the country, in the Distrito Federal state. According to census data provided by the Brazilian Institute of Geography and Statistics (IBGE), in 2000, there were 169,799,170 inhabitants in Brazil, 2,051,146 in the Distrito Federal state, and 198,422 in the city of Brasilia. According to data from the Bureau of Development of Distrito Federal (Seplan-DF), in 2001, the state GDP was R\$ 33,051 million (approximately US\$ 14,246 million), generating an annual per capita GDP of R\$ 15,725 (or US\$ 6,778).

The information contained in our sample was obtained from a field research made in Brasilia, in July 2003. The data set is composed exclusively of female street prostitutes. Street prostitutes solicit their services in public places and do not work in brothels. One hundred fifty-one female street prostitutes were interviewed. The data was obtained through *in loco*, face to face interviews with prostitutes. The questionnaire contains questions about hourly price, monthly wage, educational level, race, age, tenure, marital status, family relationships, etc.

In Table 1, preliminary information is presented concerning the descriptive statistics of the variables. According to Table 1, the majority of street prostitutes (53.6%) had less than 8 years of education, 43.7% finished the basic school, and 2.6% finished high school (11 years of study). The average age

of the prostitutes is 25 years old with a tenure (time in the profession) of approximately 3.5 years.

Table 1: Descriptive Statistics*

Variable	Prostitutes
Beautiful rating:	in %
a) Very beautiful	5.96
b) Beautiful	22.51
c) Average beautiful	43.70
d) Below average beautiful	16.55
e) Ugly	11.25
Educational level	
a) Less than 8 years of schooling	53.64
b) Basic school (8 years of study)	43.70
c) High school (11 years of study)	2.64
d) College degree (16 years of study)	0
Mother educational level:	
a) Less than 8 years of schooling	56.95
b) Basic school (8 years of study)	39.73
c) High school (11 years of study)	2.64
d) College degree (16 years of study)	0
Tenure in years	3.58 (3.13)
Age in years	25.46 (5.43)
White	56.95
Are you married or live with a partner?	31.78
Do you have children?	55.62
Average number of children	1.13 (1.30)
Are you satisfied with your profession?	25.16
Do you think that you are beauty?	84.10
Do you invest in your physical appearance?	84.76

The price varies with the social condition of the client?	35.76
In your opinion, does your wage depend of your physical appearance?	89.40
Monthly wage in R\$	1,324.30 (873.39)
Hourly price in R\$	56.86 (28.87)
Main reason to enter in the prostitution market:	
a) Financial problems	54.30
b) Low wages in other markets	16.55
c) Enjoy sex	3.31
d) Low opportunities in other markets	15.89
e) Influence of friends	9.93
Are you looking for another job?	41.05
Do you have another job?	17.21
Do you have a good family relationship?	76.82
When you have sex with a client do you have orgasm always or almost always?	16.55
Do you use drugs?	7.28
Are you bisexual?	3.31
Does anyone in your family know about your profession?	34.43
Do your parents (mother or father) know about your profession?	31.78
Do you have a pimp?	1.98
Do you invest in education?	19.86
Do you have any religion?	64.23
Have you ever been arrested?	9.93
Do you grow up in a good neighborhood?	82.78
Do you think that you are sexy?	88.07
Do you drink alcoholic drinks?	41.72
Do you smoke?	56.29
Number of observations	151

* The values in parenthesis are the standard deviations of the variables.

It is interesting to note that 31% of the prostitutes are married or live with a partner. This is evidence against the link proposed by Edlund and Korn (2002), but in agreement with others field researches. Another question asks the prostitutes why they chose to become prostitutes. In our sample, 54% of those surveyed began prostituting because of financial problems, another 15% because of limited opportunities in other labor markets. These percentages imply that about 30% of the prostitutes in the sample entered in this market motivated by factors other than financial difficulties or poor job prospects. Since our sample consists of lower paid prostitutes (street prostitutes), our results provide evidence that traditional factors (poverty and absence of job opportunities) alone are not enough to explain the female prostitution market.

