

# **Informal Urban Economy: a Historical Approach of Paris Street-level Prostitution (1870-1914)<sup>1</sup>**

\*\*\*VERY PRELIMINARY AND INCOMPLETE\*\*\*

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**Abstract:** How can districts become totally embedded in informal economy despite harsh state regulation? In this paper, we use qualitative and quantitative data to explain the increasing number of “clandestine” street prostitutes in Paris during The Belle Epoque. We first describe the economics of street prostitution at the time: street prostitutes were young, unskilled and well-paid; they tended to work with pimps that were from the same area and clustered in neighborhoods where they could compete with regulated brothels. Street prostitutes not only generated profits for themselves but also for a whole bunch of actors, thereby switching the whole local economy to this industry, at the expense of the formal economy.

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<sup>1</sup> This work is mainly derived from Alexandre Frondizi’s master dissertation in History: *Histoires de trottoirs. Prostitution, espace public et identités populaires à la Goutte-d’Or, 1870-1914* (2007).

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## I- Introduction

Like other underground economic activities, prostitution is based on markets. Sex workers cluster in some districts to be visible to their buyers and generally align their tariffs but can compete on their specific characteristics or the services they are willing to provide. This concentration of sex workers can generate negative externalities for the neighborhood, positive externalities for some shopkeepers and the development of informal economy. Despite these characteristics, there are very few economic studies of the contemporary market of prostitution and even less economic analyses of this market from an historical perspective (see Posner, 1992; Edlund & Korn, 2002 and Levitt and Venkatesh, 2007; for a complete literature review). Moreover, there are no real studies about the potential inverse impact of an implemented policy to struggle against prostitution.

In this paper, we investigate the market of prostitution in the district of *La Goutte d'Or* in Paris during the *Belle Epoque*. At the time, France was considered as the fatherland of regulation and Paris as the “city of sin”. In the heads of French regulators, prostitution must be tolerated because it was “necessary for the social body’s survival” (Corbin, 1986) but it had to be counterbalanced by a strong regulation. As a result, prostitutes had all to be registered and undergo sanitary examinations twice a month. Because of that tough regulation based on records of information about prostitutes, sex workers who did not want to be registered were called the *insoumises*, literally “rebellious girls” and were considered “clandestine” workers, contrary to the registered prostitutes, the *soumises*. Because of a harsh regulation that could lead to detention or notices to cease work, a lot of prostitutes decided to become outdoor prostitutes or to drop their status of registered prostitutes to avoid constraints imposed by the regulatory status, thus giving birth to distrust against the State capacity to regulate prostitution. The terminology of regulators was somehow a paradox: most of “clandestine” prostitutes became visible in the public space as they were outdoor prostitutes,

while tolerated prostitutes working in houses of prostitution became “clandestine” as they were indoor and hidden prostitutes.

Despite being one of the “oldest jobs in the world”, prostitution is not easy to define. We consider prostitution as a valid informal contract between a supplier – the prostitute – and a buyer – the customer – to exchange sex for money. One of the problems raised with this definition is that some married women satisfy to a certain extent this definition: exchanging sex for money is a feature of the marriage market. Promiscuity between both markets is however limited by two facts: firstly, contracting for sexual relationship is informal and for short-duration on the prostitution market and does not give to any additional rights unlike the marriage contract (such as reversion pensions); secondly, married women do not receive a payment for non-reproductive sex from the buyer’s point of view (Edlund and Korn, 2002). Prostitution and marriage markets thus share common features but can be differentiated.

Another difficulty to define prostitution as a market is the will of sex workers to enter the market. In our paper, we assume that prostitutes are voluntarily providing a sexual service. We do not mean that prostitution is appreciated by the sex workers nor that it is not linked to the economic, gender, social and urban conditions of the times and women’s employment difficulties that may force some of them to become prostitutes. We just consider the choice to enter the prostitution market as being voluntary. We thus exclude the assumption of forced prostitution or trafficking in women in our analysis as we have no information that can help us explore this issue.

We also assume that to a certain extent prostitutes see their relationship to their nude body as being a relationship to goods, perhaps the most underlined limit to any theory or empirical evidence of rationality in this kind of market. We thus consider prostitutes as being the result of rational choices made by utility-maximizing individuals. However, unlike Posner (1992)

and Reynolds (1986), we do not consider that actors on this market include cost-benefit analyses in their decision-making but we believe that their decisions were unconscious, spontaneous and following individual interests.

In this paper, we aim at understanding actors' strategies to maximize their welfare in an underground economy framework. We used an ethnographic research approach to study street-level prostitution in *La Goutte d'Or*, an upper-east side district of Paris, between 1870 and 1914. We thus focus on the informal<sup>4</sup> part of prostitution – i.e. income-generating prostitution outside the state's regulatory framework (Sassen, 1988) - to understand its relationship to the formal economy.

