

CM18: PROHIBITION (2/22/17)

IF YOU ARE OFFENDED BY A LECTURE DEVOTED TO THE ECONOMICS OF PROSTITUTION, THEN PLEASE FEEL FREE NOT TO ATTEND THE LECTURE, OR, TO LEAVE AT ANY TIME THAT YOU FEEL UNCOMFORTABLE. ALAS, THE LECTURE IS NOT VERY TITILLATING (NO PUN INTENDED). AND IT CONTAINS SOME INTERESTING ECONOMICS.

At a recent AEA meeting the WWU economics department hosted a dinner for some twenty of our graduates who are now university professors. I am told that my ECON 206 class was the favorite topic of conversation and that everyone seemed to fondly remember the lecture on prostitution.

MOST, BUT NOT ALL, OF WHAT YOU SHOULD KNOW

1. Can economists use the supply and demand model to analyze prostitution (a service) or "hard" drugs (a "good")?
2. Making a commodity illegal reduces the supply and sometimes the demand, but does it eliminate the use of the commodity?
3. If the supply and demand curves both shift to the left what happens to the producer and consumer surplus?
4. If both the supply and demand curves shift simultaneously can we predict what will happen to both price and quantity?
5. If supply and demand both increase what can you predict and why?
6. If supply increases but demand decreases what can you predict?
7. What are the costs and benefits of banning a voluntary trade?
8. If there are enforcement costs how will they vary with the

reduction in the level of the activity?

9. Is prostitution a victimless crime?

10. Is prostitution a homogeneous service (a single industry)?

11. What would be an efficient policy to deal with the external effects associated with prostitution?

12. Are prostitutes forced into prostitution by economic necessity?

A. PROSTITUTION.

1. PROHIBITION OF MARKETS.

1. A pure market economy would produce any, and all, goods and services for which there was sufficient demand and supply to constitute a market; everything would be for sale. Some of these goods and services, child prostitution and child pornography, are generally repugnant¹ and some, such as adult prostitution, pornography, alcohol, hard drugs and gambling, have often been prohibited (made illegal) on moral grounds in the US and other countries. There are other markets that are either prohibited (you may not sell your kidneys in the US), or, which are heavily regulated (such as adoption markets and so there is no real market in babies in the US). Economics attempts to avoid introducing overt value judgments into economic analysis and therefore treats all goods and services on an equal footing; bread and AK47s and \$2,300,000 diamond dog collars are just goods, and lawyers and prostitutes both provide services, and economists may give advice both to governments and to monopolists.

2. If society wishes to prohibit a market in a good or service then society has effectively declared that there has been a "market

¹ <https://www.aeaweb.org/articles.php?doi=10.1257/jep.21.3.37>

failure", even though the market does not exhibit external effects, public good problems, or informational asymmetries.

3. Economics ignores moral issues, although they may be thought of as a type of externality: "external costs" that are essentially psychological and arise from some persons feeling of moral outrage that someone else is behaving in a manner that is prohibited by the person's moral², usually religious, views. However, when I talk about "society" wanting to suppress certain types of social behaviour that does not mean that everyone wishes to do so; libertarians would be concerned with the "tyranny of the majority" and there may be a "tyranny of the minority" if politicians hypocritically espouse "family values" or if the Taliban decides to impose strict Sharia laws (including stoning adulterers to death). However, many laws are imposed that affect some groups who would not vote for them; this is one of the prices that we pay for democracy.³

4. There is very little economics research on prostitution, and, in my far from humble opinion, what there is, is not very good.⁴ The various articles in the *Economist* are better but miss the major points.⁵

5. In Abrahamic societies there is much moral concern with sexual activity, although this is not something that is shared by all societies, and this is not one of Pinker's seven universal norms.⁶ In about half of Western European countries prostitution is legal and in the other half it is illegal.

In the UK solicitation is a crime but the sale of sex is not.⁷ In some counties in Nevada prostitution is legal, although not in Las Vegas

² "Morality" is usually associated with religious and social prohibitions. Ethics is generally concerned with what is right and wrong and may have no religious basis.

³ This is only tangentially related to the point but I found this video and article fascinating.

<http://www.upworthy.com/20-years-of-data-reveals-that-congress-doesnt-care-what-you-think>

⁴ <http://freakonomics.com/2011/10/10/economics-run-amok-whats-your-price/>

⁵ <http://www.economist.com/topics/prostitution>

⁶ <http://www.nytimes.com/2008/01/13/magazine/13Psychology-t.html?pagewanted=all>

⁷ <http://prostitution.procon.org/view.resource.php?resourceID=000772>

despite the huge amounts of advertising of the services of prostitutes that litter the pavements.

