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Swinger Economics

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Summary

Swinging is a sexual behavior of increasing relevance but substantially ignored in theoretical economic investigation. This paper has two major goals. The first is to describe what swinging is, discuss its economic relevance and single out the main characteristics of swinger behavior. To this end, the Italian situation has been considered as a type of case study. The second goal is to use standard and less-standard tools from economic theory to propose some preliminary assessments of the causes and consequences of swinger couples' behavior. In this respect, some contributions on two-sided markets, hedonic adaptation approaches and equilibrium matching models have proved particularly useful.

Introduction

Swinging has taken on a key role among contemporary sexual customs, consequently constituting the subject matter of various contributions in the fields of psychology, sociology and other social sciences. However, in spite of the constant increase in the number of couples involved and in the economic relevance of this phenomenon, to the best of my knowledge no article on the topic has yet appeared in economics journals. The aim of this paper is to cast light on swinging, both empirically and theoretically.

On the empirical side, the paper describes what swinging is, discusses the economic relevance of the phenomenon and singles out the main characteristics of swinger behavior. To this end, the Italian situation has been considered as a type of case study. On the theoretical side, the paper proposes some preliminary assessments of the causes and consequences of swinger couples' behavior. In this respect, some contributions on two-sided markets, hedonic adaptation approaches and equilibrium matching models have proved particularly useful.

The paper is organized as follows. Section 1 describes swinging in Italy. Section 2 presents comparative evaluation of the economic dimension of swinging within the Italian sex industry as a whole. Section 3 discusses the evolution of swinger behavior over the last few years and proposes some preliminary theoretical considerations to account for this evolution. Finally, section 4 sums up the main results and draws the conclusions.

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1. A Case study: swinging in Italy

1.1 What swinging is

Swinging is by no means a new phenomenon. What is new today is its acquired mass dimension, with hundred of thousands of swingers in many countries, swinger clubs in all the principal cities, continuous presence in the mass-media, etc.
According to Bergrstand and Williams (2000, p.2):

> "Unlike 'open marriages' of the 1970s which promoted non-possessive love and tolerance of infidelity in their spouses (O'Neill and O'Neill, 1972), or 'polyamory' (Wesp, 1992) - the love of many people at once – swinging is non-monogamous sexual activity, treated much like any other social activity, that can be experienced as a couple. Emotional monogamy, or commitment to the love relationship with one's marital partner, remains the primary focus. Swinging is usually done in the presence of one's spouse and requires the consent of both to the experience. Although swingers often become close friends with other swinging couples, there are rules restricting emotional involvement with non-spousal partners. […] Swinging as an alternative lifestyle is of both practical and scholarly interest because the attempt to combine sexual non-monogamy with emotional monogamy is fundamentally 'deviant' from the western model of romantic love which assumes that sexual and emotional monogamy are mutually reinforcing and inseparable".

The fact that swinging "requires the consent of both" members of a couple "to the experience" explains why, although sex in various extreme forms has always been practiced, true swingers did not establish their pattern before the 20th century, when the role of women in society saw considerable change. It is therefore hardly surprising that there is only scant, anecdotic evidence, if indeed any at all, of swinging before 1940. After 1940 things changed, but the social stigma that attaches to the phenomenon has stood in the way of serious study of the topic and the beginnings of its mass diffusion in the 20th century have never been historically studied. The few existing sources (see, e.g., Liberated Christians 1997-2003, McGinley 1995) report that swinging (at that time, "wife swapping") started during World War II, when the high mortality rate of US Air Force fighter pilots favored the development of a particular way of life in which all the husbands took care of all the wives living near the Air Force bases. It was a way of life that saw great intimacy growing among couples, and wife swapping was generally accepted. At the end of World War II these couples left the bases and swinging spread in the USA. This version of the birth of swinging may be controversial, but there seems to be little doubt that swinging was quite common among USA military families in the late '50s, when the phenomenon was aired by the media.

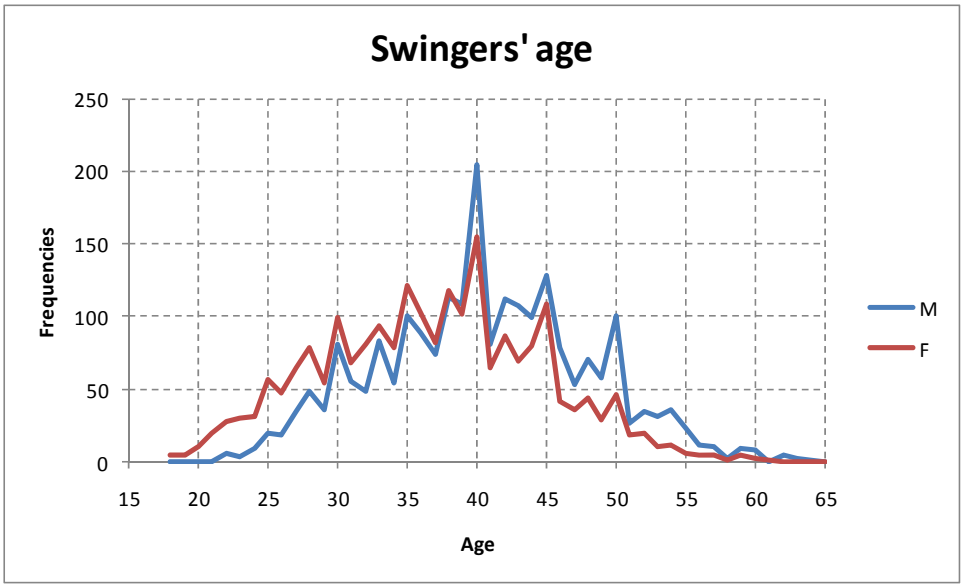
1.2 Italian swingers: figures and behaviors

Subsequent to the sexual revolution of the '60s swinging spread over the world, gathering momentum with the ICT revolution of the '90s. In the case of Italy, although swinging developed later than in other European countries such as France and Germany, it has grown very fast in the last few years and has now become a mass phenomenon. It is nonetheless difficult to assess the number of swingers in Italy, although similar difficulties have been tackled in contributions studying the phenomenon in other countries.[1] According to Federsex (2007)[2] the number of

[1] In the United States, for example, "[e]stimates of the size of the swinging population vary widely. Research provided by North American Swing Club Association (NASCA) (McGinley, 1995) found that 15% of couples in the U.S. have at some point incorporated swinging into their marriage. More conservative estimates are offered by studies which are unrelated to NASCA. Hunt (1974) and

swinger couples in Italy should be around 400,000, so that 800,000 people should share this lifestyle. Including the single males who participate in sexual activities with swinger couples, over 1,500,000 people share the lifestyle.[3] These data find confirmation in a sampling study carried out by www.morenasex.net (morenasex 2007), which estimates about 370,000 swinger couples in Italy. Apart from the numerical proportions of the phenomenon, it is particularly interesting, also for theoretical purposes, to have a rough idea of the age profile of Italian swingers. To do so we considered 2217 couples who posted adds on the Italian swinger web site www.morenasex.net declaring their age; these figures are set out in Appendix 1 and shown in graphic representation in figure 1 below. Of course, anonymous swingers who post ads on the Internet may not be completely frank about their age (the comparatively high frequencies of ages 30, 35, 40, 45 and 50 suggest that swingers tend to approximate their age, probably by defect). However, assuming that these data are roughly correct, the average age appears to be 41 years for males and 37 for females, and some interesting information emerges from the absolute (and relative) frequencies of age classes. On the evidence of figure 1 it will be seen that most people begin swinging when well into maturity: in particular, females tend to begin swinging after the age of 25, males after the age of 30; and the "golden age" of swinging appears to be between 30 and 50 for males and between 25 and 45 for women.

Figure 1
The age of Italian swinger couples posting on morenasex.net



Typically, swinger couples make full use of the market for sexual recreation, with the partial exception of the direct purchase of prostitutes' service: they access swinger clubs, buy sex toys in

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Weiss (1983) estimate that two to four percent of married couples have engaged in swinging at least on an occasional basis. Bartell (1971) found the figure to be one percent and Cole and Spaniard (1974) found, based on a small college community sample, that 1.7 percent had experienced swinging at least once" (Bergrstand and Williams 2000, p. 2).