Information sources come from qualitative records of arrests from the *Préfecture de Police de Paris*, the highest police administration at the regional level and letters of complaints from neighbors directly to the *Préfet de Police* and records of surveillance and raids from the *brigade mondaine*, the vice police squad in charge of regulating and enforcing prostitution. Even if our data sources are mostly qualitative, we were able to build a data set of 418 observations concerning 339 arrested prostitutes. This data set contains information – sometimes incomplete – about prostitutes' ages, names, places of birth, skills, working places and registration statuses. We matched this data set with a separately built one about the shopkeepers of the district, especially bar or hotel tenants that were sometimes the prostitutes' managers.

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<sup>4</sup> According to Sassen (1988), informal economy “refers to income-generating activities occurring outside the state's regulatory framework that have analogs within that framework” and it “can only be understood in terms of its relationship to the formal economy – that is, regulated income-generating activity”.

The district and the period were not randomly chosen. *La Goutte-d'Or* is one of the most famous districts in Paris for being still perceived as a cluster of underground economy<sup>5</sup>. While it was a central market for prostitution until the middle of the 20<sup>th</sup> century, it became a drug cluster in the 1970s and is now a famous spot for hawkers and all kinds of street sellers. Moreover, unlike other prostitution clusters of the time, *la Goutte-d'Or* was a middle-class area famous for cheap sex – even during the day - in which “clandestine” and “tolerated” prostitutes were direct competitors.

The *Belle Epoque* is an interesting time period to study when one considers informal economy. For the first time, the whole economy became formal as France was turning into an industrialized country. In such a context, it was therefore surprising to witness the development of an informal economy which was becoming visible to both the population and the authorities. Being characterized by a clear development of the outdoor prostitution phenomenon, this period has spurred debates between historians. On the one hand, some like Corbin (1978) argued that the gentrification of Paris led to an increasing activity in unregulated prostitution based on seduction. On the other hand, Harsin (1985) argued that legal and administrative changes liberalized the access to keep bars while shopkeepers or landlords involved in prostitution faced diminishing entry costs of prostitution as associated penalties and punishment became smaller. There are however no clear-cut answers to this debate, neither from an historical perspective nor from an economic point of view.

We shall here focus on the market's three main issues. Firstly, we shall widely analyze the features of the prostitution market such as rates, determinants of demand and supply. We shall examine how competition between street prostitutes was high, with largely unregulated prices, leading to a relatively low and leveled rate, even if cost structures were different from one

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<sup>5</sup> Emile Zola's famous novel *L'Assommoir* (1877) about Parisian working-classes takes place in this district. The main character Gervaise becomes a prostitute and so is her daughter Nana, the main character of Zola's novel *Nana* (1880) whose main theme is prostitution.

prostitute to the other. We shall focus on the location and the geographic competition between street prostitutes. We will show here that location was determined by the fact that prostitutes tried to be visible, thus clustering in the same streets and close to legal houses of prostitution, mostly in streets behind the main street. Finally, we shall address the externalities of prostitution for the inhabitants of the district and the shops in the vicinity who became actors of the informal economy.

We shall finally contribute to the historical debate by giving a clear-cut answer to the reasons for the development of street prostitution in this district and, more generally, to the growing informal economy that took place in some areas. We believe that not only was increasing outdoor prostitution the result of the failure of the regulatory system from the sex workers' perspective, but that it was also self-powered, since it led to a massive switch of shopkeepers from the formal to the informal economy, prostitution being the only profitable business in the district by the beginning of the 20<sup>th</sup> century.

The present paper is divided into four parts. Section II is a short overview of the French regulation system concerning prostitution. In section III, we will analyze the supply side of the market and provide insight about the networks on this market. In section IV, we will empirically analyze geographical organization and competition on the market. Section V will give qualitative insights about positive and negative externalities. A brief conclusion will follow.

## **II- Prostitution in nineteenth-century France**

State regulators were inclined to respect what an adult woman might do with her own body, provided her decision is set. Hygienist policies on the one hand and moralist thoughts on the other hand are often considered as the cornerstones of regulation. The basis of prostitution regulation was to call on a third-party in order to decrease transaction costs.

Firstly, “tolerated” houses of prostitutions – the so-called *Maisons de tolerance* - and the prostitutes working in those houses under the order of a *Madame* were registered at the *Préfecture de Police*. Houses of prostitution decreased the cost of bringing the parties together and were a means of putting prostitution on the marketing channels as they were official shops with commercial rules. Some of the registered prostitutes were nevertheless allowed to work outdoors – they were called *filles en carte* - provided they respected the imposed rules inherent to their status. By registering prostitutes, the regulators meant to make sure their property rights were not violated, as forced prostitution was strictly forbidden and guaranteed through a tough control of prostitutes by the houses of prostitution at the micro-level and by the *Préfecture de Police* at the macro-level.