5. My analysis of prostitution will treat it just like any service. I will confine the analysis to voluntary exchanges, and so I will be concerned with adult (female) prostitutes who freely enter into the market, as they do in Germany and Holland or Nevada.

I will not discuss the serious problem of "human trafficking", except to note that in my opinion the evidence suggests that making prostitution illegal makes escaping from this appalling situation of sexual slavery more difficult.⁸ Recently, in an attempt to reduce human trafficking, Sweden, Norway, and Denmark have made the purchase of sex illegal although its sale is legal. However, Holland has adopted a different approach to human trafficking. (The Netherlands Ministry of Foreign Affairs wrote in its 2005 document "Dutch Policy on Prostitution: Questions and Answers" provided on its website: "To end abuses in the sex industry, the Netherlands decided to change the law to reflect everyday reality. It is now legal to employ prostitutes who are over the age of consent, and do the work voluntarily, but stricter measures have been introduced under criminal law to prevent exploitation. The legalization of brothels enables the government to exercise more control over the sex industry and counter abuses. The police conduct frequent controls of brothels and are thus in a position to pick up signs of human trafficking. This approach is in the interests of prostitutes themselves, and it facilitates action against sexual violence and abuse and human trafficking... An important spin-off of the policy is that it prevents human trafficking, which is characterized by exploitation, coercion and violence. The lifting of the ban on brothels makes prostitution a legitimate occupation and gives prostitutes the same rights and protection as other professionals. The labor laws offer the most effective protection against exploitation, violence and coercion. The

⁸ <http://www.bellinghamherald.com/news/nation-world/world/article29751928.html>

policy is based on the conviction that strengthening the position of women is the best way to combat sexual violence. Moreover, abuses are easier to detect when prostitutes operate publicly and legally rather than in a clandestine subculture.")

I will continue to use the term prostitute rather than sex worker, which covers a wider group of occupations, such as women employed in the pornography industry.⁹