[2] Federsex is one of the two associations representing Italian swinger clubs (the other is Entes).

[3] In Italy, it is very difficult to find single females who swing, which explains why the vast majority of swinger clubs deny access to single females on the assumption that most of them are prostitutes.

sex shops or sex-friendly shops (e.g. lingerie shops), access swinger and pornographic internet sites, advertise in and buy swinger journals, participate in erotic fairs, purchase pornographic videos and subscribe to erotic pay-per-view television, travel to swinger resorts, etc. Nonetheless, since it is methodologically disputable and in practice impossible to state how much of the pornographic industry's turnover relies on swingers, I will assume that swingers purchase pornography, buy sex toys and visit erotic fairs as much as the rest of Italian population and hence will not consider the impact of swinging on these activities. In the following sections I will therefore briefly consider each of the remaining activities.

1.3 Swinger clubs

In Italy there are about 200 swinger clubs.[4] According to Federsex (2007), each club sells, on average, about 3,500 entrance tickets per year. These data probably underestimate the real number of entrances, since Entes (2007) official data show that each club has, on average, about 1,800 members, and it seems unlikely that each member goes to the club less than twice a year.[5] However, accepting Federsex data 3,500 people a year go to each club, so that aggregate per year entrance tickets number about 700,000. These figures can be disaggregated in about 233,000 entrances of couples and 233,000 entrances of single males (about 1,160 couples and 1,160 single males per club).[6] It is worth noting that couples generally pay discounted rates and on some days have free entry, whereas single males (when admitted: some days are reserved for couples only) pay higher rates. From the latter circumstance it follows that it is in the club owner's interest to admit the highest possible number of singles (even if a trade-off exists: couples prefer those clubs in which the number of single males is low, a circumstance which bears interesting consequences for the optimal strategy of swinger club owners).

Given the peculiar fiscal rules that apply to private clubs in Italy it is practically impossible to have reliable data on the global turnover of the sector, which therefore has to be estimated. Now, since according to the Federsex (2007) data and Internet forums (mainly www.escortforum.com and www.superzeta.it), single males pay about 150.00 euros or more per ticket[7] whereas couples pay about 50.00 euros (and sometimes less), the global turnover of swinger clubs should amount to

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[4] On Sex Guida 2006-2007 (D'Antuono 2006b) 188 clubs are listed; on www.ledolcinotti.it site 204 clubs are listed (even though the figure changes day by day).

[5] Entes (2007) data show the balance-sheets for a sample of seven Italian swinger clubs; according to these data, and considering only 2006 full-year data, the members of these clubs range from 982 to 2936, with an average of 1,804.

[6] Unofficial data furnished by ENTES confirm a couples/single males ratio of 1 to 1. I personally rate the real ratio lower, but neither the official nor the unofficial data are accurate enough to bear this out.

[7] It is worth noting that 150 euros is much more than the average charge of a prostitute, which ranges from 30 to 35 euros (on this point see D'Orlando 2008, p. 8). Why do single males accept to pay more for sex with a swinger woman than with a prostitute? Granted that a male may accept to pay so much to buy a continuous relationship with a couple, anecdotic wisdom and discussions on Internet forums suggest nevertheless that single males attach higher value to sexual intercourse with a swinger woman than with a prostitute. The psychological motivations for this preference are beyond the purview of the present paper, but they may range from preferring to have sex with a woman who really enjoys it (and not simply pretends to enjoy it), to the perception of this as a more transgressive and exciting experience.

about 34,950,000 euros from single males and 11,650,000 euros from couples, with a total of 46,600,000 euros for entrance tickets alone.

1.4 Swinger internet sites

While there are many "amateur" swinger web sites (i.e. sites created by couples or singles with the aim to exhibit themselves and make it easier to contact other swingers with a view to meeting them) in Italy, fewer than ten are of economic importance – typically, those web sites where swinger couples, single males, single females or groups post their ads to seek other swingers.[8] Over the last few years these sites have changed from the original amateur types into profit web sites by progressively adding other services to the mere posting of ads, and nowadays they attempt to cover all the possible interests of both swingers and pornography users,[9] being visited not only by swinger couples in search of other couples, but also by people in search of pornographic images and single males in search of couples; on the other hand, it is difficult to find prostitutional offers there since abetting prostitution is a crime in Italy and, moreover, swinger couples mainly seek free sex and not pay sex.[10]

The largest of these sites is morenasex (www.morenasex.net), which contains about 37,000 ads. According to the webmaster data, this site has 2 million unique visitors a year and 55,000/60,000 visits a day, offering a significant cross-section of the Italian swingers' world. Within the site there are 45 major posting categories. Of these, in October 2009 the largest were those of heterosexual single males (12,605 ads), couples with photos/videos (7,494), bisexual single males (4,051), couples without photos (2,791), transsexuals and transvestites (1,821), gays (1,509) and sadomasochist single males (687). Ads are deleted after 12 months, so 37,000 is also the average number of ads per year. On the whole, the couples' ads summing all categories come to about 13,000. All the services devoted to swinger couples are free, but a fee is required in order to access specific services mainly devoted to single males seeking sexual encounters or to purchasers of pornographic contents.

Apart from the relevance that internet posting has in swinging lifestyle, and apart from their theoretical relevance in terms of two-sided markets, commercial swinger sites have little aggregate economic importance in Italy. According to (unofficial) morenasex.net webmaster data, an average site turnover ranges from 50,000 to 100,000 euros, and there are fewer than 10 Italian commercial swinger sites, so the global turnover ranges from 500,000 to 1,000,000 euros – say 750,000 on average. However, there is a tendency for these sites to expand their activity into other economic sectors, such as organizing erotic travel and erotic dinners, or supplying services such as translation, legal assistance, aesthetic surgery, etc., which could enhance their future economic dimension.

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[8] The most frequently accessed among swinger sites in Italy are: annunci69.it (which in October 2009 ranked 274th, according to Alexa ranking methodology, among all the Italian web sites), desiderya.it (687th), morenasex.net (717th), gabbia.com (3.086th), lauraX.it (3.147th), incontri-on-line.com (3.979th), sexycoppie.it (9.725th). It is worth noting that Alexa's methodology is disputable, and that positions can change by thousands in a few days.

[9] For a discussion of the relation between swinging and pornography, see D'Orlando 2010.

[10] The phenomenon of prostitutes posting ads in swinger sites pretending to be single females or couples was quite widespread in the past. Nowadays it is less common since there are specific prostitutional sites (hosted outside Italy).

1.5 Swinger journals

The importance of swinger journals, i.e. journals in which swingers place their ads to contact other swingers, has significantly diminished subsequent to the information and communications technology revolution. In particular, the Internet and digital photography have undermined the "traditional" ads posting procedure. Traditional posting procedure implies taking couple's pictures, developing and printing them in "friendly" photo shops (many journals used to refuse low-resolution Polaroid pictures), preparing an ad, sending it by snail mail together with pictures, waiting for the journal to publish it, waiting for snail mail replies by other readers, replying to these letters and finally getting in touch with other swingers. The whole procedure takes months to generate meetings and sexual intercourse with other swingers and at many stages of it privacy is seriously at risk. The information and communications technology revolution has changed this traditional procedure, speeding up the take/print pictures procedure (thanks to the widespread use of digital cameras) and indeed the send-an-ad/reply-to-an-ad procedure (thanks to e-mail and cell phones), but the time necessary for the journal to publish the ads has remained unchanged. Thus people have taken full advantage of all the opportunities connected with the new technologies by substituting electronic journals (i.e. swinger web sites) for paper journals. Posting ads on swinger web sites takes a few hours and not months: people take digital photos, send them straight to a swinger site together with the ad by e-mail, the ad appears in real time on the site and people can get in touch by e-mail or webcam in less than one day. Moreover, there is far more privacy.
For these reasons the swinger journal sector has retained only historical importance. However, the Eurispes 2005 study maintains that in Italy swinger journals still have a yearly turnover of about 21 million euros.[11]

