

Competitive Marriage Markets and Jewish Law¹

by

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ABSTRACT

This paper first shows how Jewish law can help us accept the assumptions behind a model of competitive markets for wife services. Most of these assumptions are easier to accept if one approaches marriage from the perspective of Jewish law than with a Western mindset. Assumptions that can be supported by Jewish sources include assumptions about women's role as household producers, men's contributions as providers of material and psychic benefits, divisibility of women's time and women's control over their time in household production, rights to own income, exchanges of work for money in marriage, homogeneity of men and of women, easy entry and exit into marriage markets, and existence of an informal price mechanism. Second, the paper presents a graphic model of demand and supply of wife-services based on these and other assumptions. Third, the paper uses competitive marriage market analysis to show how a regulation forcing men to pay a particular form of material benefit to their wives—a promise to pay a particular sum in case of divorce, as formalized in the ketuba—may be welfare-improving if the alternative is a situation where husbands exert monopsony power in marriage. It is also shown that a prohibition on adultery and an obligation for men to marry may possibly be beneficial (the latter is particularly advantageous for women interested in marriage).

Married households produce large amounts of household produced goods and services.² Consequently, the laws and customs regulating 'who marries?' and 'what is produced in marriage?' have the potential of generating large aggregate effects on a society's welfare. Marriage laws can affect marriage rates, divorce rates, and the wellbeing of those affected by marriage.

This paper examines the impact of Jewish laws of marriage (laws of ketuba, the prohibition of adultery, and the commandment for men to marry) using an economic model of competitive markets for wife-services following Grossbard (1976). In turn, that model was inspired by Becker's (1973) competitive market model of marriage. Becker's economic theory of marriage was originally published in two parts in 1973 and 1974 in the *Journal of Political Economy* and contained at least two models: a competitive

¹ I thank Douglass Allen, Valerio Filoso, and Yakov Rosenberg for helpful comments.

² For instance, Ironmonger and Soupourmas (forthcoming) state that married households produced 75% of Australia's Gross Household Product.

market model and a matching model. The competitive marriage market model later appeared in a chapter on polygamy in Becker's *Treatise on the Family* (Chapter 2 in Becker 1981 and Chapter 3 in Becker 1991). Becker's analyses of marriage and family have helped him gain the recognition that eventually led to a Nobel prize awarded in 1992. Despite Becker's international fame and the *Treatise's* wide exposure, competitive marriage market models (Becker's included) have had a limited impact among economists and other social scientists.

How husbands and wives treat each other in marriage is an important issue involving the allocation of all resources: money, time, and attention. Economists studying intra-marriage allocation include bargaining theorists interested in how a particular husband and wife may negotiate various allocations of resources. Competitive marriage market theorists look at all the men and women who could potentially marry each other and argue that the market forces of demand and supply have an impact on intra-marriage allocation of resources.³ According to this framework, the scarcer men are, the more women (or in the case of traditional societies, their guardians) compete for marriageable men and the more marriage becomes advantageous to men. In contrast, the scarcer women are, the more men compete for marriageable women and the more marriage becomes advantageous to women.

From the onset competitive marriage market theories have been used to analyze the effect of various laws and regulations involving marriage and divorce. Accordingly, Becker (1973) studied the effect of laws prohibiting polygamy. He recognized that societies that allow polygamy unleash a more generalized competition for women, as men can reenter the market competing for a second or higher order wife. If competitive processes operate, polygamy creates a higher total demand for women. In principle, women can translate higher demand for their services into an advantageous market position, as argued in Becker (1973). However, the traditional societies that allow polygamy tend to include other laws and regulations that interfere with competition and prevent women from enjoying their marriage market advantage.⁴ For the last 1000 years, Jewish laws of marriage and divorce include an edict of Rabbi Gershom that prohibits polygamy, and so an economic analysis of polygamy can also be regarded as an economic analysis of Jewish law.⁵

The value of marriage market models goes far beyond their applicability to the analysis of the effects of laws prohibiting polygamy. Marriage market analysis helps us understand the effects of any laws regulating marriage and divorce. Most economic analyses of laws of marriage and divorce have focused on the effects of Western legal stipulations, including U.S. laws (see, for instance, most chapters in Dnes and Rowthorn 2002), Canadian laws (Hamilton 1999), French laws (Laferriere xx), and U.K. laws (e.g. Smith 2002). Jewish laws on marriage and divorce have not received much attention in

³ Market forces also play a role in the bargaining theories of marriage of McElroy and Horney (1981), Chiappori (1992), and Lundberg and Pollak (1993).