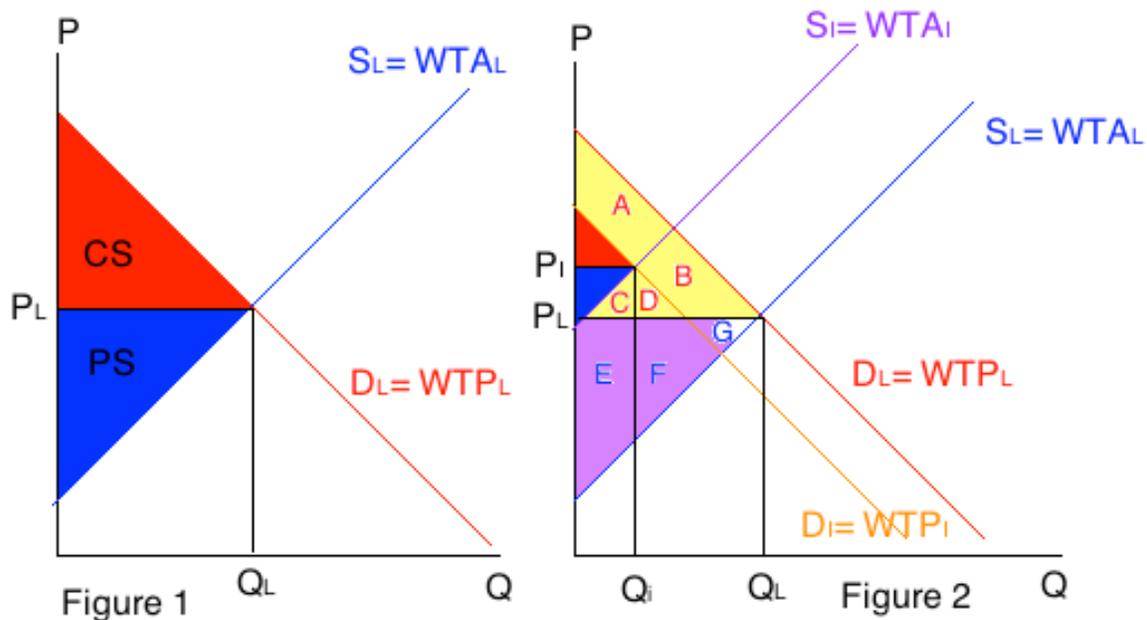
2. A TOY SUPPLY AND DEMAND MODEL

1. Figure 1 shows the market for prostitution when the activity is legal. The market maximizes the gains from trade ($GFT = CS + PS$) and, if there are no external effects, then the market produces the socially optimal output where $MB = MSB = MC = MSC$, which is a Pareto Optimum. Figure 2 shows the market when prostitution is illegal. The supply curve shifts upwards – the prostitute's WTA is higher because her expenses are higher: she may now have to "pay off" the vice squad, she has to avoid arrest by changing her location from time to time, she has to take into account the costs of being arrested, being convicted and paying fines or serving a term of imprisonment. The demand curve shifts downwards since the client now has a lower WTP because of increased search costs, possible social disgrace, and fines or imprisonment. In practice the police devote most of their suppression efforts to the supply side of the market and so the supply curve shifts by more than the demand curve. (There is a higher return to arresting a supplier who services many buyers than a buyer who trades with only a few sellers. It may also reflect sexism and a "double standard".)¹⁰

⁹ VIEWER DISCRETION: NSFW FOR THOSE UNDER 18. <http://jonmillward.com/blog/studies/deep-inside-a-study-of-10000-porn-stars/>

¹⁰ "In fact, in the U.S., prostitutes get busted more often than Johns [clients] or pimps by a huge margin. Every year in the U.S., between 70,000 and 80,000 people are arrested for prostitution, costing taxpayers approximately \$200 million. The breakdown of arrests: 70% female prostitutes and madams, 20% male prostitutes and pimps, and just 10% Johns.

2. First note that making a voluntary activity illegal does not eliminate it; Q_I (Figure 2) is always less than Q_L but it is still positive. Increasing the severity of penalties is less effective, but lower cost, than increasing the probability of apprehension. A \$2,000 fine for speeding that increases by \$2,000 for every extra five miles per hour in excess of the speed limit, but is rarely enforced, is less effective than a \$50 fine with a 90% probability that you will be caught and have to pay almost every time that you speed. Of course, such rates of apprehension will be prohibitively costly. In China prostitutes may be sent to labor camps, but there is still prostitution in China.



That equates to nine prostitutes/pimps being arrested for every one customer. Reasons for that vary, but the most obvious is that it is much easier and cost effective for law enforcement to answer ads or proposition obvious prostitutes on the street than to invest the time and manpower to attract Johns then ambush them without issue as they attempt to consummate the transaction." HG.org

But see: <http://www.bellinghamherald.com/news/local/crime/article24675565.html>

3. CS (which is now the small red triangle) is reduced by the small (PS) blue triangle, which is a transfer from buyers to sellers, plus the sum of the areas $A+B+C+D$. PS is the small blue triangle and is reduced by the difference of the areas $E+F+G$ and the small blue triangle. Economists would treat A through G as a dead weight loss but that is because economists essentially disregard the psychological benefits to those who are morally opposed to prostitution. It is not obvious whether those psychological benefits are greater than, less than or the same as the area A through G .

4. This is the first time that we have shifted both the supply and demand curves. Notice that [when both curves shift, which is likely to be the normal case, the supply and demand model loses half of its predictive power.](#) When both curves shift in the same direction we can predict what will happen to the quantity transacted but not what will happen to price, whereas when the curves shift in opposite directions we can predict what will happen to price but not what will happen to quantity. This is because when the curves shift in the same direction both buyers and sellers wish to transact more or less, but they differ with respect to what should happen to price, whereas if the curves shift in opposite directions buyers and sellers agree about what should happen to price, but they differ with respect to the amount to be transacted.