1.6 Travel

Swingers have difficulty in finding swinger-friendly resorts in Italy for their leisure travels, although quite often they traverse short distances to meet other couples. As far as holidays are concerned, apart from specific locations such as private villas or small out-of-the-way hotels, swingers' sexually-oriented long-distance journeys are mainly to destinations outside Italy. The most outstanding of these resorts is certainly the French "Naked City" of Cap d'Agde (which hosts 9 swinger clubs, 4 swinger saunas and 6 sex clubs)[12] followed by others in France, Spain or Greece. It is worth noting that while swingers can find entire villages in which their lifestyle is more or less explicitly accepted in Europe (such as Cap d'Agde and Ile du Levant in France), outside Europe they generally find only individual resorts (such as Hedonism and Couples in Jamaica). Accordingly, in Europe swingers mix with nudists or young party people, but outside Europe they prefer to gather together in swinger resorts.
In any case Italian swingers can only have explicit lifestyle holidays travelling outside Italy, so the only turnover to be estimated here is that of the travel agencies organizing the trips. However, only very few travel agencies are fully (or principally) devoted to this type of tourism. According to the "Sex Guide" (D'Antuono 2006b), in Italy there is only one travel agency devoted to erotic travel for swingers. Even if this agency sells nothing that the other agencies do not sell, and formally is not involved in "sex tourism", it guarantees easier access to the tour operators selling naturist resorts and the few existing lifestyle resorts, thereby reducing the social stigma that buying transgressive vacations could generate. But reducing social stigmatization has a cost, in terms of higher tariffs, so

[11] Eurispes 2005 (pp. 57 and 59) makes an estimate of 24 million euros, but considers swinger and prostitutional advertising journals together. Since prostitutional catalogues are considered by the Eurispes 2005 study as covering 10% of the total, 21 million are accounted for by swinger journals.

[12] See D'Antuono 2006a.

that a great number of swingers use non-lifestyle agencies to reach the same destinations, and it is indeed difficult to estimate the global turnover of the sector. On the basis of a sample study of about 700 www.morenasex.net advertisers, average spending on travel by each swinger couple is about 1,400 euros per year: 900 euros per year for travel in Italy and 500 euros per year for travel outside Italy.[13] Therefore the global turnover from sexual travel for 400,000 swinger couples comes to about 560,000,000 euros.[14]

1.7 Other expenditures

Swinging implies other expenditures which cannot be formally computed within the sex-economy but nevertheless have a sexual goal when made by swingers. Examples of these expenditures are buying sexually-oriented clothes in formally regular shops; going to restaurants and other public shops for exhibitionistic goals or to familiarize with other couples before sexual intercourse; buying personal computers, digital cameras and internet connections to post ads in swinger web sites; buying drugs and medicines to facilitate sexual intercourse, and so on. All these activities have a high cost, and confirm what many swingers say, namely that swinging is a very expensive activity. On the basis of my sample study of www.morenasex.net advertisers, the average spending by swinger couples on sexually-oriented non-sexual commodities amounts to about 600 euros per couple per year. Since much of this spending is done both by couples and by single males involved in the lifestyle, the global turnover is 450,000,000 euros: 240,000,000 for 400,000 couples and 210,000,000 for 700,000 single males.[15]

2. The economic dimension of swinging within the sex industry

On the basis of the data estimated above I can propose a comprehensive, albeit rough, evaluation of the economic dimension of swinging and its relative importance within the whole sex industry. Globally, the turnover of the activities linked with swinging is about 1.1 billion euros (less than 0.1% of 1,500 billion euros of Italian 2007 *GDP*), whereas the global turnover of the whole sex industry is about 7.5 billion euros (D'Orlando 2008, pp. 12-13). The main contribution to this latter figure comes from prostitution, which covers about 68% of the entire turnover of the industry, followed by pornography (18%) and swinging (14%). Table 1 below sketches out the relative economic composition of the sex industry (see again D'Orlando 2008, p. 13).

[13] I sent an e-mail to 683 couples who posted their ads in www.morenasex.net, asking them about their sexually-driven expenses.

[14] Single males sharing the lifestyle are potential buyers for sexually oriented travels, too, but in many cases (even though not in all the cases, since the presence of singles in places like Cap D'Agde is very common) they seek prostitutes and not swingers when abroad, so I consider this kind of activity as sex tourism and exclude it from the present analysis. For a discussion of the role and the economic dimension of sex tourism see D'Orlando 2008, section 2.5.

[15] I assume that each single male participating in the lifestyle spends half the amount a couple spends.

Table 1
Global economic dimension of sexual recreation industry

Typology	Gross Turnover	Total	%
Swinging			
- Swinger clubs	46.600.000,00		
- internet	750.000,00		
- journals	21.000.000,00		
- travel	560.000.000,00		
- other	450.000.000,00		
		1.078.350.000,00	**14,39**
Prostitution			
- on the road prostitution	1.530.000.000,00		
- off the road prostitution	3.480.000.000,00		
- sex tourism	70.000.000,00		
		5.080.000.000,00	**67,77**
Pornography			
- movies	224.000.000,00		
- sex shops (toys)	38.000.000,00		
- television	360.000.000,00		
- erotic telephon calls	89.000.000,00		
- journals	10.000.000,00		
- internet (commercial web sites)	304.000.000,00		
- night clubs and sex bars	306.000.000,00		
- erotic fairs	7.000.000,00		
		1.338.000.000,00	**17,85**
TOTAL		**7.496.350.000,00**	

Source: processing of D'Orlando 2008 data

It is immediately evident that the increasing economic importance of all the "new" activities connected with the sex market (i.e. pornography and swinging) does not threaten the economic leadership of prostitution, which accounts for the bulk of the industry's turnover.[16] However, swinging calls for different considerations. Here we have a direct economic turnover which is totally at odds with the number of the participants in the sector. But the sector is a particular one, since swinging has economic effect only when swingers go to swinger clubs, draw on the pornographic industry (buying pornographic movies or journals, or going to erotic fairs) or buy products of non-sexual industries for sexual purposes. In the other cases swinging is a sexual activity of no economic relevance.

3. Swinger behavior: some theoretical considerations

In the last few years both sexual recreation and swinging have seen significant developments. In this section I will describe these developments and will try to single out the theoretical approaches which could best be used to discuss the causes and consequences of swinger behavior.

3.1 Ever more swingers, ever in search of "harder" sex

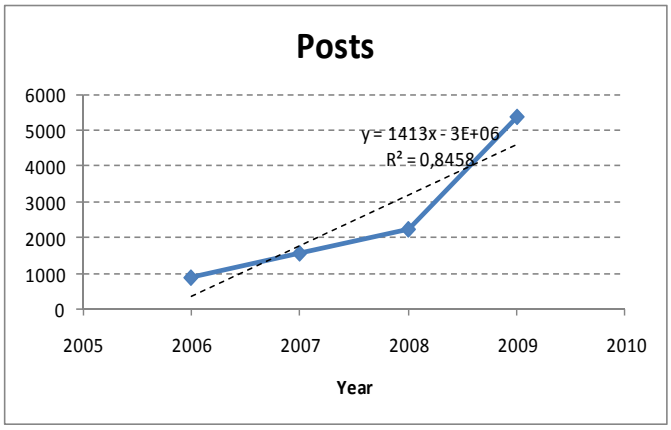
In Italy swinging emerged as a social phenomenon in 1987, when the swinger journal "Fermoposta" was created. Before the Internet era this journal reached a circulation of 40,000 copies per month (duepiu.net 2007). In the same years the first swinger clubs opened, but Italian legislation made it very difficult for these clubs to survive, and the difficulties continued until recent years. Since then the number of swingers has greatly increased, both in Italy and in the world as a whole, but the existing data furnish only partial evidence of this growing trend. In particular, the circumstance that almost all swinger web sites destroy their archives after about one year makes it very difficult to