⁴ E.g. by giving fathers control over daughters, see Guttentag and Secord (1983) and Grossbard-Shechtman (1993).

⁵ This edict only held for Jews living in Christian lands and the influence of Christian prohibitions on polygamy was explicitly recognized by Rabbi Gershom and his contemporaries. Most Jews living in Moslim lands also adopted Rabbi Gershom's edict except for some isolated Jewish communities such as the Jews of Yemen and the Jews of Kurdistan. Since the establishment of the state of Israel in 1948 polygamy is totally banned by rabbinical authorities. Contemporary rabbis could possibly revoke the ban on polygamy.

the economic literature. Becker (1981) mentioned ketubas (Jewish marriage contracts). That topic is also covered in Liebermann (1983) and Grossbard-Shechtman (1986).

This paper also deals with Jewish marriage contracts. Other Jewish laws are also analyzed with the help of economic models. In addition, it compares Jewish laws of marriage and divorce with comparable Western laws. Furthermore, some of the assumptions behind Jewish laws of marriage are examined and the paper assesses their compatibility with central assumptions underlying some models of competitive marriage markets, in particular a model of competitive markets for wife-services.

Jewish Laws of Marriage

Jewish law is drawn both from a written tradition reported in the Torah (part of what Christians call the Old Testament) and an oral tradition that eventually got written down in the Mishna (around 1800 years ago) and the Talmud (around 1500 years ago). Most Jewish laws currently followed by practicing Jews have been in place for well over 2000 years. Some laws are now inapplicable, such as laws regarding temple sacrifices or laws regarding slavery, and there is a large variation in the degree to which contemporary Jews practice the laws that are applicable.

Jewish laws are categorized according to two major categories: obligations related to interpersonal relations, and obligations related to relations between Man and God. Laws of marriage are an important part of the laws regarding interpersonal relations. In fact, a couple is considered as a model dyad: marriage is viewed as a primary training ground where people are expected to practice the all-important virtue of kindness towards others.

Jewish law and Judaism can be compared to both Western law and Christianity. In contrast to Western law with its emphasis on individual rights, Judaism emphasizes individual obligations (Meiselman 1978). In contrast to Christianity, a religion centered around faith, Judaism centers around the law. These two contrasts--(1) Jewish law versus Western law and (2) a law-based religion versus a faith-based religion—are related: Western law, including the importance of the state as a source of legitimacy, has its roots in Christianity (see Stone 1997). The religious contrast can be restated as follows: Judaism as a law-based religion regulates behavior with hundreds of specific regulations, whereas Christianity as a faith-based religion focuses on teaching meta-preferences or guidelines to individuals who are then relatively free to implement these guidelines in their behavior (more so in the case of protestant Christianity than in the case of Catholicism).⁶ Given the freedom that individuals have to interpret their faith, interpretations of the faith may differ dramatically and these differences can lead to conflict.⁷ This helps explain contrast (1): Western law based on rights guaranteed and enforced by a strong state that was in part allowed to become strong in order to minimize possible conflicts among various interpreters of one faith, versus Jewish law based on

⁶ This contrast is emphasized in the New Testament: it explicitly discourages the observance of numerous Jewish laws such as circumcision, kosher food laws, and temple sacrifices.

⁷ Historically, a major reason why in the West the state is a much stronger institution than in the rest of the world is that the citizenry wanted states to gain strength so they could stop bloody conflicts between various Christian denominations. States respond to conflict, and they also may cause conflict. This includes religious conflicts. For instance, after Christianity became the official religion of the Roman Empire, religious persecutions started. Also, since Jews have a state of their own, there tends to be more intense religious conflicts among different interpreters of Jewish law than was the case before the state of Israel was established in 1948.

obligations and without a state to enforce these obligations for most of the last two thousand years. Until 1948, Jewish law has offered limited mechanisms of enforcement other than social pressure and the legal systems of the nations where Jews have dwelled in their diaspora.