In relation to the wage level, prostitutes charge an hourly price around R\$ 56 (approximately US\$ 20.00) and receive a net monthly wage of R\$ 1,324 (US\$ 473) more than two times the gross monthly wages (pre-tax wages including sales commissions) received by female sales people in Brasilia. It is interesting to note that 41% of the prostitutes are looking for jobs in the formal sector of the labor market. Furthermore, 17% of the sample had jobs outside the prostitution market.

5 Econometric Results

In this section we estimate the determinants of the monthly wages received by Brasilia's street prostitutes. After that, we provide a link between the econometric results and our theoretical model.

Table 2 presents the OLS and instrumental variable (IV) regressions. The dependent variable is the logarithm of monthly wages received by prostitutes. Columns (1) and (2) are the OLS regressions for the full set of explanatory variables and for the

subset of statistically significant variables, respectively. Economic literature that examines returns to schooling claims that educational level is an endogenous variable, implying that OLS estimators are biased [Griiliches (1977), Card (2001), *inter alia*]. To solve the endogeneity problem of the variable schooling columns (3) and (4) present the instrumental variable regressions.

The results in column (4) suggest a beauty premium of 79 percent for beautiful prostitutes. If we believe that orgasm is not related to the beauty of the partner, this result indicates wage discrimination by customers against ugly prostitutes and in favor of beautiful ones. However, if the pleasure in the sexual act depends on the beauty of the partner, then we have a clear indication that beauty increases the productivity (orgasm) and is better compensated for it. These results are in agreement with Hamermesh and Biddle (1994) who document the importance of physical appearance over wages. It is interesting to note that more educated prostitutes receive higher monthly wages (this result is in agreement with our theoretical model). This can be understood as a signal that clients demand more than sexual activities when looking for prostitution services.

Prostitutes that enter in the prostitution market because they like sex receive a monthly wage that is 83% higher than the wages of prostitutes that enter in the market for other reasons. Their higher monthly compensation results from serving more customers, and not for charging higher prices. Both married and drug addict prostitutes receive higher wages, but as they charge the same price as non-married and non-drug addict prostitutes, this compensation results from serving more customers. Both prostitutes that usually have orgasms and prostitutes that change the price in agreement with the perceived social status of the client receive lower monthly wages.

Table 2: Determinants of Monthly Wage of Prostitutes*

Variable	Log of Monthly Wage			
	OLS (1)	OLS (2)	IV [#] (3)	IV [#] (4)
Very beautiful	.5990 (2.48)	.6496 (3.03)	.6759 (3.85)	.7903 (4.86)
Ugly	-.5918 (-3.26)	-.7179 (-4.73)	-.5683 (-2.50)	-.5036 (-2.24)
Educational Level**				
a)Basic school	-.0249 (-0.22)		.1017 (1.19)	.4500 (2.62)
b)High school	.2194 (0.63)		2.0241 (1.47)	6.0727 (2.04)
Reason to enter in the prostitution				
a)Financial problems	.1361 (0.69)		.2688 (1.19)	
b)Low wages in other markets	.4974 (2.28)	.3092 (2.39)	.5442 (2.15)	
c)Enjoy sex	.4905 (1.38)		.7552 (2.06)	.8398 (2.38)
d)Low opportunities	.0394 (0.17)		.1429 (0.57)	
Are you satisfied with your profession?	.0643 (0.43)		.2168 (1.18)	.4480 (2.36)
Are you looking for another job?	-.0608 (-0.49)		-.0229 (-0.16)	
Do you have another job?	.0318 (0.22)		-.0939 (-0.45)	
White	.1380 (1.28)		.2130 (1.69)	.3592 (1.70)
Tenure	.0002 (0.01)		.0017 (0.09)	
Age	-.0105 (-0.87)		-.0129 (-1.07)	