[16] The above pornography figures may be downward biased with respect to the real dimension of the phenomenon due to the circumstance that the (growing) supply of free pornography on the net should be considered in the count by calculating its "shadow price". On this point see D'Orlando 2010, section 1.2.

single out relevant figures such as the growth rate of the phenomenon over time. To this end the only useful data come from the posts on www.annunci69.it, whose archives cover four years, showing a steady increase in the number of postings.[17]
Apart from the numeric growth of the phenomenon, swinger behavior has also greatly changed over the last 25 years. Both in Italy and in the rest of the world. Twenty-five years ago couples sought almost exclusively other couples or single females; nowadays couples seek other couples, single males and groups of males. The phenomenon has thus evolved from situations in which the centre of sexual intercourse was the male component of the couple to "harder" situations in which the centre of sexual intercourse is the female component and the male takes his pleasure from sharing his companion with other men. And, apart from this "historical" tendency to the diffusion of ever more extreme sexual behaviors among swingers,[18] a similar path is followed by the couples who begin swinging nowadays: according to Morenasex (2007) data, couples launch into their swinging experience mainly by posting ads in the exhibitionist sections of the site; later on they post them in the "soft" sections, and finally in the full-swinging sections. And when they have entered the full-swinging section, a tendency begins to search progressively for ever "harder" sex. It is therefore a

[17] Ads numbered 868 in 2006 (as from February), 1,544 in 2007, 2,216 in 2008 and 5,354 in 2009 (up to October). Clearly, the number of ads also depends on the success of the site, and is only a rough proxy of the actual quantitative trend of swinging in Italy. Graphic representation of the trend in the number of ads over time, the equation of the interpolating line and its R^2 are set out in figure 2 below.

Figure 2: the trend of posts on www.annunci69.it



[18] No objective ranking of sexual acts can exist, since any such ranking would depend on the inner cultural, social and religious beliefs of a population, a country or even a single person. Therefore, strictly speaking swingers do not effectively engage in more extreme sexual acts over time, but simply engage in what they *believe* are more extreme sexual acts, whatever kind of acts they are. With reference to the Italian cultural framework, it is generally accepted that a man having sex with a woman who is not his companion generates less social stigma than a woman having sex with a man who is not her companion; furthermore, a man having sex with another man generates more social stigma than a woman having sex with another woman. The reasons for these cultural traits, albeit certainly interesting, are beyond the purview of this article. However, for Italy we have the following ranking for swinger couples unconventional sex (from "softer" to "harder"): couple-woman, couple-couple, couple-man, couple-men. Couple-man is considered "harder" than couple-couple since it explicitly implies that the female part of the couple will have sex with two men at once, whereas the couple-couple case could simply imply wife swapping. Obviously enough, cultural traits in other societies may led to different rankings.

matter of theoretical interest not only to investigate the reasons behind the growth of the phenomenon through time, but also to understand how the new typologies of sexual behaviour spread among swingers and why sexual customs evolve toward ever "harder" sexual practices, or in other words why people are led on in a ceaseless search for "more" and "harder" sex. [19] In particular, it seems extremely interesting to consider whether through such behaviour swingers can actually enhance their wellbeing.
Summing up, theoretical investigation in this area should address two major questions: i) why the number of swingers has so greatly increased in recent years, i.e. why couples decide to swing; ii) why swingers begin with "soft" swinging and thereafter, in many cases, engage in ever more extreme sexual acts.

3.2 Some useful theoretical models
To answer the above questions we have no economic literature on which to draw, since no theoretical study on swinging exists: swinging is even absent from books studying the sex market, such as Della Giusta, Di Tommaso and Strom (2008).
However, also in the absence of any specific empirical and/or theoretical analysis, a number of existing economic models could in principle be used to study swinger behavior: contributions on the theme of hedonic adaptation (see, e.g., Brickman et al. 1978, Frederick and Loewenstein 1999, Diener et al. 1999); equilibrium matching models (see, e.g., Greenwood and Guner 2007); contributions on the theme of addiction (see, e.g., Becker and Murphy 1988); contributions on the theme of weakness of will (see, e.g., Elster 1985); and contributions on the theme of novelty in consumption (for a survey, see Bianchi 1998). Of these contributions those dealing with hedonic adaptation together with the Greenwood and Guner equilibrium matching model seem the most interesting, since they can contribute to our understanding of the causes behind the decision to swing and behind the constant increase in the intensity of sexual acts sought after by swingers.

[19] Another matter of theoretical interest could be the organization of the market, with particular reference to the supply of services for swingers. These services take the form of structures (in many cases, firms) which allow swingers to meet together, both furnishing (virtual) platforms by means of which couples advertise themselves and their wishes to get in touch with other swingers, and furnishing (physical) places in which couples can have sexual intercourse with other couples or single males in a reasonably secure environment. The way these structures operate implies network externalities and can be examined in the logic of two-sided markets (see e.g. Rochet and Tirole 2002, Evans and Schmalensee 2007, Gabszewicz and Wauthy 2004). In particular, focusing on swinger clubs (but much the same could apply to swinger web sites), the problem to be modelled can be summarized as follows. Generally, an access fee is charged for both single males and couples when joining the club, and this fee is higher for singles, lower for couples. Thereafter, single males pay high usage fees for each entry in the club, whereas couples pay discounted rates or enter the club free. It is therefore in the club owner's interest to have the greatest possible number of single males entering the club. The problem is, and here is the two-sided aspect, that couples generally dislike situations in which there are too many single males: so, if the number of single males admitted rises over a certain level, fewer couples enter the club; and with the decrease in the number of couples also the interest (and willingness to pay) of single males to access the club decreases. Summarizing, the willingness of single males to pay depends positively on the number of couples present in the club; the willingness of couples to pay (or enter the club) depends negatively on the number of single males present in the club; and the owner's profit depends positively on the number of single males present. These circumstances lead club owners to particular strategies, the most common being to pay prostitutes and their partners to pretend to be swinger couples, thereby increasing the couples/single males ratio in the club.

Indeed, all the theoretical approaches taken to discuss swinger behaviour should be consistent with this latter condition, i.e. with the empirical evidence that swingers seek after ever more extreme sexual acts and, on attaining them, try out these sexual acts for a while but, as the novelty disappears, begin the quest anew for different, "harder" sexual acts. And so on, without end.

3.3 Why people decide to swing: a preliminary formalization

The Greenwood and Guner (2007) equilibrium matching model is a possible starting point to explain theoretically the swinging decision and the increase in the number of swingers through time. Since the model is not explicitly designed to assess swinging, some significant changes must, however, be made to its structure.

The Greenwood and Guner (2007) model was devised to account for the rise in premarital sex in the last century. According to this model "there are two social classes in society, one whose members are abstinent, the other whose members are promiscuous. … Social change will be measured by the shift in membership between the two classes" (Greenwood and Guner 2007, p. 7). It is worth noting that in the Greenwood and Guner model promiscuous people engage in premarital sex with their partner but do not engage in swinging-like activities, whereas abstinent people do not engage in premarital sex at all. Each (matched) member of the abstinence class enjoys a momentary utility u, whereas each (matched) member of the promiscuity class enjoys a momentary utility $u+s-\psi$, where s is the "joy of sex" and ψ is the "cost" of sex "due to an out-of-wedlock birth or a sexually transmitted disease" (Greenwood and Guner 2007, p. 8). And s has a different value for each individual of the promiscuity class, so that only those people for whom $s>\psi$ are promiscuous. Since "over time the cost of premarital sex, ψ, declines due to technological progress in contraception and improvement in birth control education… people move out of the abstinence class… into the promiscuity class…" (Greenwood and Guner 2007, pp. 8-9). Hence, technological progress changes the attitude of population towards premarital sex, in such a way that the "joy of sex" comes to dominate over the "cost of sex" and induces people to shift membership from one class to another, and actually become promiscuous.