Marriage and divorce laws have been influenced by religion perhaps even more than other laws, given that until recently most people wanted their marriage accepted by their religion. The influence of Christianity on marriage and divorce laws is felt throughout the Western world (see Grossbard-Shechtman and Lemennicier 1999). This is even the case in the United States, where separation of church and state is a central principle of government. For instance, for more than a century the U.S. government and the Supreme court enforce a law followed by most Christians (and a rabbinical regulation for Jews) prohibiting polygamy. As a result other Christians who believe that polygamy is permissible—as is the case of offshoots of the Church of Latter Day Saints—as well as Muslims and others who do not share this particular Christian precept, are not allowed to follow their preference for polygamy.⁸ Given minimal reliance on state power to enforce their laws, Jews have used social pressure as a major engine of enforcement. Some obligations related to marriage are presented as conditions for membership in Jewish communities.⁹ This includes adultery laws and some laws of divorce.¹⁰

The Model

Becker (1973) and most other market models of marriage assume that when people get married their whole time belongs to the marriage. In these models there is no need to decide on how to allocate one's time other than the decision to work outside the home or not. In contrast, the model of a market for wife-services presented here views marriage as a more focused institution to which people allocate part of their time, even if they do not participate in the labor force. Both married men and women may prefer to keep certain activities to themselves rather than share them with their spouse. This implies that time is divisible and that work in household production is conceptually very similar to work for a firm. Accordingly, marriage markets are modeled as markets for wife-services.

Most people are unaccustomed to think in terms of wife-services, and even less in terms of markets for wife-services. They also have a tendency to question the relevance of market models to questions such as how men and women treat each other in marriage. As a result, a major part of this paper is devoted to a discussion of the assumptions behind the model. That discussion lists the assumptions systematically, discusses how realistic they are, and compares them with some of the assumptions made by other economists (Gary Becker in particular) and by Jewish law and customs. The applicability of the assumptions underlying an economic analysis of markets for wife-services does not differ much from that of assumptions applied to the analysis of markets for labor or capital. As Westerners we find that applying these assumptions to marriage market analysis is perhaps somewhat more heroic, especially relative to the assumptions

⁸ Monogamy is a law instituted by Christianity, so the contrast between Judaism and Christianity is not as stark. Both religions have laws, but Judaism is based on law and Christianity based on faith.

⁹ Why membership costs would be so high is another interesting question that economists have addressed, principally Lawrence Iannaccone (HI COSTS)

¹⁰ For instance, most of the world's rabbis currently rule that if a Jewish marriage dissolves without a Jewish divorce ceremony (called a *get*), and the woman remarries by state law and has a child, that child is not an eligible marriage partner.

underlying the most popular model of marriage in the West: the romantic love model. However, from the perspective of a Jewish perspective (*hashkafa*), the assumptions underlying a model of competitive markets for wife-services are not as heroic.

The model used in this analysis is based on (A) assumptions regarding division of labor in the home, (B) assumptions required for the derivation of demands and supplies of wife services, and (C) assumptions underlying competitive market analysis. The assumptions in Becker (1973) and Grossbard (1976) are summarized in Table 1. The following discussion examines eight of these assumptions and examines them from a perspective of Jewish law or *hashkafa* (Jewish perspective). For a full discussion of the model and more technical assumptions, see Grossbard-Shechtman (1984).

A) Assumptions 1 and 2: Division of Labor

The model assumes a traditional division of labor between men and women. This consists of two assumptions:

1. The first assumption is that women perform most marital household production. Household production is defined following earlier contributions to the New Home Economics, including Jacob Mincer (1962) and Becker (1965), and includes parenting and the production of men's legitimate offspring. That assumption was definitely realistic in the context of the analysis for which the model was designed: polygamous Muslim Nigeria, where specialization of women in household production is universally observed.¹¹ In the U.S. and other Western countries today, many households start out by following an egalitarian division of labor, but after they have children, most of these couples end up with having the wife doing more than half of the household production. This even holds for couples living together without marriage, an increasingly popular lifestyle in the West. It is therefore realistic to assume a traditional division of labor, even in the West, and even if we limit ourselves to concrete forms of household production such as food production and children. The first application of this model was limited to material and concrete concerns (Grossbard (1976). In a postmodern world household production increasingly includes the production of goods and services that bestow meaning to life, such as spiritual fulfillment and actions symbolizing a couple's standing in the community. Even if we concentrate on more intangible tasks, such as support of a spouse's career, it remains the case that women more often work for their husband than men work for their wife.