When you have sex with a client do you have orgasm always or almost always?	-.0969 (-0.57)		-.2564 (-1.21)	-.5776 (-1.68)
Are you married or live with a partner?	.1732 (1.36)	.2474 (2.39)	.2588 (1.90)	.3639 (2.80)
Do you have children?	.0080 (0.07)		-.0368 (-0.32)	
Do you use drugs?	.4623 (2.09)	.5212 (2.82)	.4653 (1.68)	.5700 (1.93)
Are you bisexual?	-.0042 (-0.01)		-.0275 (-0.11)	
Do you have a pimp?	-1.0413 (-2.43)	-1.0339 (-2.77)	-.8727 (-3.24)	
Do you invest in your physical appearance?	.2856 (1.80)	.3955 (2.95)	.2250 (1.40)	
Do you invest in education?	.3007 (2.23)	.3759 (3.13)	.1843 (1.01)	
Do you have any religion?	.0551 (0.47)		.1276 (0.95)	
Do you think that you are beauty?	.2490 (1.49)		.2108 (1.05)	
Do you think that you are sexy?	-.1911 (-1.09)		-.1769 (-1.06)	
The price varies with the social condition of the client?	-.2470 (-2.09)	-.2806 (-2.76)	-.3999 (-2.49)	-.8143 (-3.80)
Do you drink alcoholic drinks?	-.1286 (-1.06)		-.0838 (-0.62)	
Do you smoke?	.0334 (0.29)		.0242 (0.21)	
Constant	6.6946 (16.92)	6.5405 (48.63)	6.5682 (17.51)	6.4918 (28.96)
N. of observations	151	151	151	151

R ² adj.	.3165	.3587		
---------------------	-------	-------	--	--

Notes: (*): the values in parenthesis are the t-values; (**): there is no prostitute with college degree this is the reason to not include this variable; (#): In the IV regression the endogenous variable is High School and the instruments are the mother educational level, number of kids and the exogenous regressors in the equation.

In agreement with our theoretical model prostitutes should receive a monthly wage $[g_1(l_p)]$ that equals their wage in a legal activity $[f_2(k, l_a, l_p)]$ plus a compensation for stigmatization $[f_3(k, l_a, l_p)]$. In words, prostitutes with better outside opportunities should receive higher wages. The empirical results linking the educational level of the prostitutes with their wages provide strong support for it. In relation to the traditional labor market theories, the finding that prostitutes that have orgasm receive a lower compensation is important evidence supporting the compensation differential wages approach.

6 Conclusion

Using a simple model where individuals maximize their inter-temporal utility function, subject to their resource restrictions, we are able to replicate stylized facts from the prostitution market. More specifically, our model explains the existence of both higher level prostitutes (call girls) and lower level prostitutes (street prostitutes). More than that, we do not need to make any statement about the skills of prostitutes.

The theoretical model presented here is in agreement with the empirical evidence and allows for the existence of married prostitutes, which was not the case in the Edlund and Korn (2002) model. Furthermore, following the empirical evidence, we found that prostitutes will receive wage compensation whether they use condoms or not.

Finally, we propose a very simple link between prostitution and wage compensation that relies on the opportunity cost of prostitutes. This is a very simple and obvious explanation; however, this issue has not been addressed in theoretical models. Moreover, using this simple link we are able to show: i) the origin of the compensation received by prostitutes; ii) the existence of a segmented market inside prostitution (call girls, brothel employees, street prostitutes, etc.); iii) a general explanation for the wage compensation received by prostitutes that does not depend on the marriage market, condom use or skill endowment; and iv) the amount of compensation that prostitutes should receive. In a public policy sense, our model suggests that public policies that decrease the stigmatization of prostitutes will decrease their wages, and vice-versa.

In the empirical section, this article examines the returns from prostitution activity. Using instrumental variable estimation, we find a beauty premium of 79 percent, meaning that beautiful prostitutes receive higher monthly wages. Similarly, ugly prostitutes receive a penalty of 50 percent in their wages. This result is consistent with Hamermesh and Biddle (1994) that right lights the importance of physical appearance in some labor markets. Furthermore, the fact that prostitutes that have orgasm with clients receive lower wages is consistent with compensation wages theory. Additional results show that better educated, married, and white prostitutes receive higher wages.