Secondly, registered prostitutes had to undergo a physical examination twice a month. Registered prostitutes working outdoor had to report to a dispensary while registered prostitutes working in houses of prostitution were directly controlled in the houses by sanitary inspectors. That physical examination was not only unpleasant but also stressful as prostitutes risked detention resulting in work vacancies and drops in income if they were detected to be sick. Registered prostitutes were thus not considered as occupying a legal work but as doing a job that took them out of the common law. Regulation was indeed designed such as the State could deprive prostitutes of their freedom and rights if they did not take the sanitary inspection or if they appeared to be sick after the sanitary exams.

Regulation was not only used to satisfy the hygienic and moral conditions put forward by regulators but also to ensure market efficiency. Expected costs of the sexual transaction itself such as ill-treatment, violence, robbery or contagious diseases were covered by the actors of the regulation system which provided a safeguard for quality and enforcement of the contract.

Prostitutes who were not registered were called “unregistered” prostitutes or *insoumises* in French. They were “clandestine” or outdoor prostitutes, working in bars, hotels, shops or in the streets. These prostitutes could be arrested randomly. Punishment for being arrested was the automatic registration and the physical examination that could lead to work vacancies or penalties. As they become registered prostitutes, they were considered as *soumises* and had to come to the dispensary for sanitary exams. Regulation was thus a success as it aimed at regulating even unregistered prostitutes.

When one studies the economics of street-level prostitution during this time period, the distinction between registered and unregistered prostitutes was however meaningless. As we previously discussed, the *filles en carte* were mostly outdoor working prostitutes and were doing the same job, sometimes in the same places, as unregistered street-prostitutes and formerly unregistered prostitutes who became registered when they were arrested. The real difference between prostitution types was between indoor prostitutes – i.e. prostitutes working in houses of prostitution or *maisons de rendez-vous* which were unregulated brothels – and outdoor prostitutes who could be registered or unregistered soliciting clients in bars, hotels, shops and in the streets. Another tendency that we observed and that seems to confirm sameness between street prostitutes is that a lot of registered prostitutes tried to be unregistered again. This happened because they wanted to avoid the sanitary visits, sometimes because they were conscious of their sanitary conditions or because they assumed that they were potentially sick. One of the means they used was the official deletion of the profession for girls who wanted to stop the prostitution; note however that deletion was a difficult and rare process.

In this sense, regulation is considered a failure because its original aim was to contain prostitution indoors, a goal that was largely unattained by the end of the nineteenth century and because regulated actors became more and more critical about regulation itself. It was



however a success as far as the system has been used to remove bourgeois inhibition to pay for sex (Fronzizi, 2009).

### **III- The Economics of Prostitution: market design**

*The number of prostitutes in La Goutte d'Or.* A first issue we address here is the number of prostitutes working in Paris and *La Goutte d'Or*. According to recent figures of EUROPAP, a European agency promoting health and well-being of sex workers, there are nowadays 40,000 prostitutes in France, a figure that is far higher than the estimation of the French Central Office for Combating Trafficking in Human Beings which estimates that there are 18,000 to 20,000 prostitutes in France. Estimating the number of prostitutes is far from being easy as there is no official register of prostitutes, while some sex workers are seasonal or working through private networks. If we however consider one of the two figures as representative, we can conclude that the number of prostitutes per inhabitant has largely decreased in France and in Paris, even if we have no figures for Paris alone.

According to an inquiry made by the French Homeland Minister in 1878, the number of prostitutes in Paris was relatively high: 23,000 unregistered prostitutes and 3991 registered prostitutes, 1343 of them working in houses of prostitution and the other 2648 as *filles en carte*. However, if we take into account full-time or consistent street-based prostitutes, there were from 10,000 to 15,000 women regularly and simultaneously supplying sex in Paris by the end of the nineteenth century.

If we focus on *La Goutte d'Or*, reports from the police chief officers estimate that the number of street prostitutes soliciting clients at the same time was around 80 in 1870 and up to 200 in 1914. These figures are quite important if we take into account the fact that prostitution in *La Goutte d'Or* was localized mainly in two streets, *rue de la Charbonnière* and *boulevard de la*

*Chapelle*. Following Moffat (2005), we can draw the evolution of the prostitution/population ratio to see the demand trend for prostitutes. Population in *La Goutte d'Or* has grown from 37,865 inhabitants in 1876 to 47,821 inhabitants in 1911. If we compute a simple elasticity of prostitution on population assuming that the number of prostitutes was stable between 1870 and 1876 and between 1911 and 1914, we find a 5.7 demand elasticity for prostitution, i.e. prostitution increases by 5.7% each time the population of *La Goutte d'Or* increases by 1%. As *La Goutte d'Or* is a famous district of prostitution, one may argue that we should take into account the whole population of Paris or the population of the whole 18<sup>th</sup> *arrondissement* of Paris as a better proxy. Elasticity is then lower but strongly positive and more than proportional to the increase of population, respectively 2.68 and 1.89<sup>6</sup>. These elasticities are comparable to those we would find by running a log-log regression on the number of arrests recorded in our database in comparison to the population of Paris (see Table 1 in appendix).