2. The second assumption is that husbands provide for the material needs of their wives who engage in marital household production. This assumption is realistic in any cultural context, including the contemporary U.S. It is certainly realistic in places where women have no alternative means of subsistence, which is the case in many parts of the world. In a postmodern world, psychic benefits take increased importance, in accordance with the increased importance of the production of non-material goods, and the traditional role of provider has been called into question. All workers—including married women—are increasingly interested in psychic benefits,

¹¹ In the Nigerian city of Maiduguri in 1973, married women were spending several hours a day preparing a meal from scratch. Other elements were present that facilitate the application of the economic model of marriage presented here: bridewealth payments were frequently paid by men to women's male guardians, the divorce rate was high, and men owned most assets.

and therefore it is important for interpreters of economic theories of marriage to take these benefits into account.

Jewish Law and Assumptions 1 and 2 on Division of Labor

Jewish law holds that women are responsible for household production in marriage, even though there is much flexibility as to what this entails (Meiselman 1978, p.82). Jewish law expects women to engage in material household production as well as production that has meaning at a higher level: spiritual household production. This helps explain why in rabbinical literature married women are often referred to as ‘home’ (bayit) and are also called ‘the core of the home’ (akeret habayit), which includes the spiritual core of the home. Two sets of laws help illustrate that. First, Jewish law commands married women to light the Sabbath candles and not married men, under the assumption that the light that women kindle benefits the whole household (husbands are only required to light candles if their wife did not). Practicing Jewish married women thus produce the spiritual good “home blessed for the Sabbath through the light of candles lit according to Jewish law”. Another example is that Jewish law commands married Jewish women to make themselves available for permitted sexual relations by immersing themselves in a ritual bath (mikve) prior to intercourse and following the laws of family purity. Otherwise intercourse is prohibited to a Jewish man eager to follow Jewish law. In this case, the spiritual good that practicing Jewish wives produce is ‘the opportunity for a married couple to have kosher sexual relations’.

Judaism is not unique in valuing women’s domestic contributions: all major religions do. Given its legal nature, Judaism (and for that matter Islam) is more specific as to what this entails than is the case with Christianity. For instance, invoking Jewish law and upon request, rabbis may specify whether wives need to make a couple’s bed or cook, or whether they can delegate these tasks to household help.

As is the case with most Jewish laws, Jews have a choice of rabbinical interpretations of the law. This holds today as it did 2000 years ago. As far as the emphasis on domesticity is concerned, some contemporary rabbis discourage women from driving and participating in the labor force, lest this would infringe on their domestic roles. Other rabbis totally support the needs of modern women employed in the labor force.

Jewish law supports the second assumption. Husbands are obligated to transfer material resources to their wives, i.e. they are expected to provide their wife with ‘food, personal needs, clothing and household needs, medical payments, and burial.’ (Meiselman 1978, p. 82). Wives can choose to work in the labor force or not. If they decide to participate in the labor force, husbands are not obliged to pay for food any more, ‘but they are still required to pay for [their wife’s] clothing, cosmetics, and personal needs.’ (ibidem) Provision of material and psychic benefits by husbands to wives is encouraged by all major religions. Where Jewish law diverges from Christianity is in the extent to which it explicitly describes how husbands should act.¹² One of the commandments that Jewish law imposes on a husband is the commandment of *Onah*, which requires that he maintains a minimum amount of regular sexual relations with his

¹² Islamic law also requires that husbands give their wife a minimum of sexual attention. Female circumcision aimed at reducing women’s pleasure from sexual relations is frowned upon by both Christianity and Judaism.

wife (Maimonides as cited in Meiselman 1978 p. 119). In addition, the Talmudic statement: “A man is required to make his wife happy” (Meiselman, *ibidem*) is interpreted as obligating Jewish husbands to satisfy their wife sexually. The law is quite specific, as in this statement by Maimonides who lived in the 12th century: “When you are ready to have relations, ensure that your wife’s mind agrees with yours. Do not hasten to arouse her desire, so that her mind will be at peace. Begin in a pleasing manner of love so that she will be satisfied first”.