It is not difficult to modify the Greenwood and Guner model so as to apply it to the case of swinging. In particular, four important modifications seem necessary. The first is to suppose that people are promiscuous in that they swing (and not simply engage in premarital sex with their partner), i.e. to substitute "swinger class" for "promiscuous class" in the model. The second modification is the introduction of a probabilistic term since swinging is an experience good and couples do not ex-ante know if they will like it or not. The third modification is to take intertemporal choices fully into account. The fourth modification concerns the "cost of sex", which should now be interpreted as the "cost of swinging".

The latter modification, i.e. the substitution of "cost of swinging" for "cost of sex", deserves particular attention, since the cost of swinging depends on many elements antagonistic to swinging which were not all explicitly considered in the Greenwood and Guner "cost of sex" variable. According to Greenwood and Guner the cost of sex reflects only the risks of out-of-wedlock birth and sexually transmitted disease. Now that contraception has reduced the risk of out-of-wedlock births almost to zero, however, the "cost of swinging" should include: fear of sexually transmitted diseases; fear of being inadequate (in terms of sexual prowess or physical aspect) while confronting others in sexual intercourse; personal religious and/or cultural beliefs against promiscuity; jealousy among members of couples; sexual inhibition on the part of the members; social stigma against swingers; imperfect information on swinging, etc.[20] It is worth noting that social stigma is probably the most important of these negative elements.

[20] Like out-of-wedlock births, some of these elements are losing in importance, since today there are pharmaceutical products able to enhance men's sexual capacities (and so reduce the fear of sexual inadequacy), while aesthetic surgery can improve the physical aspect (and so reduce the fear

In the decision whether to swing or not, a crucial role is played by information: the increasing diffusion of information on this lifestyle induces more couples to swing, and due to network externalities couples tend to swing more easily if they know that more people swing. Whereas in the former case we have an increase in the number of potential swingers, i.e. in the number of couples which include swinging among their decisional set, in the second case we have a reduction in the costs of swinging, since the strength of some of the antagonistic elements (and in particular social stigma) negatively depends on the (perceived) number of swingers. An example of how these elements actually work is given by the digital information revolution: with the Internet a greater number of people have come to know about this lifestyle; new sexual behaviours are discussed in Internet forums, reducing the fear of unexpected consequences from swinging; knowledge about the dimension of the lifestyle has generated network effects, reducing social stigma; the Internet has made it easier, anonymous and faster to get in touch with other swingers, reducing social stigma; digital photography has allowed swingers to take pictures for their ads without having to go to a photographic lab, increasing privacy and hence, again, reducing social stigma, and so forth. All this can contribute to explaining the diffusion of swinging with the *ICT* revolution: we could say that the reduced cost of swinging has led more couples to shift from abstinence to the swinging class. Within such a framework, the choice whether to swing or not can be formalized as follows. Let us suppose that initially a risk neutral couple *i* is not engaging in any swinging activity, and that only one swinging activity exists (so that the choice is to engage in this swinging activity or not to swing at all). The members of couple *i* ex-ante know that they have an exogenously given probability p_i (with $1>p_i>0$) that they will like swinging, and a probability $1-p_i$ that they will dislike swinging. If they like swinging each day *t* of the *T* days of their time horizon they will attain a level of *net* wellbeing equal to $W_{i,t}^{+} > 0$; otherwise, if they dislike swinging, each day *t* they will get a level of *net* wellbeing $W_{i,t}^{-} < 0$. The probability of liking swinging and the wellbeing from swinging are different for each couple, as it was for parameter *s* in Greenwood and Guner model. According to standard economic theory, couple *i* will swing if swinging increases its expected net wellbeing for the time horizon, i.e. if

$$p_i \cdot \left(\sum_{t=0}^{T} \vartheta^{-t} \cdot U_{i,t}^{+} - \sum_{t=0}^{T} \vartheta^{-t} \cdot C_{i,t} \right) + (1 - p_i) \cdot \left(U_{i,0}^{-} - C_{i,0} \right) > 0 \qquad (1)$$

In relation (1) $\vartheta = (1+\gamma)$ is the discount factor (γ is the subjective time preference: the larger γ is, the more the consumer prefers the present to the future); $\sum_{t=0}^{T} \vartheta^{-t} \cdot U_{i,t}^{+} > 0$ is the (discounted) sum of *gross* wellbeing the couple assumes it will get from swinging in each of the *T* days of the time horizon if it discovers that swinging is a pleasant activity; $U_{i,0}^{-} < 0$ is *gross* wellbeing the couple assumes it will obtain from swinging in *t*=0 if it discovers that swinging is *not* a gratifying activity (it is not necessary to compute the discounted sum of gross wellbeing in each of the remaining *T*-1 future days since when the couple discovers that it dislikes swinging it stops immediately); $\sum_{t=0}^{T} \vartheta^{-t} \cdot C_{i,t} > 0$ is the (discounted) sum of disutility deriving from monetary and non-monetary (psychological) costs the couple assumes it will have to bear in each of *T* days of the time horizon if it discovers that swinging is a pleasant activity and goes on with it; $C_{i,0}$ is the disutility deriving from monetary and non-monetary (psychological) costs the couple assumes it will have to bear in *t*= 0 if, on the contrary, it tries swinging and, having found it not to be a gratifying activity, stops

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of being aesthetically inadequate). By contrast, the other elements antagonistic to swinging still have some residual role, and in particular the fear of sexually transmitted diseases, although medical innovations tend to reduce them, too.

immediately. All these costs are mainly psychological and mainly include social stigmatization, but some economic costs do exist, too. Using relation (1) it is fairly straightforward to explain the increase in the number of swinger couples over the last twenty-five years: for a given distribution of p_i, $U_{i,t}^{+}$ and $U_{i,0}^{-}$ across couples the reduction of $C_{i,t}$ increases the number of couples for which relation (1) holds true. And the *ICT* revolution, together with medical innovations, has been effective in reducing $C_{i,t}$ over time.

3.4 Why swingers begin from soft sex…

Having decided to swing, a couple has still to decide which kind of swinging activity to engage in. Swinger couples can either engage in "soft" swinging (i.e. having sex on the same bed without swapping partners, having sex with another woman but without another man, only oral and manual intercourse) or "hard" swinging (full sexual intercourse with another couple, sex with another man, sex with other couples, sex with many other men, sadomasochistic practices, etc.). It is extremely important to emphasize that the "harder" sexual acts also include "softer" sexual acts, but the contrary is not true: for example, full sexual intercourse with other couples includes sex with another woman, sex with another man, oral and manual intercourse, etc. Thus "harder" behaviors include "softer" behaviors and, as we will see, this is of enormous importance for the optimal intertemporal choice of swinger couples.

When the object of study moves on from the decision whether to swing or not and the evolution of the number of swingers over time, we then have to take explicitly into account the existence of more than one single swinging activity, and can refer to the behavior of a representative couple suppressing the index *i*. In such a context, according to standard economic theory and the Greenwood and Guner model, in choosing among different swinging activities our representative couple will engage in the sexual behaviour *j* which maximizes

$$p^{j}\cdot\left(\sum_{t=0}^{T}\vartheta^{-t}\cdot U_{t}^{+,j}-\sum_{t=0}^{T}\vartheta^{-t}\cdot C_{t}^{j}\right)+\left(1-p^{j}\right)\cdot\left(U_{0}^{-,j}-C_{0}^{j}\right) \qquad (2)$$

where the suffix *j* denotes the typology of swinging behavior.

Since couples believe that the probability p^j of liking swinging decreases as sexual acts become more extreme, since couples do not perceive "harder" sex as capable of yielding them much more satisfaction than "softer" sex, and since the cost of "harder" sex is higher (mainly due to the greater cost in terms of social stigmatization, but also due to other elements such as fear of sexually transmitted diseases), new swinging couples initially prefer to engage in "soft" swinging. We will see that starting from "soft" and later engaging in "hard" swinging activities is an efficient behavior since it also guarantees the maximization of wellbeing in the long period.