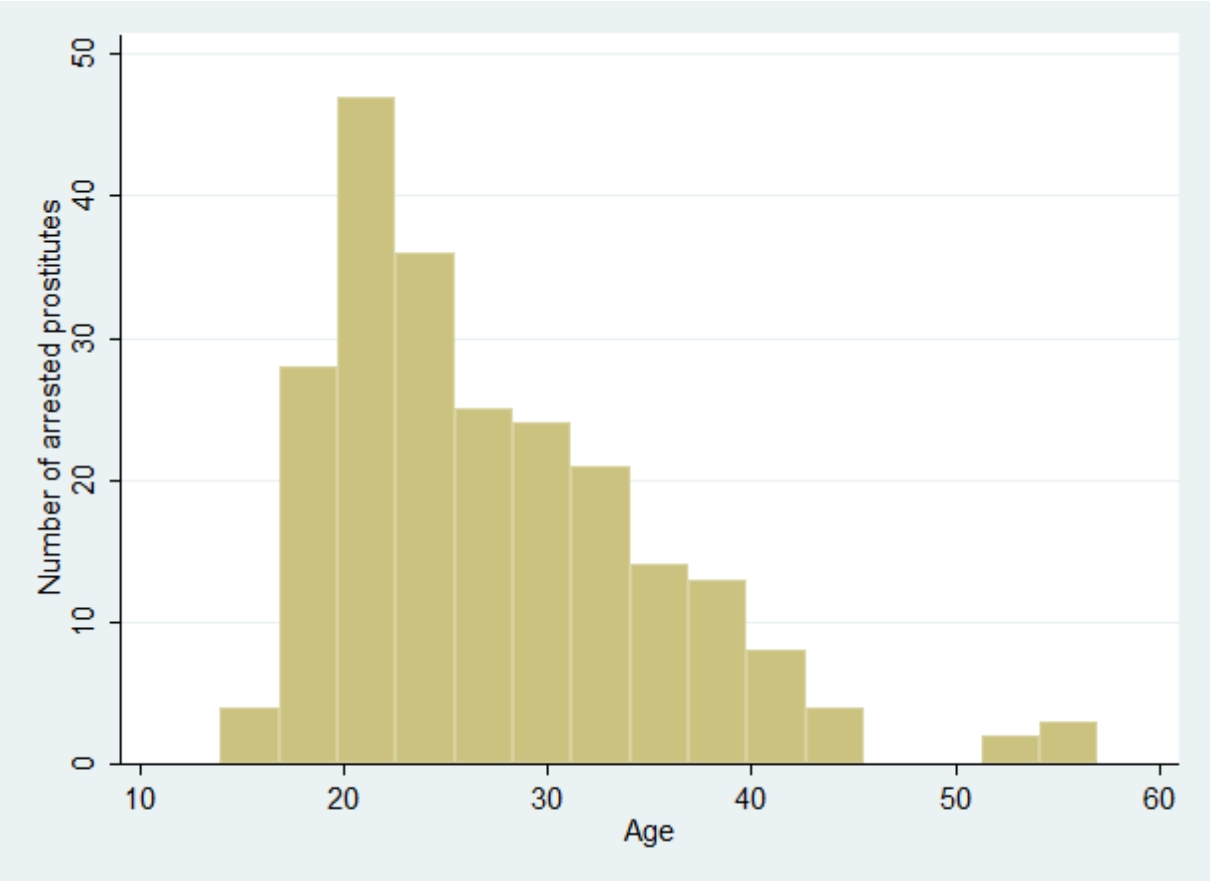
Highly localized prostitutes and outdoor prostitution probably created extensive demand for sexual services, some features that we will discuss in part V. This positive and more than proportional elasticity between prostitution and population was especially true in dense areas such as Paris, because of the geographic proximity of supply and demand, a feature observed in other informal markets (Levitt and Venkatesh, 2007).

*Prostitutes' characteristics*. If we have a quick look to the characteristics of prostitutes, we can see that prostitutes were on average 27 years old with a standard deviation of 8 years, the median being 25 years old. It is not clear whether prostitutes had a long-time career or not. On the one hand, prostitutes could face a short career because of the competition of other markets. Marriage and labor markets were substitutes to the prostitution market. Moreover, prostitution is a hard job and sex workers probably chose to exit the market as soon as they

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<sup>6</sup> Population in Paris in 1872 was 1,851,792 inhabitants and 2,888,110 inhabitants in 1911. Population in the 18<sup>th</sup> *arrondissement* was 274,717 inhabitants in 1911 and 153,264 in 1876.

could. Another explanation is that prostitution wages decreased when they got older as their physical capital depreciated. Indeed, buyers were less willing to pay for old prostitutes as they may be seen as less charming. This could explain why there were few prostitutes older than 40 years old in our database (see figure 1).