B) Assumptions Underlying the Supply and Demand for Wife-Services

The model moves from general assumptions about division of labor based on gender to the more specific assumptions behind the economics models of competitive labor markets. This is not the place to list all these assumptions, which includes the assumption of rational behavior and diminishing marginal utility.¹³ Here I single out some of the assumptions that distinguish this model of a market for wife-services and then I discuss them in light of Jewish law.

1. Following Grossbard (1976) the model assumes that time in marriage is divisible and can remain under individual control. This creates a parallel between work in marriage and work in labor markets: we take it for granted that employers do not own all their workers’ time, and that a worker’s time is under his or her control. The same holds for workers in marriage. In contrast, an implicit assumption in most other economic models of marriage, including Becker’s models, is that marriage entails a blending of time constraints and that all of a person’s time belongs to the marriage.¹⁴ A consequence of this assumption of divisibility of time devoted to household production in marriage is that any time supplied to marital production has an opportunity cost in terms of forgone personal utility. This is one of the assumptions behind the derivation of an upward-sloping supply of wife-services.¹⁵ It is realistic to have an upward-sloping supply, as most studies of labor market behavior indicate upward-sloping labor supplies. This also holds for the professionals who could possibly replace a wife active in household production, such as nurses or child care takers. (In fact, in court cases one of the common methods of calculating the value of a housewife is to compute the cost of replacing her in all the tasks that she fulfills, see Hersch *forthcoming*). If the supply of professionals such as nurses and babysitters is upwardsloping, and the homemaker is a possible substitute for these professionals, then it is logical that the homemaker’s supply of labor is also upwardsloping.
2. The fourth assumption in the model is that men have divisible income that to some degree remains their personal income after marriage.¹⁶ Given that in most

¹³ Grossbard (1984) gives a formal presentation of the assumptions underlying Grossbard (1976).

¹⁴ Chiappori (1992) has criticized the first New Home Economics models for assuming unitary utility functions and unitary income constraints. By extension, one can say that these models also assumed that after marriage a couple created a unitary time constraint. For the history of the New Home Economics, see Grossbard-Shechtman (2001).

¹⁵ Another assumption behind this upwardsloping supply is diminishing marginal utility. See Grossbard-Shechtman (1984).

¹⁶ In contrast, most household economics models assume that income is household income and is not under the control of who earns it.

legal systems men keep the bulk of their earnings even after a long marriage to a devoted homemaker, is a clear indication that husbands do not automatically share their income with their wife, so this is a realistic assumption. Men also keep control over how much of their time they intend to use to make their wife happy.

3. The fifth assumption in this model that will be emphasized here, is that there is a quid-pro-quo, an exchange, between husband and wife. As is commonly done in labor economics in the case of firms benefiting from labor, we can derive a demand for labor based on men's willingness to pay for women's wife services that contribute to their utility: the husband exchanges access to his income for household goods produced by the wife. That is his demand for wife-services.¹⁷ This demand can be derived prior to marriage, when men are thinking that they would like to have a wife who produces household production for them. Likewise, as is done for workers in labor economics, we obtain women's supply of wife-services defined as willingness to work various hours of marital household production at various levels of pay by a potential husband. Again, this is a supply derived prior to marriage, when women are considering this form of employment. Both the demand and the supply may include psychic benefits as part of the compensation that men and women react to. The same analysis can also be applied to a supply of husband services and a demand for husband services by women (see Grossbard-Shechtman 1984).

Jewish Law and Assumptions 3 to 5 on Wife-Services

Assumptions 3 to 5 can be justified in terms of Jewish laws about marriage. It is the fundamental viewpoint of Judaism about marriage that it is a personal contract between two people: a woman producing a home, children, etc. and a man benefiting from that production and compensating the woman for it. Jewish law specifies obligations for husbands that are reminiscent of obligations that Jewish law imposes on employers, such as the obligation to pay on time and to treat the worker well. In that sense, marriage according to Jewish law is similar to a labor contract.