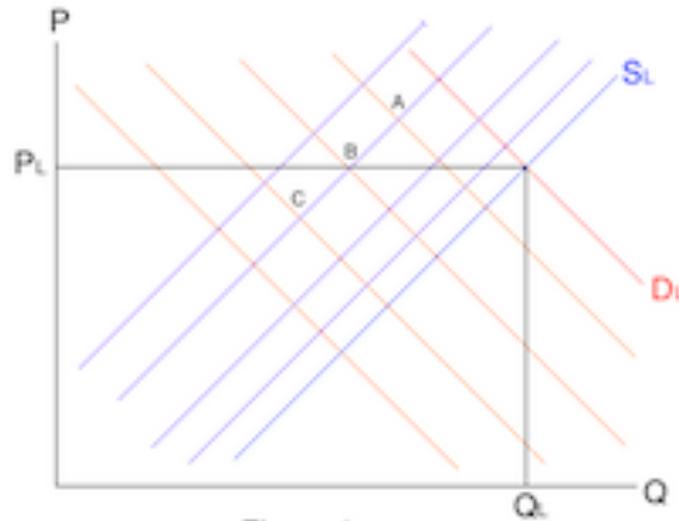


Figure 3

5. In Figure 3 I shifted the curves by arbitrary amounts and you can see that what happens to P depends on the size of the two shifts. I deliberately drew the supply and demand curves with 45° slopes.¹¹ In Figure 3 at A the price has risen because the supply shift was larger than the demand shift; at B the price has remained constant because the vertical shifts of the two curves cancel out; and at C the price has fallen because the demand shift was larger than the supply shift.

6. Even when street prostitution is curtailed by heavier enforcement as in Soho, in central London, during my student days, the prostitutes did not disappear; they simply changed their mode of operation. For example, advertising a "Large chest for sale" in the local tobacconists' shops. If you can find a public telephone booth in Soho today, you will probably find that its interior is covered with the business cards of prostitutes, who may sell sex but may not

¹¹ Potential economics majors must be wary of diagrams. Our eye hand coordination is such that we tend to shift curves by the same amount and to draw them with the same – but opposite sign – slopes. It is very easy to come up with special cases when using a diagram to illustrate a general argument. You should also be aware that what is true in two dimensions may not be true in three or more dimensions, although what is true in three dimensions is often true in four or more dimensions.

solicit. The local council pays a gang of men to remove these cards and the prostitutes simply replace them. I am told that the cards, which have photographs of attractive, scantily clothed women (but beware of asymmetric information!), were collected by English schoolboys in the way that American school boys collect baseball cards.

7. Shifting the curves cannot be achieved by simply passing a law, and so, in addition to the efficiency loss (both CS and PS fall), there will be enforcement costs, either police must be diverted from other types of crime or the police budget must increase at the expense of other types of expenditures. The opportunity cost of the ban on prostitution is the increase in other types of crime in the first case, and the reduction in other types of government services in the second case. These enforcement costs are likely to increase at an increasing rate.¹²

If prostitutes are incarcerated there will be costs of imprisonment.

8. There will probably be a decline in the quality of the service: clients will have to spend more time looking for the service, probably in the least salubrious parts of town, the women who are willing to supply an illegal service will want to get the transaction over as soon as possible, and they are more likely to engage in other types of crime.

The prostitutes are more likely to be subject to violence since they cannot complain to the police when raped and robbed, and since at least the time of "Jack the Ripper" prostitutes are often the victims of choice of serial killers.¹³

¹² http://articles.latimes.com/1987-07-10/news/mn-1941_1_prostitution-arrests.

¹³ "Prostitution is one of the most dangerous professions in the country; worse than Alaskan fisherman, or loggers, or oil rig workers. According to recent statistics, the death

On the benefit side of the equation people who find prostitution morally repugnant will gain psychological benefits.

3. IS PROSTITUTION: A VICTIMLESS CRIME? EXTERNAL COSTS

1. Prostitution is sometimes referred to as a "victimless" crime, because if it is a voluntary exchange, and we are only concerned with voluntary exchanges, then both the buyer and the seller believe that they gain from the transaction so who is the victim? Prostitution is a crime that, unlike mugging or robbery, does not appear to be a zero sum game. On the other hand, if the client is in a relationship then he may divert money away from household spending and so partners and children are worse off, but that is also true of alcoholics and golf fanatics, but we do not currently prohibit the sale of alcohol or make golf illegal. However, some types of prostitution generate external costs.

2. When analyzing social issues such as prostitution it is important to note that prostitution is not a single activity, the market for prostitutes' services is as segmented as is the market for cars: Honda Accords are in a different class from Hummers or expensive sports cars. Some prostitutes work the streets (streetwalkers), others work in "massage parlors", some work in brothels, some for escort agencies, some use the net to advertise and some are "call girls". The streetwalkers are the "economy end" of the market and the call girls

rate for prostitutes in the U.S. is 204 out of every 100,000. For fishermen, it is 129 out of every 100,000. Also, the average prostitute gets physically (but non-lethally) attacked approximately once a month. One reason for these numbers is that prostitution is illegal in every state (even Nevada where it is only allowed in brothels in certain parts of the state). When prostitutes face violence they have nowhere to turn without being arrested themselves. Consequently, prostitutes are an easy target ..." HG.org

are the “luxury end” of the market. Therefore when we analyze potential external effects we need to think about which segments of the overall market generate the external effects, just as we might want to tax Hummers differently than Accords.