**Figure 1: Prostitutes' age**

On the other hand, according to Posner (1992), prostitutes could have a long-term career as women who had lost their virginity before the marriage were losing value on the marriage market. Their prospects of getting a high-quality husband were thus reduced compared to women who could still offer their virginity. Even if we have no individual-level data about prostitutes' virginity status, we can assume that most of the prostitutes had lost their virginity

before marriage, thereby diminishing their own value on the marriage market. We indeed observe that some prostitutes could have a long-term career as some of them had been arrested several times in our panel in time-lags going from 10 years up to 29 years.

However, we could mitigate Posner's analysis: prostitutes could have long-term career not because they were losing value on the marriage market but also because prostitutes got married with their pimps or some shopkeepers working with them. Moreover some of the prostitutes that we followed became themselves "managers" of other prostitutes. Career prospects, more than lost value, could explain that some prostitutes stayed a long time on the market.

For Edlund and Korn (2002), marriage was a source of income and as a result, we should expect few women to be both a wife and a prostitute. Prostitution can then be considered a second market (Doeringer and Piore, 1971), the first segment being the marriage market. If we look at the data, five prostitutes were married and four were widows. Prostitution and marriage markets are thus not exclusive. The poverty condition of widows could surely explain why those women had to trade sexual relationships to survive, particularly because reversionary pensions were not common practice. When we consider the prostitution market regarding the marriage market, we should underline the fact that prostitutes embodied an idea of damaged good. As their value was substantially lower than that of other women on the marriage market, they partnered men who also had a lower quality.

However marriage and widowhood were not the only reasons why some women decided to enter the prostitution market. Wage discrimination between men and women (Cox and Nye, 1989) and dualism – seasonality of the job market for women - on the labour market help us to understand the French labour market of the nineteenth century and the choice made by the prostitutes between prostitution on the one hand and comparatively badly paid and, on the

other hand, unregular employment for low-skilled work. Prostitutes traded sex at the same price in *La Goutte d'Or*. Prices were always declared to be between 1.5 and 2 Francs for a regular trick – a 10 to 15 minutes trick in a shop or in a room - whatever the type of prostitution.

Prostitutes working in the houses of prostitution faced low fixed costs as they usually paid 0.5 Francs to the *Madame* of the house of prostitution. Despite this low marginal cost, registered prostitutes faced additional costs such as the sanitary inspections and risks of work vacancies. On the other hand, street prostitutes – registered or not - had to face larger fixed costs, such as an informal license paid to a shopkeeper such as a tenant to work indoors, or the cost of a rent for a room to trade the sexual act. Prostitutes faced different costs: some paid 1 Franc per trick, other paid 3 Francs per night, some other 9 Francs per week or 20 to 28 Francs per month to have a room plus a variable part of 50 cents or 60 cents per buyer. Tenants, shopkeepers or individual landlords used different sets of menu to protect themselves from the prostitution market's economic cycles.

The growing number of street prostitutes was linked to the high costs supported by prostitutes working in houses of prostitution. Houses of prostitution faced higher fixed costs linked to the rental costs of the houses. Those fixed costs could lead to a lack of flexibility on the market while street prostitutes were more flexible to adjust their supply. Moreover, even if there was higher information on the transaction and the characteristics of the prostitutes, it is not sure however, whether buyers made a real difference between both types of prostitution in terms of costs and risks.

Even if we have no information about prostitutes' monthly earnings, the fixed cost that they had to pay let us think that prostitutes could make better earnings than low-skilled jobs. However, contrary to the usual idea that prostitutes are low-skilled workers with high

earnings, the fixed costs that they had to face and the high level of competition leading to small mark-ups between prostitutes let us believe that prostitutes in *La Goutte d'Or* did not have high-end earnings. Reports made by some policemen tell us that, in order to be profitable, tricks were strictly limited to 10 minutes. After 20 minutes, the landlord could knock at the door to remind the prostitutes that the trick was limited in time.

Another reason why the number of street prostitutes significantly increased is that prostitutes working in legal brothels had a single job while street prostitutes could have a regular job in the week and get extra-earnings by trading sex at night or during the week-ends. In our database, 21 prostitutes declared that they had a regular job and five out of the 26 were unemployed at the moment they were arrested. 6 prostitutes declared to have no job and no skills (see Table 2 in appendix). Combining a regular job and prostitution could be attractive to some women: a seamstress could increase her monthly income by 50%. Extra-earnings were probably what made the job attractive to a lot of women despite the risks they could face.

*Information asymmetry between buyers and sellers.* In the mind of regulators, registered prostitutes were supposed to break the information asymmetry of the transaction as qualitative characteristics of the products and disease transmissions were controlled. Moreover, most prostitutes were supposed to work in houses of prostitution, where tricks and prices were strongly regulated. However, information asymmetry was maintained by the fact that prostitutes were “hidden” in houses, whereas clients wanted to observe the physical assets of the prostitutes. This is probably a reason why street prostitutes became so numerous in *La Goutte d'Or*: The customers walking down the streets could see the physical assets of the prostitutes and directly negotiate the price with them, something that was impossible in the regulated monopoly of houses of prostitution. Another reason is that street prostitutes were

obviously soliciting clients, thus diminishing customers' imperfect information and costs for searching the market, and creating the demand.