Whereas the Greenwood and Guner model can help in understanding why couples begin swinging (and the growth in the number of swingers through time) on the basis of the reduction of the cost of swinging, a hedonic adaptation framework can account for the process of seeking after ever more extreme sexual acts on the part of swingers.[21] This approach is based on the empirical finding that people adapt to life events: "[l]ife events such as marriage, loss of a job, and serious

[21] It may appear strange to see different theoretical approaches coupled together, from the traditional (maximizing) to the (strongly psychological founded) hedonic adaptation approach. However, this appears to be a case in which applying different models and different approaches together can better contribute to the understanding of a phenomenon. The implication here is that the traditional approach is not intended to be the only approach of utility in theoretical investigation, but on the contrary other (less traditional) approaches have equal legitimacy for getting to grips with the realities (on this point, see D'Orlando and Sanfilippo 2010). Nonetheless, as we shall see, in the case discussed in this paper the empirical evidence seems to confirm that people behave in a way compatible with the predictions deriving from the traditional approach.

injury may deflect a person above or below [his/her] setpoint, but in time hedonic adaptation will return an individual to the initial setpoint" (Easterlin 2003, p. 1). "Hedonic adaptation" is sometimes also called "habituation", and the existence of a baseline level of wellbeing toward which actual wellbeing tends to return is a crucial characteristic of hedonic adaptation models. Subsequent to the seminal (and controversial) paper by Brickman et al. (1978), the strong empirical evidence on hedonic adaptation has been discussed in psychological journals (see, e.g., Diener et al. 1999, Frederick and Loewenstein 1999, Oswald and Powdthavee 2006), even if it is still disputed whether adaptation is complete or incomplete, i.e. whether life shocks have a permanent effect on the long-period level of subjects' wellbeing[22]. Recent theoretical contributions on hedonic adaptation in economics include Clark and Oswald (1994), Clark (1999), Di Tella et al. (2003), Clark et al. (2004), Stutzer (2004), Layard (2005), Oswald and Powdthavee (2006), D'Orlando and Ferrante (2008), D'Orlando and Ferrante (2009) and D'Orlando (2010). It is also worth noting that the theme of hedonic adaptation is closely linked to the theme of habit formation and endogenous preferences (see, e.g., Carroll et al. 2000).

Within a hedonic adaptation framework the representative couple's choice whether to swing or not can be formalized by suppressing, in relation (1), the deponent *i*, and emphasizing the circumstance that in this case wellbeing increase/reduction is over the baseline level $\overline{BL}$. Rewriting relation (1) accordingly, we get relation (1bis):

$$p \cdot \left(\sum_{t=0}^{T} \vartheta^{-t} \cdot U_t^{+} - \sum_{t=0}^{T} \vartheta^{-t} \cdot C_t \right) + (1-p) \cdot \left(U_0^{-} - C_0 \right) > 0 \qquad \text{(1bis)}$$

If (1bis) holds true, the representative couple will swing. It is worth noting that in this case, i.e. if the couple swings and is not disappointed with the activity, then wellbeing actually rises not only above its baseline level $\overline{BL}$ but also above the expected wellbeing level (which was an average between positive and negative possible outcomes).

For example, referring to figure 3, in the first day of swinging in the time horizon (t=0) the net actual first-day wellbeing $W_0 = U_0^{+} - C_0 + \overline{BL}$ for a couple that likes swinging may correspond to point *A*, which is above the expected first-day wellbeing $p \cdot \left(U_0^{+} - C_0 \right) + (1-p) \cdot \left(U_0^{-} - C_0 \right)$, corresponding to point *E*. A dynamic process now comes into action. Slowly the novelty of the sexual acts the couple is engaged in disappears, and couple's gross wellbeing U_t^{+} begins declining.[23] The psychological costs caused by social stigmatization are also decreasing magnitudes due to hedonic adaptation, so that C_t decreases, too, but in general these costs do not decrease so much as to offset the decline in gross wellbeing, i.e. $\left| \frac{\Delta U_t^{+}}{\Delta t} \right| > \left| \frac{\Delta C_t}{\Delta t} \right|$, so that the net wellbeing does in fact decrease. The dynamics of this decline can only be conjectured upon, since much more empirical study is needed to see how rapidly the practice of swinging leads to habituation. Lacking empirical evidence, in the spirit of the hedonic adaptation framework (see, e.g., D'Orlando and Ferrante 2009, p. 111), this decline can be represented with the following difference equation:

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[22] For a discussion on the theme of complete or incomplete adaptation and the setpoint hypothesis, see Easterlin 2003 and Lucas et al. 2003.

[23] It is worth noting that, even if the wellbeing which couples extract from a given typology of sex is a decreasing magnitude, the marginal utility of sex is an increasing magnitude. This is a consequence of the circumstance that the subjects' excitement soars while engaging in sexual intercourse. It is hence global wellbeing which decreases, and not the marginal utility of subsequent time unit of (the same kind of) sex.

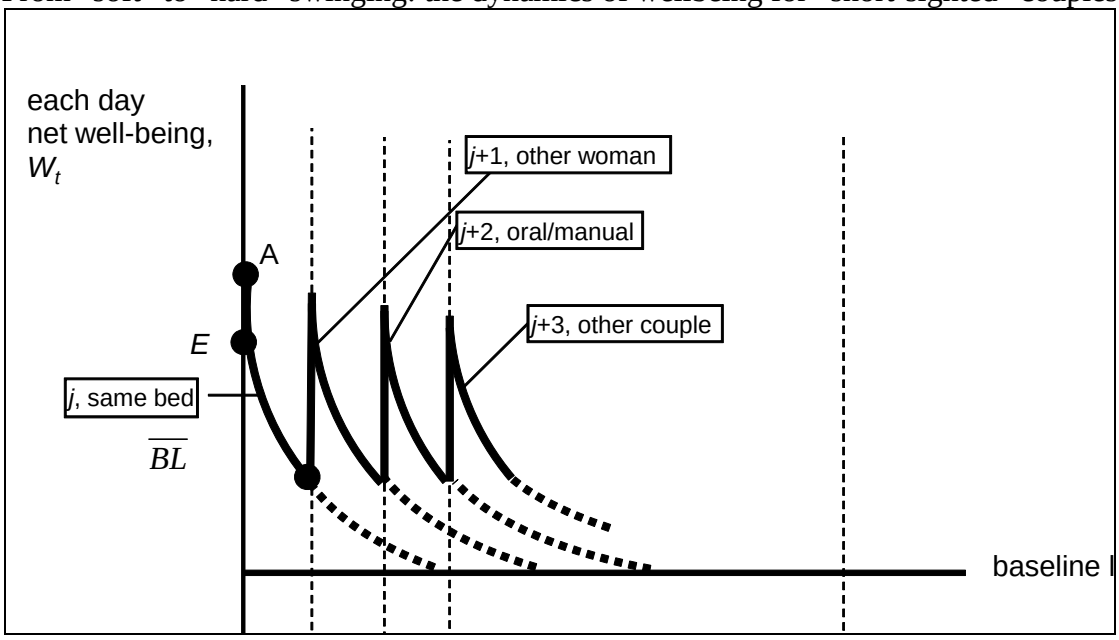
$$U_t^+ - C_t = U_{t-1}^+ - C_{t-1} - \alpha\left(U_{t-1}^+ - C_{t-1}\right) \quad (3)$$

Substituting W_t for $\overline{BL} + U_t^+ - C_t$ and W_{t-1} for $\overline{BL} + U_{t-1}^+ - C_{t-1}$, relation (3) can also be written as:

$$W_t = W_{t-1} - \alpha \cdot \left(W_{t-1} - \overline{BL}\right) \quad (4)$$

With $\{t : 0 < t < T\}$, $0 < \alpha < 1$ and $W_0 = \overline{BL} + U_0^+ - C_0$. In such a framework, for each day *t* couple's net wellbeing W_t is given by the previous day's net wellbeing deriving from swinging W_{t-1}, minus the progressive loss of utility deriving from habit-forming $\alpha \cdot \left(W_{t-1} - \overline{BL}\right)$. Through time, the daily wellbeing tends toward its baseline level $\overline{BL}$, as shown in Figure 3.