3. Prostitution may generate two types of external effects (external costs): neighborhood effects and Sexually Transmitted Diseases (STD) effects.

4. Neighborhood externalities are largely associated with streetwalkers although massage parlors and brothels may also generate neighborhood effects. Businesses selling sexual services, like other businesses, tend to cluster close to one another – Iowa Street is “automobile row” in Bellingham. Streetwalkers cause increased traffic flow, especially late at night, and prostitutes soliciting trade have to “advertise” their wares in ways that may be offensive to non-customers, and non-prostitutes may be accosted by men looking to buy sex. These activities lead to lower house values and to a decline in the neighborhood: for example, the “gentrification” of Davy street in Vancouver, BC, ultimately led to the elimination of street prostitution in that area of Vancouver.

5. However, although the electric utility industry generates external costs we do not shut it down but attempt to reduce the external costs. Rather than making prostitution illegal we can attempt to mitigate the external effects. In the case of neighborhood effects zoning is one solution – move the activities to parts of the town that are little used at night (the Combat Zone in Boston, the Tenderloin in San Francisco, the Reeperbahn in Hamburg, the Red Light district in Amsterdam, Railroad Avenue in Bellingham before 1950¹⁴).

¹⁴ <http://klipsun.wvu.edu/archives/s08b/story.php?name=brothels>
<http://www.demandforum.net/site/bellingham-wa/>

Restrictions may be placed on massage parlors and brothels so that they may not locate near schools, churches, or in close proximity to one another. Prostitutes using the Internet, or working in massage parlors, or for escort services or call girls do not generate neighborhood effects.

6. Although prostitutes are more likely to engage in protected sex than are high school students, they may also spread sexually transmitted diseases (STDs) including AIDS (the spread of AIDS in East Africa is associated with the prostitutes who service the north-south truck routes). STD externalities are again a problem largely associated with streetwalkers, since the other types of prostitution are to some extent self policing – massage parlors, brothels, and call girls want repeat custom just as Hagen and Nordstrom do. Until the 20th century many countries licensed prostitutes who were subject to weekly medical exams. In Germany prostitutes who acquire STDs have their licenses temporarily suspended, and they receive free medical treatment and welfare payments while they are unemployed. Making prostitution illegal makes it more difficult to control the spread of STDs. There has never been a case of AIDS in the controlled brothels in Nevada and venereal disease is quickly detected and controlled. In major cities in the US it is estimated that the incidence of venereal disease amongst street prostitutes is close to 100% and perhaps 50% of streetwalkers are HIV positive. Licensing street prostitutes would reduce the external effect and add tax money that could be used for treatment. A supplementary form of income would also be desirable because withdrawing the license denies the prostitute her means of making a living, forcing her to return to the streets illegally.

6. Note that banning prostitution is not only a very poorly targeted policy for dealing with any external effects but there is no reason to

believe that an outright ban acts like a Pigouvian external cost tax. Such a tax would need to be levied on the streetwalkers to reduce the external cost they may generate and this would involve working out who is generating which externality, how much externality she is generating, and then charging an appropriate tax or license fee. Again we are moving beyond the simple analysis of CM19 where we had what is called a “point-source” externality.

4. IS PROSTITUTION A VOLUNTARY TRADE?

1. Feminists seem to be divided on the subject of prostitution. Some feminists believe that prostitution should be legal because they believe that women have the right to do what they want to with their bodies. These feminists see the ban on prostitution as an example of the way that a male dominated society mistreats women. And these feminists will point to a “double standard” that arises if the police pursue the prostitutes rather than their clients. Other feminists believe that prostitution is an obvious example of how a male dominated society exploits women and believe that prostitution should be illegal, to protect women from male exploitation even if the women claim that they are voluntarily engaged in prostitution. (This is one of the reasons that some women’s organizations oppose the Amnesty International’s support for the legalization of prostitution.)

2. One point that is often common to both sides in this dialog is the argument that women are forced into prostitution by economic necessity. In the nineteenth century if a woman in domestic service was to have sex, usually against her will, with one of the male members of the household then she would almost certainly be immediately dismissed if her “liaison” was discovered and she would not be given a “character” – a reference by her previous employers. This would make it almost impossible for her to find another job of

any kind, including work in a factory, and the woman would likely end up as one of thousands of prostitutes plying the cities streets.