Implicit in Jewish law is the recognition that a wife's time is divisible. This is evident from the fact that at any time prior or during marriage Jewish law allows women to choose between two types of contract specified in the Talmud: 'mezonot' and 'maasei yadeiha'. The default contract in a standard Jewish marriage contract is mezonot, meaning that the husband is responsible for the wife's material needs and will provide for her. He also buys her time in the labor force with the mezonot payments. If she chooses this contract and earns an income, the wife must turn all her earnings to her husband. A woman can reject this contract and instead ask for a 'maasei yadeiha' contract that allows her to keep her earnings, and amounts to the wife buying her time out from her husband. However, in this case she gives up on her right to obtain mezonot from her husband.¹⁸

¹⁷ This demand is negatively sloped, as is the case with most demand functions. This follows from the assumptions of diminishing marginal utility and possibly diminishing marginal productivity. See Grossbard-Shechtman 1984.

¹⁸ It is my understanding that Jewish law can accommodate other contracts as well. For instance, a woman could possibly require to keep her earnings and get mezonot from her husband.

Psychic benefits and spiritual production are also part of the Jewish marriage contract. Here too, one can conceive of a quid-pro-quo in the sense that the more one spouse gives, the more it is likely that the other will give too. The more careful and considerate the wife is in observing her commandments such as candle lighting and ritual purity, the more the husband is motivated to observe his commandments such as onah. Likewise, the more the husband is careful in following the law by making his wife happy, the more one expects the wife to be careful in her observance as well.

C) Assumptions 6 thru 8 Underlying Competition in Markets for Wife-Services

A number of assumptions underlie competitive market analysis. In particular, let us look at the following three assumptions and examine them from a perspective of Jewish law and hashkafa.

6. Another assumption in this model of competitive markets for wife-services is the assumption that groups of identical men consider marriage to groups of identical women, and vice-versa.¹⁹ Homogeneous people can perfectly substitute for one another.²⁰ This assumption is a working assumption behind any market analysis, and may hold for groups of people categorized by factors such as age, education, religion or degree of religious devotion, all factors that may create barriers to substitution.²¹ This assumption applies to markets for wife-services supplied by women categorized by one or another criterion. Given that people invest in their human capital, or alternatively that parents invest in their children's human capital as a way of readying them for marriage, this assumption implies that within their market individuals have portable marriage-general human capital in the sense that household production skills are equally valuable with any potential spouse.²² Many forms of social behavior may aim at segmenting a market for the purpose of avoiding homogeneity and thereby improving one's market position. For instance, young men impose age restrictions on parties and bar admissions in order to exclude older men from competition for a limited pool of young women.²³

7. Competitive marriage market models such as Becker (1973) and Grossbard (1976) rely on the assumption of easy entry and exit typically assumed in all competitive market models. The more that assumption holds, the more competition is possible and the more the competitive market models are applicable. (The same also holds for other competitive marriage market models, such as Becker 1973). As for the more restrictive assumption of free entry or exit that underlies perfectly competitive market analysis, it is an assumption that rarely describes any market, and certainly it is not realistic for marriage markets. However, to perform welfare analysis within a market framework, we don't need to assume perfectly competitive markets.

¹⁹ This assumption is also found in Becker's (1973) market model of marriage.

²⁰ In perfectly competitive market models, be it conventional models or marriage market models, one also assumes perfect information and no transaction costs. Search models of marriage also pursue analogies between marriage markets and labor markets, see e.g. Michael Keeley (1977) and Dale Mortensen (1988).

²¹ Grossbard (1976) separated women by two education levels: educated and uneducated.

²² See also Chiswick and Lehrer (1990) about an explicit discussion of general and specific human capital used in marital household production.

²³ This may also help explain the often drastic generational switches in musical taste: by influencing the taste of women of their own generation and not those of older men, younger men obtain more access to women of their generation at dance clubs etc.

8. A model of competitive markets for wife-services follows standard labor market analysis by also assuming that some price mechanism functions in marriage markets: it is an informal price mechanism in contrast to the formal price mechanisms that operate in labor markets. The idea that wife-services are treated like any other form of labor and have a price bothers most people, including most economists. If it is assumed that women engage in wife-services in return for a material compensation, the implication is that they are not so different from prostitutes. Does not that fly in the face of what we know about marriage, an institution that seals love between man and woman and facilitates the giving life? However, if one recognizes that informal prices include psychic benefits then the idea that the total compensation for wife-services is partially determined by market forces does not necessarily fly in the face of other belief systems that influence individual expectations about marriage, such as romanticism or religious beliefs.