Figure 3
From "soft" to "hard" swinging: the dynamics of wellbeing for "short-sighted" couples



3.5 … and then engage in ever more extreme sexual acts: two different scenarios

Within the framework depicted above, two different scenarios are conceivable. In the first scenario, described in figure 3, the representative couple does not necessarily fall back (close) to the baseline level of wellbeing. At a certain date, *D*, the sum of (discounted) net wellbeing that the couple expects to obtain in the future by going on with the (same) sexual behaviour *j* falls below the sum of (discounted) net wellbeing that the couple expects to obtain in the future by engaging in another, "harder" swinging sexual activity *j*+1 for the same number of future *t*s. Formally:

$$\sum_{t=D}^{T} \vartheta^{-(t-D)} \cdot U_t^{+,j} - \sum_{t=D}^{T} \vartheta^{-(t-D)} \cdot C_t^j < p \cdot \left(\sum_{t=0}^{T-D} \vartheta^{-t} \cdot U_t^{+,j+1} - \sum_{t=0}^{T-D} \vartheta^{-t} \cdot C_t^{j+1} \right) + (1-p) \cdot \left(U_0^{-,j+1} - C_0^{j+1}\right) \quad (6)$$

This implies that the couple thinks it can obtain an increase in wellbeing by engaging in more extreme sexual acts. They therefore experiment the new sexual behaviour *j*+1 and, as usual, if they are not disappointed with such behaviour their realized level of wellbeing over the time span is greater than the expected level of wellbeing. On the contrary, if they are disappointed they will not go on with their (new) sexual behaviour *j*+1. Habit-forming also applies to sexual behaviour *j*+1, so that if the couple chooses *j*+1 a new dynamics starts, and the couple begins falling back toward the baseline level of wellbeing once again. However, even if their wellbeing declines, the couple has nothing to gain by abandoning the "new" sexual behaviour (*j*+1) for the "old" (*j*), since the new

sexual behaviour also includes the old, i.e. while engaging in sexual behaviour *j*+1 wellbeing declines again also for sexual behaviour *j*. Consequently, the couple can only cope with the declining wellbeing by moving on to "harder" sexual activities, say *j*+2 when the expected wellbeing from continuing with sexual behaviour *j*+1 falls below the wellbeing expected of sexual behaviour *j*+2. And so on, year after year.

The exact moment when it becomes desirable to shift from "softer" to "harder" sexual behaviors depends upon the formal specification of the dynamics of wellbeing for each different sexual behaviour. If relation (4) depicts the dynamics of wellbeing for all the *N* sexual behaviours in the decision set, and if all these functions have the same α, the circumstance that $W_0^j > W_0^{j+1} > ... > W_0^N$, yields an important result: the shift to "harder" sexual behaviours occurs when $W_t^j < W_0^{E,j+1}$, i.e. when the per-day wellbeing coming from the sexual behaviour actually undertaken falls short of the wellbeing the couple expects to obtain in the first day of practicing the new sexual behaviour. To put it another way, the couple tries to equalize the marginal wellbeing deriving from the different activities, but the fact that the "harder" activities include the "softer" ones induces the couple not only to "buy" the new activity, but also to abandon the old. And, once made, the choice is irreversible (if the couple enjoys the new activity; otherwise it is still possible to revert to the old). This strategy is fully rational for shortsighted couples, i.e. for couples that have a relatively short time horizon (short with respect to the number of possible alternative sexual behaviours)

Another scenario is, however, also possible. In this case the couple does not change its behaviour when $W_t^j < W_0^{E,j+1}$, and goes on with the old swinging behaviour *j*, accepting further reduction in wellbeing due to habituation. Only when the daily wellbeing comes (close) to baseline level $\overline{BL}$ does the couple realize it is not obtaining significant gains in satisfaction over the baseline level and shifts to the new sexual behaviour *j* +1. This latter strategy is fully rational for couples that have a relatively long time horizon (long with respect to the number of possible alternative sexual behaviours): in this way a couple maximises its intertemporal wellbeing, since only in this way can it extract all the wellbeing gains from all the typologies of swinging behaviour.

This scenario is illustrated in figure 4, in which the assumption is made that there are only four possible swinging sexual behaviours within the time horizon *T*: *j*, *j*+1, *j*+2 and *j*+3. It is immediately evident that the sum of the areas representing cumulative wellbeing below the solid curves (which depict scenario 2) is greater than the sum of the areas below the dot curves (which depict scenario 1),[24] and that following the dot curves the baseline level is definitively reached sooner than when following the solid curves. In figure 4 it is also made clear that, if swingers could invent a fifth sexual behaviour, say *j*+4, they could fill the gap which exists between the end of the exploitation of sexual behaviour *j*+3 (point *H*) and the end of the time span *T*, or in other words they could reduce the time in which, having exploited sexual behaviour from *j* to *j*+3, they stay on the baseline level of wellbeing.

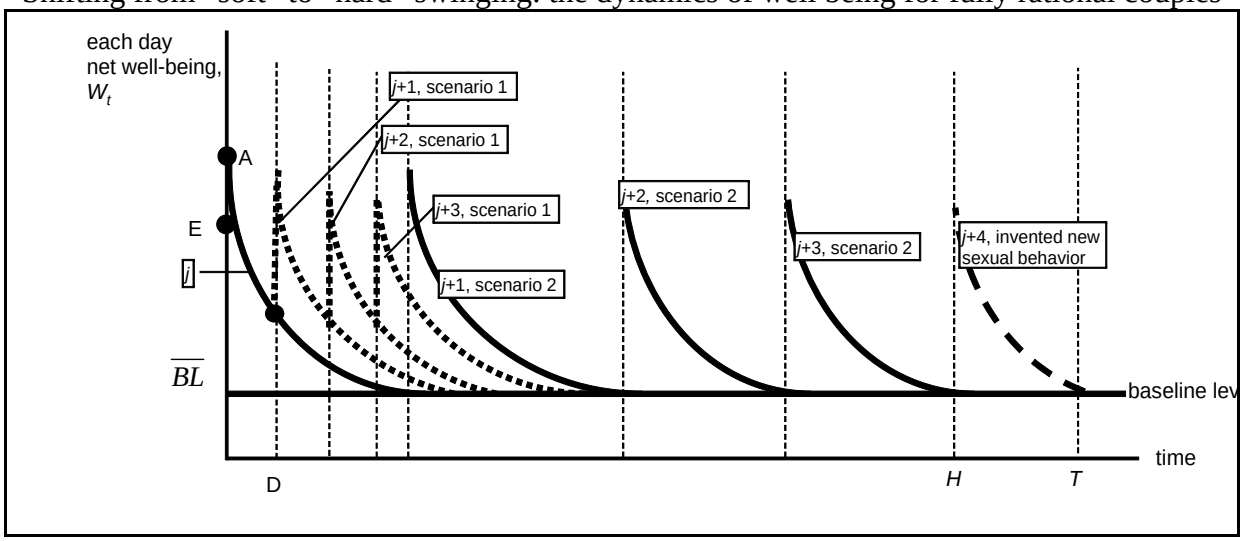
If the couples are rational, the main difference between the two scenarios is a consequence of their different time horizon: a shorter time horizon implies short-period maximizing behaviour (scenario 1), a longer time horizon long-period maximizing behaviour (scenario 2).

However, an implication of hedonic adaptation is that, having experienced all the possible swinging typologies, in the long period the couple inevitably falls back to the baseline level of wellbeing once and for all, and swinging no longer has any appeal.

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[24] This result is straightforward, since $\sum_{t=0}^{T} W_t^j > \sum_{t=0}^{T-X} W_t^j$ if $X>0$.

Figure 4
Shifting from "soft" to "hard" swinging: the dynamics of well being for fully rational couples



3.6 Four implications

On the basis of the above considerations, four main implications seem to emerge.