3. But in 2017 most women who *voluntarily* decide to become prostitutes are not in the position of only having one way to support themselves (and often a dependent child). We are all “wage slaves” in the sense that we must work to generate income to buy at least what in our society are the bare necessities. Therefore professors are wage slaves too; the difference between the professor and the prostitute is that they have different resource endowments – the professor has a lot of human capital and perhaps a higher IQ and the prostitute has physical attributes that make her attractive to men wanting casual sex. The professor has many employment options but the prostitute may be between “a rock and a hard place”, but even then she has a choice. Therefore, the prostitute is making an employment choice just like anyone else. It is therefore likely that she has chosen to be a prostitute because she believes that that is her best alternative amongst the jobs that are available to her. This is especially true of call girls who have to be well educated – some of them have MBAs¹⁵ – and able to talk intelligently about current political and cultural events and know how to choose a decent wine. Such women are very selective about their clients and make significant sums of money – usually tax free – that they probably invest carefully for when they leave the profession.¹⁶

4. Of course the street prostitute may not be doing her calculation correctly. She probably does not factor in the physical and psychological wear and tear that goes with her job, and the social

¹⁵ http://en.wikipedia.org/wiki/Sydney_Biddle_Barrows Ms. Barrows was not a prostitute but she did run an escort agency. Her book makes an interesting read for summer on the beach.

¹⁶ <http://pricingstrategies.ca/2012/01/hooker-nomics/> Asymmetric information is a problem with contacts via the Internet or casual advertising on doorways as is common in London's Soho red-light district.

problems too (which include the difficulties of forming a relationship, which is one of the reasons that some prostitutes have pimps). But when evaluating a possible career you are making an inter-temporal choice – you have to compare the discounted lifetime benefits and costs of alternative occupations. It may be the case that some prostitutes, especially the young ones, underestimate the long term costs of their short term choices, but this is a problem that is not solely confined to prostitutes and it is difficult to make a case for banning prostitution on these grounds.

5. A TOY TWO-SECTOR MODEL

1. Paul Samuelson once wrote that the reason you need to have a Ph.D. in economics is so that you really understand supply and demand. Rensis Fels was a distinguished economist who did research on business cycles and the minimum wage. Rensis Fels' story shows how easy it is, even for someone with a good training in economics, to fail to see the need to apply some elementary economic analysis to a policy issue. He writes:

Late in 1945 I was sent to Japan as part of a military government team stationed in Yokohama. I was put in charge of rationing, price control, forestry, fishing and mining for Kanagawa Prefecture. That meant I had nothing to do. The occupation was being run exclusively by General MacArthur's headquarters in Tokyo. But we in the military government at lower levels didn't know we weren't supposed to do anything. Neither did the local Japanese officials. We—and they—took ourselves quite seriously.

One day the medical officer of our company came to see me. He was worried about the health of the American troops. They were picking up girls on the street instead of patronizing the brothels,

where the girls were given a medical inspection once a week. The medical officer thought the soldiers were picking up girls on the street because the brothels' prices were too high. Since I was in charge of price control, he wanted me to take action [that is, lower the prices charged at brothels to the prices charged on the streets].

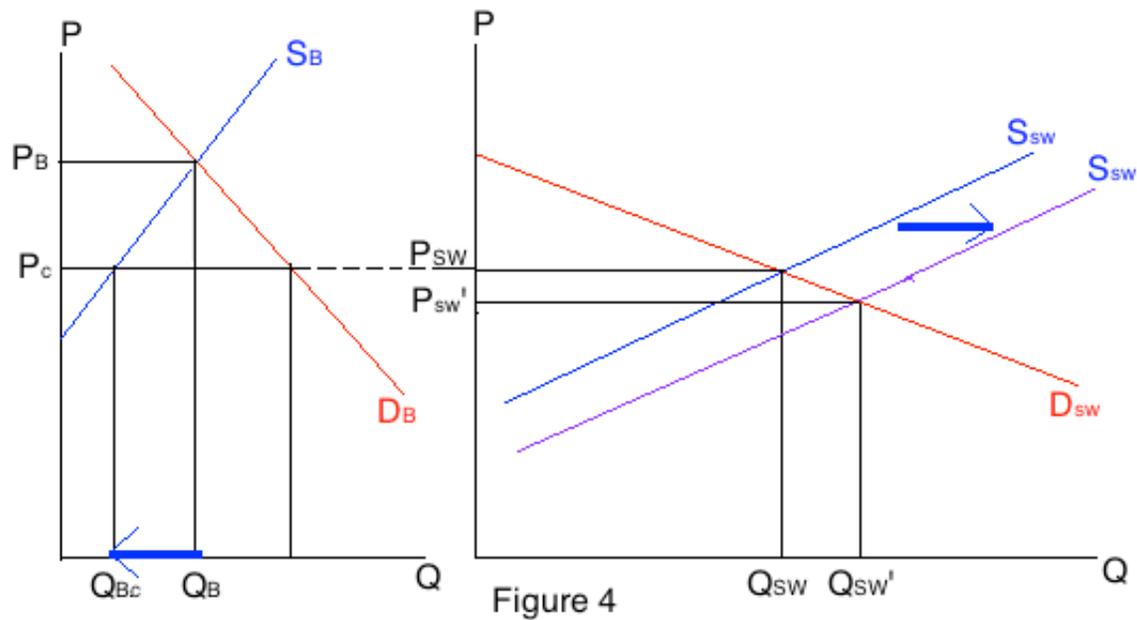
I sent for the chief of the Yokohama police, asked for a report on prices charged by every brothel in Yokohama, and naively told him why. The conversation was conducted through an interpreter. The chief spoke no English, and the Japanese language instruction provided by the Army program at Northwestern had not taught me the vocabulary needed for the conversation. At the end of the interview, the interpreter informed me that the chief, who was not naïve, would like to give me a party, and he wanted my friend the medical officer to come too.