Increasing street prostitution at the expense of indoor and tolerated prostitution looked like / was tantamount to the Gresham Law: high quality providers – here from the moral and hygienist point of view - were driven out of the market by those of lower quality. This tendency was self-sustained as more prostitutes from the houses of prostitution decided to work outdoors to escape the harsh rules of the houses of prostitution.

*Networks between shopkeepers and prostitutes.* In our database, 54% of arrested prostitutes have been arrested inside shops or in front of shops with tenants that had the same geographical birth places. We have no information proving that shopkeepers or bar tenants were officially or not managing the prostitutes' careers. However, we know that they could have some commercial links – such as renting a part of their shops to prostitutes or letting them soliciting clients in front or inside the shop. From an economic and sociological point of view, this is not surprising: ethnic and social networks are typically associated with characteristics such as enhanced communication, reputation or trust, leading to economic performance (see Alesina and La Ferrara, 2005 for a literature review).

If we have a glance at the origins of prostitutes, we can see that most of them were not from Paris (see table 3). Particularly, the northern area of France was overrepresented in the street prostitution market of the district. In Paris, prostitutes from the northern area represented 36% of sex workers while they were more than 54% in *La Goutte d'Or*. Migration from the northern part of France was probably linked with shopkeepers of *La Goutte d'Or*, thus following micro-founded preferences to work in this district or maybe because shopkeepers, keen on being involved in the prostitution business, wanted to be associated with members from the same geographical origin in order to curb information asymmetries and opportunistic

behaviors from prostitutes (Greif, 1993). This is an assumption that we make here but a more detailed analysis of the population of *La Goutte d'Or* could help us in understanding this fact.

#### **IV- Location and Geographic Competition**

As prostitution is market-based, suppliers must be localized where demanders can easily find them so they tend to cluster in areas easily findable and well-known to their clients. As traditional marketing channels are not open to them, even for legalized houses of prostitution, one way of being visible is to concentrate in the same district along main streets and close to a well-known place.

Following Hotelling [1929], street prostitutes tended to concentrate in the same area as houses of prostitution in order to steal a share of their market and to break the houses of prostitution regulated monopoly. If we have a glance at the places where prostitutes were arrested, we find a strong geographical concentration. In our dataset, 413 arrests occurred in 41 different places concentrated in an area of 1.09 km<sup>2</sup> (around 0.42 square miles).

Street prostitutes had then a clear strategy: not only were they visible, thus breaking the regulated monopoly from the houses of prostitution, but they were signaling their competences using solicitation and thus acting as unfair competitors. Many complaint letters written from the *Madames* of the two houses of prostitution in *La Goutte d'Or*<sup>7</sup> to the *Préfecture de Police* denounced an unfair competition from street prostitutes who were soliciting some clients in front of houses of prostitution.

Table 3 presents the results from regressions. The dependent variable in model (1) and (2) is the number of prostitution arrests on a given street in the sample period. The first column includes a dummy equal to 1 if the street is a main street and a dummy equal to 1 if the arrest occurred in *rue la Charbonnière*. Model (2) includes two dummies about the characteristics of

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<sup>7</sup>The two houses of prostitution were at the 22 rue de la charbonnière and at the 106 Bd de la Chapelle



the places where arrests took place. One of the dummy takes 1 if prostitutes were working in a hotel, the other one takes 1 if the prostitute were working in a bar or a dancing bar. We here focus on arrests that took place in some shops. Main streets such as *Boulevard La Chapelle* were the scene of more arrests than the six other streets where arrests occurred. *Boulevard de La Chapelle* was a famous street for outdoor and indoor prostitution with prostitutes working in bars and hotels and in rented rooms. While in *Rue de la Charbonnière* most prostitutes were working outdoors or in private rooms or shops that they transformed into rooms.

For models (3) and (4), the dependent variable is the number of prostitution arrests in a given place or soliciting clients in front of a given postal address. We include here additional variables such as the distance in kilometers to the Northern Train Station of Paris and to the closer house of prostitutes. Being on the major street always has a significant positive effect. Distance to the Train Station has a negative effect confirming that prostitution tends to cluster close to easily findable places. More arrests occurred close to the houses of prostitution, not only because street prostitutes tended to cluster in those areas but also because police officers were trying to protect the regulatory monopoly of those houses.