The quasi-wage for wife-services includes norms on how men and women should treat each other in marriage and prior to marriage. This includes norms about sexual behavior inside and outside marriage. As argued in Heer and Grossbard-Shechtman (1981), these norms may vary with the relative scarcity of men and women in the marriage market.

Jewish laws and customs on Assumptions 6 through 8 about Markets for Wife-Services

As far as homogeneity is concerned, no religion explicitly justifies this assumption, but one can interpret stories told by all major religions, such as the story of Adam and Eve, as emphasizing the universality of manhood and womanhood, a universality implying a certain degree of substitutability and homogeneity between all men on one hand and all women on the other hand. Religions and cultures can also support this assumption via the guidelines they set for their marriage brokers, if they use such institution. The more marriage brokers emphasize homogeneity, the more market analysis becomes applicable. For instance, to the extent that marriage brokers propose matches according to characteristics such as presumed fertility as measured by age, they implicitly assume that all women of a certain age are interchangeable, and that so are all men. The same is true of other attributes of a general nature, such as good health. In the observant Jewish circles where marriage brokers tend to play an important role, an attribute that has the nature of general human capital is religious devotion. That is one reason why marriage brokers in those circles are very alert to external signs of religious devotion, such as a beard or a willingness to wear a wig after marriage. Non-religious institutions that facilitate couple formation, such as bars and dancing clubs, also promote homogeneity by age group and other physical characteristics.

As for the seventh assumption, easy exit or exit, religions differ greatly in the obstacles they present to divorce. With respect to the difficulty of divorce, Christianity is at one end of the spectrum, (Catholicism does not accept divorce at all) and Judaism and Islam are at the other end of the spectrum, as they make it relatively easy to divorce. According to Jewish law, if a couple agrees that they are incompatible and cooperate on the termination of their marriage, there will not be any problem and divorce occurs quickly. When the couple disagrees, there can be very serious problems with exiting a

marriage, especially if the husband disagrees.²⁴ The religions also differ with respect to ease of entry into marriage. Traditional Jews and Muslim facilitate entry into marriage by discouraging marriage out of romantic love. Societies encouraging expectations of love at first sight raise the costs of entry of competitors in cases where a man and a woman started a relationship. This may cut short the search process for the best possible mate. Jews and Muslims also encourage the use of market intermediaries such as marriage brokers. The use of marriage contracts may also facilitate entry into marriage if the contracts match well with individual preferences.

The most problematic assumption discussed above is that of the existence of an informal price mechanism in marriage markets. World cultures and religions vary widely in terms of their tolerance of a price mechanism regulating marriage formation and possibly other aspects of marriage. Any culture that has a dowry or bridewealth mechanism facilitating entry into marriages is closer to accepting this assumption than a culture where monetary transactions are foreign to the matching process. In that respect, contemporary Western society stands out. Most of the rest of the world has monetary transactions at marriage, and so did most Western countries in earlier periods in history. In the West, exceptions include traditional Jews, Muslims, Hindus, and other minorities following their religious traditions while living in the West.

Jewish law specifies such norms that are beyond time and space. These can be viewed as regulation. Market forces are expected to have an impact too. For instance, among devout Jews, there tends to be a premium paid for Torah and Talmud scholarship in men: scholars with a good recommendation from their teachers can obtain higher dowries at marriage. This results from the relative scarcity of good scholars and the high demand for such scholars by potential brides and their families, given that Torah scholarship is the highest goal among devout Jews. Cultures and religions also differ in terms of how much they encourage men to compensate women for their wife services in the form of psychic benefits. By explicitly requiring psychic benefits such as men's obligation to make their wife happy, Jewish law increases overall emotional willingness to accept that we are influenced by marriage markets using a price mechanism, by women as well as men. The more a culture accepts that marriage matches can be facilitated by a price mechanism, the closer that culture is to a competitive marriage market model, especially a model such as Grossbard (1976) where it is assumed that a price mechanism operates.²⁵ The next section elaborates on the model.

A Graphic Model of a Market for Wife-Services

The above assumptions are the major assumptions underlying a model of competitive markets for wife services. This model looks very much like any other market model and is presented graphically in Figure 1 (a mathematical presentation can be found in

²⁴ The logic for the asymmetry regarding refusal of rabbis to impose a divorce on a man (while they sometimes impose it on a woman) is that even though polygamy is illegal, it is not out of the question and if a man is separated from a wife who refuses to divorce him and he remarries, he is like a polygamist. But since polygamy is absolutely prohibited to women, a woman whose husband refuses to divorce her can not remarry under any circumstances. This is the situation of the *aguna*, a very serious problem that is being addressed e.g.)