I got to quite a few good parties before the Japanese learned I had no power, but the police chief's party was by far the best. By the time it took place, I had had second thoughts. What if American newspapers got hold of the story that a United States Army officer was reducing prices in brothels for the benefit of American troops? I quietly abandoned the project. A bulky report on Yokohama brothels went unused. The chief must have thought his party had been a great success.

Years later, when I finally saw the light, I became shocked at the deficiency of my economic training. To be sure, I had been away from economics for three and a half years before this incident, but that was hardly an excuse. I had majored in economics as an undergraduate at Harvard, received an M.A. in economics from Columbia, taught economics for two years at Harvard, passed the qualifying examination for Ph.D., and worked briefly for the Office of Price Administration. Yet it had never occurred to me to apply

elementary economic analysis to the problem. The medical officer's proposal would have had exactly the opposite effect from what he intended. But if I had figured that out, I would have missed a hell of a good party.¹⁷

2. To see what was wrong with the proposal we need to do



something that we have not done formally until now, that is, we must construct a very simplified model of two inter-related markets (what economists call a two sector model).

In Figure 4 I show the two sectors of the prostitution market. On the left we have the brothels, and on the right the streetwalkers. Initially the P_B is greater than the P_{SW} and the Q_{SW} is greater than the Q_B . What the medical officer wanted Fels to do was to lower the price in the brothels, and set a price ceiling to make the brothels more attractive to ordinary US servicemen. In my diagram I have set the

¹⁷ This case study is excerpted from an article by Rendig Fels, "Teaching Economics by the Case Method", *Vanderbilt Alumnus*, Winter 1972 p.15

lower, controlled (ceiling) price equal to the P_{SW} , although I could have made the controlled price even lower. The lower brothel price causes a movement down the demand curve, but the key result is that the lower price in the brothel sector causes a movement down the supply curve. There is excess demand in the brothel market. When a market is not in equilibrium transactions take place at the level determined by the smaller of the Q_S or the Q_D , in this case at $Q_S = Q_{Bc}$. Some brothels will close, and others will cut back their activity. But that means that some of the prostitutes will be fired, and although they might become Buddhist nuns the most obvious result is that those women will become streetwalkers. Therefore, the supply curve in the streetwalker sector will shift to the right (from S_{SW} to S_{SW}') because of an influx of new suppliers. There will be excess supply at P_{SW} , and a new equilibrium will be established at P_{SW}' and Q_{SW}' . But there are now more soldiers using street prostitutes and fewer frequenting the brothels, the exact opposite of what the medical officer wanted to happen.

3. The obvious solution is to deal with the STD externality directly by licensing the street prostitutes requiring them to have weekly medical examinations. A subsidy to lower the prices in the brothels would not seem politically feasible!

Who would have thought that something like prostitution could generate so many interesting economic problems?

B. DRUGS

I do not have time to add a section on drugs. But here are a couple of points to think about.