Following Chamberlin (1933), our data allows us to argue that street prostitutes, sometimes organized as firms, were in the case of monopolistic competition by differentiating their selling products from their rivals. One of the real or perceived non-price differences for the customers was teen prostitution. In our sample, 21% of prostitutes had come of age – 21 years old at the time. In the period studied, the age of consent was 13 years old but it was a restricted rule applied only for married couples. There are 10 arrested prostitutes that were under 18 (2 were 14 years old, 2 other were 16 years old and 6 of them were 17 years old). There is however a selection bias from our dataset as police officers did not register children; there were thus probably more under-aged prostitutes.

## V- Externalities of Prostitution

One of the reasons why regulation appeared as compulsory for the prostitution market is the way people and especially neighbors pictured prostitution. Such negative moral externalities – a broad externality inherent to any transaction – must be taken into account. On the one hand, one may argue that visible prostitution is harmful for the neighbors in the district. Historians such as Corbin [1978] or Conner [1995] underlined that, when particularly visible, prostitution was seen as debauchery or as an offense to public morality. Several testimonies or informing letters from inhabitants about prostitution's negative externalities were indeed collected. Even if morality was often underlined, this was not the main source of complaints. Social disapproval of prostitutes and prostitution appeared in streets where prostitution was visible as in *rue de la Charbonnière*: insults, violence, fear, safety were put forward as negative externalities of prostitution.

One other externality concerns third-parties: prostitution is costly for its buyers and dissipates financial resources that could have been directed to their families; diseases contracted after a sexual relationship with a prostitute could be spread to other sexual partners, including the wife. Marital prejudices – such as divorce – were very rare (we found only one complaint on this subject).

Some shopkeepers used denunciation of unfair competition and commercial prejudice as a means to protect their margins. This is especially true for the *Madames* of the *Maisons de tolerance* who regularly complained about unfair competition from illegal brothels and asked for more arrests and more fines to remove the prostitution market from the district. In several letters, some *Madames* of the tolerated houses of prostitution highlighted the fact that street prostitutes were free to walk outside and “solicit clients up to the entrance of the houses of

prostitution”. Houses of prostitution were probably not to be complained from the economic point of view as none of them went bankrupt (and one of them has been the last house of prostitution in France) but complaint letters give us a clear view of the actors’ strategies: the *Madames* were denouncing immoral outdoor prostitution, barbarian/unsafe prostitution and tax-free prostitution while they considered the houses of prostitution as a convenient sex trade. They thus became the best defender of the prostitution regulation.

Testimonies of unfair competition were confirmed by the charged tenants themselves: a wine tenant declared that she was a “competitor” to the *madame* of the house of prostitutes and that the latter had to illegally use some *marcheuses*, or street walkers, to instore a fair competition with street prostitutes. Solicitors stole potential clients from legal brothels but also, by giving them the taste of liberty, their prostitutes. This confirms the inexistence of an opposition between registered and unregistered prostitutes who were living and working in the same places.

A dozen of registered complaints were about denunciation for commercial prejudice from shopkeepers of the district. First of all, we notice that prostitution could have some positive externalities for economic actors of the formal economy. For the bar and hotel tenants who had prostitutes formerly or not working in, prostitution was a positive externality for the economics of the district as prostitutes and their customers consumed. Bar tenants often wrote letters to the police officers to justify the fact that prostitutes could be soliciting clients in their shops: by reinterpreting trade laws, they notified that they could not “refuse to serve any clients, even prostitutes, provided they are not soliciting<sup>8</sup>”. Moreover, the French regulatory

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<sup>8</sup> BM2, box 48, 42 rue de la Charbonnière, Report from the Safety Service, letter from Marguerite Scholastique Bal, former prostitute, now a bar tenant at the corner of rue Charbonnière and rue des Islettes, September 18th, 1898.

laws were not clear either, as registered prostitutes could work outdoors – the so-called *filles en carte*- provided they did not solicit.

However, prostitution had a clear impact on the shops of the district. Because of a decreasing profit, shopkeepers changed their specialization to renting rooms or their full shop to street prostitutes. Some shopkeepers on *rue de la Charbonnière* did not deny their informal activity but tried to justify it: “(...) trading was impossible in this street because of the number of street-prostitutes soliciting clients”. Shopkeepers argued that to avoid bankruptcy the only way was to rent their shops to street prostitutes. Once again, we have to dissociate the actors’ strategies from reality but we believe that profit-maximization in *La Goutte d’Or* implied converting activities into prostitution.

This point of view is moreover largely shared by the people living in *La Goutte d’Or* and the police officers. An inhabitant of the district wrote in a letter sent in 1910 “some landlords divided their shops in three or four rooms and installed as many women, thus leading to “wholesale pimps”, at the expense of the hotel tenants of the district. After bringing down all the once upon a time rich small retailers because no housewife dared walking in these streets, this will be the turn of the hotel tenants<sup>9</sup>”.

The police officer made a similar statement:

“Retail is almost dead in this part of the district of *La Goutte d’Or*, most of the shops which are not rented by bar tenants would be vacant if bar and hotel tenants did not consider renting rooms for tricks (...)