First, for swinger couples it is fully rational to begin from "soft" sexual intercourse and then, when hedonic adaptation has reduced the increase of wellbeing over the baseline level (close) to zero, shift to progressively "harder" sexual behaviour. In this way swingers maximize intertemporal wellbeing. Doing the opposite is inefficient, due to the circumstance that the "harder" sexual acts include "softer" ones, so that shifting from "harder" to "softer" swinging does not increase wellbeing ("softer" sexual acts are no novelty). Theoretical analysis fully explains actual behaviours.

Second, although hedonic adaptation inevitably forces couples back to the baseline level of wellbeing, swingers can delay this decline by discovering (or creating) ever new sexual behaviours (not included in the sexual behaviours they have already engaged in) and engaging in them, which can account for the increasing number of sexual behaviour typologies attested by swinger web sites.[25] Creativity can increase intertemporal wellbeing.

Third, the reduction of social stigma and increase in the amount of information available on this lifestyle can increase swinger couples' expected net wellbeing by reducing the costs of swinging and increasing the number of potential swingers, with the result of increasing the number of actual swingers. Due to network externalities a similar result can also be obtained by the diffusion of information demonstrating that swinging is a mass phenomenon, and as such not harmful. All these theoretical considerations help explain why the *ICT* revolution has increased the number of swingers: awareness of the lifestyle has spread, and the reduction in the cost of swinging has increased swingers' net wellbeing and has made it desirable for more couples to swing.

Fourth, in the long run the wellbeing a couple gains from swinging inevitably decreases. This circumstance, combined with the increase in the costs of social stigmatization which could derive from particular life events (such as the birth of children or hire for particular jobs) may lead couples to stop swinging after having engaged in the activity for a certain number of years. Furthermore, we would expect the vast majority of swingers to be neither too young nor too old, since, according to our model, it is preferable to begin with non-swinging ("vanilla") or "soft" sexual behaviours, and then shift to swinging or "harder" ones when hedonic adaptation has

[25] In morenasex.net these sexual categories number over twenty.

reduced the wellbeing generated by these "softer" sexual behaviours; and it becomes opportune to reduce and stop swinging when hedonic adaptation has reduced wellbeing from swinging close to baseline. This theoretical result is fully confirmed by the empirical data (see Appendix 1 and Figure 1).

4. Conclusions

The market for sexual recreation has changed significantly over the last twenty-five years, but, at least in Italy, these changes have so far had no truly drastic effect on the economic weight of each sector of the industry. In particular, prostitution still remains the most lucrative activity.
However, the development of swinging represents a new element which could potentially, in the long term, crowd prostitution out. Nowadays an increasing number of single males seek swingers rather than prostitutes, since swinger women are considered more participative than prostitutes.
And analyses, both theoretical and empirical, show that the *ICT* revolution, together with improvements in medicine, has been effective in reducing some of the costs of swinging and hence in increasing the number of swingers. Nonetheless an excessive supply of single males (and excess in the demand for swinger couples) still persists, so that swinging is not as yet able to threaten the role of prostitution significantly, and crowding it out seems only a future possibility.
As far as swinger behaviour is concerned, the theoretical approaches which seem best suited to capture the empirical data are those based on the concept of hedonic adaptation. These approaches suggest that it is consistent with maximizing swingers' strategy to begin from "soft" swinging and only later engage in "harder" swinging, and that also the search for ever new sexual experiences delays long-period hedonic adaptation and hence increases swingers' long-period wellbeing. Both these theoretical predictions seem to find confirmation in the empirical data on swinger behaviour.
Nonetheless, with reference to theoretical analysis, a general disclaimer is necessary: the phenomena under consideration are so many and varied that a wide range of theoretical models could be used to examine their evolution thoroughly. In this paper I have confined analysis to a limited number of these models, but further studies should necessarily take into account other theoretical approaches and, above all, should go deeper into their implications. However, given the critical lack of reliable empirical data, the research priority lies on the empirical rather than theoretical side. Theory cannot advance in the absence of data. In particular, empirical studies should focus on four key topics.
First of all, we need a clearer quantitative image of the swinging world. We need estimates on the number of swinger couples in the different countries and robust, rather than anecdotic, estimates of the number of single men who participate in the lifestyle. The relative number of men and couples involved in the lifestyle in different countries, together with their age distribution, their income and their cultural traits, are key elements for an understanding of how the different cultural and institutional frameworks affect swinging.
Apart from quantitative data, deeper investigation into the motives behind the decision to become swingers appears necessary. Questionnaires should be submitted to swinger couples to investigate their motivations. And it is crucially important that these questionnaires be submitted separately to the male and female component of the couple since, at least as far as Italy is concerned, the anecdotic evidence suggests that it is the male component that induces the female component to swing (a circumstance that might offer a starting point to study intrahousehold bargaining in swinging decision as a possible cause of gender discrimination).
Quantitative empirical data, together with psychological evidence, can contribute to clarify another crucial point, i.e. the evolution of the sexual behaviour of the representative swinger couple over time. The Italian figures appear to confirm that swingers begin with "soft" to engage subsequently in "harder" swinging activities, but both this evolution and the very definition of what exactly is meant by "harder" sexual behaviours may differ for different countries and cultures. It would be particularly useful to verify if such a difference actually exists and try to understand why. A closely

related topic to study is how hedonic adaptation affects these behaviours, i.e. the time path of the loss of wellbeing consequent to swinging habituation. In this paper reference is to a very simple habituation process, but only thorough (albeit challenging) empirical research on the time swingers persist in a given type of sexual behaviour before escalating can answer this question.
Finally, another interesting area to examine lies in comparing the behaviour of swinger and non-swinger couples with reference to the pornography and prostitution market. Researchers should try to understand if swingers rely on pornography and/or prostitutional services more than non-swingers or if swinging is a substitute for pornography and prostitutional services; and should also investigate the role of swingers as suppliers of free pornography and free sex, discussing how all these behaviours can influence (or have already influenced) the characteristics of the sex market as a whole.
As a general conclusion, we may say that swinging is a phenomenon of such proportions as to merit a great deal of empirical and theoretical investigation. It is a shame that prejudices on the part of researchers appear so far to have stood in the way of research on the topic.

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APPENDIX 1: Swingers' age

The age of Italian swinger couples posting on morenasex.net

age	Male	Female	M%	F%
18	0	4	0,00	0,18
19	0	5	0,00	0,23
20	0	10	0,00	0,45
21	0	19	0,00	0,86
22	6	28	0,26	1,26
23	3	30	0,13	1,35
24	9	31	0,40	1,40
25	19	57	0,84	2,57
26	18	47	0,79	2,12
27	34	65	1,50	2,93
28	48	78	2,11	3,52
29	36	54	1,59	2,44
30	81	99	3,57	4,47
31	55	68	2,42	3,07
32	49	81	2,16	3,65
33	83	93	3,65	4,19
34	54	79	2,38	3,56
35	101	121	4,45	5,46
36	89	103	3,92	4,65
37	74	82	3,26	3,70
38	113	118	4,98	5,32
39	109	102	4,80	4,60
40	204	155	8,98	6,99
41	81	65	3,57	2,93
42	112	87	4,93	3,92
43	107	69	4,71	3,11
44	99	80	4,36	3,61
45	128	108	5,64	4,87
46	78	42	3,43	1,89
47	53	36	2,33	1,62
48	70	44	3,08	1,98
49	58	29	2,55	1,31
50	100	46	4,40	2,07
51	27	18	1,19	0,81
52	34	20	1,50	0,90
53	31	10	1,37	0,45
54	36	11	1,59	0,50
55	23	6	1,01	0,27
56	12	5	0,53	0,23
57	10	4	0,44	0,18
58	2	1	0,09	0,05
59	9	4	0,40	0,18
60	8	2	0,35	0,09
61	0	1	0,00	0,05
62	5	0	0,22	0,00
63	2	0	0,09	0,00
64	1	0	0,04	0,00
65	0	0	0,00	0,00
TOTAL	2271	2217	100	100

Source: elaboration on Morenasex.net data