1. Reducing the use of illegal drugs generates benefits but also has costs. So the optimal policy would require a careful cost-benefit analysis to determine the level of enforcement that would make $MSB = MSC$. Among the costs of the war on drugs are: the US has the

largest prison population in the world, and, even if we knew the true number of people incarcerated in China, the US prison population per head would be larger. (North Korea may actually be number one on this league table.) (The US also has the highest number of reported male rapes, about 200,000 a year, almost all of which occur in prison.) Another cost that would need to be evaluated would be the number of innocent people shot and injured because of gang wars, and the destabilization of countries in Central and South America (100,000 drug deaths in Mexico during the last 10 years.)¹⁸ The war on drugs has also had a disastrous impact on Afro-American communities in our large cities.

2. Shifting the supply curve by drug interdiction is counterproductive, especially because the demand for drugs is likely to be inelastic. In Figure A1 the market equilibrium would be at Q_L - P_L . The equilibrium when the drug is illegal is at Q_I - P_I . If the authorities successfully interdict a large quantity of drugs then the supply curve would shift back to S_I and there would be a new equilibrium at (Q_I, P_I) . But since the demand is inelastic TR will increase (the orange rectangle will be larger than the magenta one) and since TC has not changed drug profits will be higher, which will simply cause an increase in supply as criminals attempt to supply more drugs because of the profit incentive.

¹⁸ A recent estimate suggests that \$100 billion have been diverted from fighting poverty and disease in LDCs because of the "war on drugs".

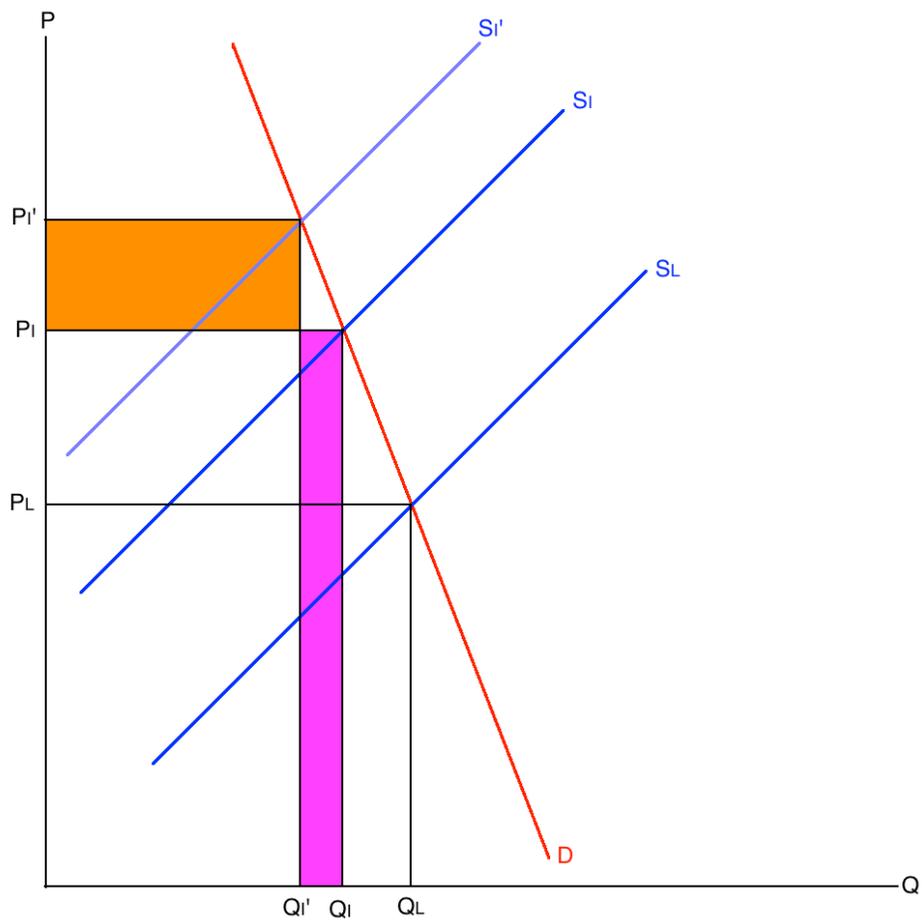


Figure A1

3. From a policy point of view we would want to control all addictive and harmful substances so that $MB_1/MC_1 = \dots = MB_N/MC_N$, which would mean controlling tobacco, alcohol, and even sugar not simply "hard drugs". (4,755)

<http://www.webmd.com/mental-health/addiction/substance-abuse>

<http://www.vox.com/2014/5/19/5727712/the-three-deadliest-drugs-in-america-are-all-totally-legal>

<http://elitedaily.com/life/culture/dangerous-drugs-world/>