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<sup>9</sup> BM2 (Vice Squad 2), HQ boulevard de la CHapelle, Letter from M. Frey, August 29<sup>th</sup>, 1910.

Bar and hotel tenants employed prostitutes; there were, in most cases, day and night shifts, the change happening at around 6 pm. It is obvious that tenants benefited from prostitution. From the moral point of view, these were pimps, but factual proofs are missing to charge them with being pimps and moreover, it was rare to find in their rooms underage prostitutes; but they are perpetually violating the provisions of the 15<sup>th</sup> February, 1910 police warrant.<sup>10</sup>»

Shops of prostitution replaced other shops, which had bankrupted because of soliciting prostitutes, or perhaps because prostitution generated prostitution; a vicious circle for some shopkeepers, a virtuous circle for others. From our point of view, shopkeepers in *La Goutte d'Or* did not disappear but specialized in sexual trading, the best suited activity to the geographic concentration of soliciting prostitutes, the only commercial activity in which products “took by the hand” potential customers. Tenants and shopkeepers were making higher profits by diverting their economic activity from traditional shops to prostitution. It became difficult to draw a line between formal and informal economy as those actors were often on both sides<sup>11</sup>.

## **Conclusion**

In this paper, we aimed at understanding the reasons why regulation of illegal activities could fail and lead to the reconversion of elements of the formal economy into informal activities. Street prostitution was growing for two reasons. First, sex trade was well-paid. Second, street prostitution freed registered prostitutes from the constraints of working indoors where they had to abide by stringent rules. As street prostitutes solicited clients, they created demand for sex trade, thereby transforming the local economy. Competition and commercial conflicts

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<sup>10</sup> BM2 (Vice Squad 2), HQ rue de la Charbonnière and boulevard de la Chapelle, Box 51, Report of the head of the police in La Goutte d'Or and police officer of the 18th arrondissement, April 24th 1913.

<sup>11</sup> A representative example is the fact that shopkeepers were almost always the one paying spotters who could earn 3 Francs per night and whose job was to signal a random police attendance.

between regulated houses of prostitution and shopkeepers involved in sex trading were important, and created even more supply as prostitution took over the public space. “Clandestine” prostitution was finally instrumented by the different actors of the regulatory system to remove bourgeois inhibition to pay for sex and thus protect the marital institution. It was moreover instrumented by the vice squads themselves who thrived on this informal economy.

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## Appendix

**Table 1: OLS Regression of prostitution against population**

VARIABLES	Log(Arrests)
Log(Population)	2.336*** (0.238)
Constant	-31.346*** (3.461)
Observations	415
R-squared	0.163

Robust standard errors in parentheses  
\*\*\* p<0.001

**Table 2: Prostitutes' jobs and skills**

Job	Observations
Laundress	2
Servant	6
Seamstress	7
Cooker	4
Florist	2
Nurse	1
Milliner	1
Performer	1
Lace dealer	1
No skills	6

**Table 3: Prostitutes' and tenants' geographical origin**

	Area	Observations
Prostitutes	Paris	30
	Areas around Paris	8
	Other départements in France	92
	Foreigners	3
Tenants	Paris	15
	Other départements in France	137
	Foreigners	18

**Table 4: Predictors of street-level and shop-level recorded arrests of prostitutes**

VARIABLES	(1) # Arrests per street	(2) # Arrests per street	(3) # Arrests per working pl.	(4) # Arrests per working pl.
Main Street	308.429*** (1.115)	311.717*** (1.405)	10.323*** (1.305)	8.256*** (2.111)
Charbonnière	56.429*** (1.115)	-59.133*** (1.569)	-5.456*** (1.175)	-5.930*** (1.755)
Hotel		-1.146* (0.497)		-7.607** (2.859)
Bar		-1.340** (0.560)		-4.949* (1.967)
Dist. to brothel			-58.937*** (10.357)	-43.934*** (10.036)
Dist. to station			-22.672+ (13.165)	20.103 (15.037)
Constant	9.571*** (1.115)	7.429*** (1.737)	31.746*** (8.981)	2.797 (11.106)
Observations	412	132	411	132
R-squared	1.000	1.000	0.302	0.346

Robust standard errors in parentheses \*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.1$ . The dependant variable in (1) and (2) is the total number of arrests per street during the 1870-1914 time interval. In (3) and (4) the dependant variable is the total number of arrests per working place during the whole period. Our sample is made of 8 streets where arrests occurred. The main street is Boulevard de la Chapelle. Charbonnière is a dummy that takes 1 if arrest is localized on rue de la Charbonnière (the main street for neighbors' complaints). Hotel and bar are dummies that take 1 if the arrest takes place in a bar or a hotel; otherwise the arrest takes place in a room rented by the prostitute. Distance to the brothel is the minimum distance in kilometers to one of the two houses of prostitution of *La Goutte d'Or*. Distance to the station is the distance in kilometers from the train station.