Bibliography

AHLBURG, D. A.; JENSEN, E. R. (1998) The Economics of the Commercial Sex Industry and its Implications for HIV/AIDS Prevention Policies. In AINSWORTH M.; FRANSEN, L.; Over, M., (eds.) Confronting AIDS: Evidence from the Developing World. Brussels: European Community.

ARCHAVANITKUL, K.; GUEST, P. (1994) Migration and the commercial sex sector in Thailand. In Health Transition Review, Supplement to Volume 4:273-295.

BASU, Amrita (1995) The Challenge of Local Feminisms: Women's Movements in Global Perspective. Boulder, CO: Westview Press.

CAMERON, S.; COLLINS, A.; THEW, N. (1999) Prostitution services: an exploratory empirical analysis. In Applied Economics, v. 31, pp. 1523-29.

CHAKRABORTY, A.K. et al (1994) Community based survey of STD/HIV infection among sex workers in Calcutta (India). Part I. Some social features of commercial sex workers. In Journal of Communicable Diseases, v. 26(3), pp. 161-67.

EDLUND, L.; KORN, E. (2002) A Theory of Prostitution. Journal of Political Economy, Vol. 110, February 2002.

ESSELSTYN, T. (1972) Prostitution in the United States In Sex and Society, ed. J. Edwards, Markham, Chicago.

EXNER, J. E.; WYLIE, J.; LEURA, A.; PARRILL, T. (1977) Some Psychological Characteristics of Prostitutes. In Journal of Personality Assessment, vol. 41, no. 5, pp. 474ff.

FOLBRE, F.; NELSON, J. (2000) For Love or Money – or Both? In Journal of Economic Perspective, v. 14, pp. 123-40.

FORWARD, Stephanie (1999) Attitudes to marriage and prostitution in the writings of Olive Schreiner, Mona Caird, Sarah Grand and George Egerton. In Women's History Review, v. 8(1), pp. 53-80.

GERTLER, P.; SHAH, M. BERTOZZI, S. (2003) Sex Sells, but Risky Sex Sells for More. Working Paper, February.

HAMILTON, C. (1909) Marriage as a Trade. London: Chapman & Hall.

HELSINGER, E. K.; SHEETS, R. L. and VEEDER, William (1983) The Woman Question: Society and Literature in Britain and America, 1837-1883. Vol. II: The Woman Question - Social Issues, 1837-1883.

HIRSCHI, T. (1962) The professional prostitute. In Berkeley Journal of Sociology, v.7, pp. 37–48.

MOFFATT, P. G.; PETERS S. (2004) Pricing Personal Services: An Empirical Study of Earnings in the UK Prostitution Industry. In Scottish Journal of Political Economy, v.51, pp. 675-90.

OMORODION, F. (1993) Sexual Networking among Market Women in Benin City, Edo State, Nigeria. In Health Transition Review, Supplement to Volume 3: 159- 69.

PLANGE, Nii-K (1990) Report on prostitution in Fiji. Department of Sociology, University of the South Pacific, Suva, Fiji.

PERKINS, R.; BENNETT G. (1985) Being A Prostitute. Allen & Unwin, Sydney.

RAO, V. et al (2003) Sex workers and the cost of safe sex: the compensating differential for condom use among Calcutta prostitutes. In Journal of Development Economics, v.71, pp. 585–603.

SINCLAIR, R. (1992) Female Prostitution in Porto Moresby: HIV/AIDS knowledge, attitudes, beliefs and practices. Working Paper, Department of Anthropology, University of Papua New Guinea, Boroko.

WIRAMAN, D.N.; FAJANS, P.; FORD, K. (1993) AIDS and STD's: Risk Behavior Patterns among Female Sex Workers in Bali, Indonesia. In AIDS Care v. 5, pp. 289-303.