²⁵ I personally overcame some of my resistance to using my own marriage market model after learning that according to Jewish law wife-services and the compensations by husbands can all have a spiritual and emotional dimension.

Grossbard-Shechtman 1984).²⁶ On the horizontal axis are wife services, including wives' maternal services. On the vertical axis is the quasi-wage for wife-services, which can be interpreted as a compensation per hour of work in wife-services. All individual supplies are aggregated leading to an upward-sloping supply of all women willing to supply wife-services, i.e. to marry and engage in household production benefiting the marriage. Assuming that all women are identical this supply is the horizontal sum of individual supplies

Men are on the demand side, and the aggregate demand is the sum of all the individual demands exhibiting men's willingness to pay for wife-services. Putting together the demand and the supply, it follows that the higher the demand relative to the supply, the more women get compensated for their wife-services. Following the labor market analogy, the best way to conceive of the participants in this market is to think about the participants as individuals who have not yet married and are willing to either supply or demand wife-services. They do not know who their spouse will be, but they know that there are all these potential spouses, all identical, available for them to marry. The market clearing compensation tells potential wives how much they can expect to receive in return for their wife-services, and potential husbands how much they can be expected to "pay" for these services, keeping in mind that the pay includes psychic benefits.

A major value of the model is to perform a comparative analysis that shows how certain factors influence equilibrium conditions in markets for wife-services, which implies influence on (1) the percent of people who marry, (2) the amount of time people devote to household production in marriage (including wife-services), and (3) the compensation women can expect for their wife-services.

Even though in some cases the entire compensation for wife services may consist of psychic benefits, it seems that even in the contemporary Western world, material elements of that compensation continue to play a role. We have some evidence on how marriage market conditions affect the material component to the compensation for wife-services as indicated by variations in married women's labor force participation: it is assumed that participation in the labor force is not the preferred state and that the higher the level of material compensation for wife-services, the less married women participate in the labor force (see Grossbard-Shechtman and Neuman 1988, Grossbard-Shechtman and Neideffer 1997, Grossbard-Shechtman and Granger 1998, Chiappori, Fortin and Lacroix 1998, and Grossbard-Shechtman and Fu 2002). A number of these studies indicate that the material component of the compensation for wife-services is more dominant when women are less educated.

One can also use a model of competitive markets for wife services in order to explain fluctuations in the norms involving psychic benefits men offer women. For instance, as argued by Heer and Grossbard-Shechtman (1981), the more men are in demand in marriage markets the more they are likely to dictate norms of behavior that suit those who do not find casual sex very costly for they do not get pregnant. The availability and legitimacy of substitutes to wives, such as servants and prostitutes, will also affect the psychic benefits that men offer women. For instance, Scandinavian men have the reputation of treating their wives well relatively to many other nationalities, and they are

²⁶ Figure 1, using the term 'wife-services', is found Grossbard (1976) and Heer and Grossbard-Shechtman (1981).

notorious for their cooperation in household work. In part this can be explained by the historical isolationism of Scandinavian countries where until today it is very difficult for non-Scandinavian to acquire residency rights. Given the high standard of living, today it is relatively difficult for Scandinavians to obtain paid household help so men's cooperation in running a home is of greater value than in countries where household help is cheap and easily available. It could be that historically the supply of such help in Scandinavia was also limited relatively to its abundance in other parts of Europe and that this explains the relatively generous property provisions offered to married women in case of death or divorce (Scandinavian laws about the division of property at divorce offer women not only access to the wealth that their husbands acquired after marriage—what is called community property in the U.S.--but also the wealth they brought to the marriage, see Grossbard-Shechtman, Ekert-Jaffe and Lemennicier 2002).

We now use this demand and supply graph to assess the impact of a number of Jewish laws regarding marriage and divorce.

The Impact of Jewish Laws on Marriage

Laws about marriage and divorce are forms of regulation that regulate either the price or the quantity dimension in markets for wife-services (and possibly husband-services as well). Therefore, an economic analysis of the efficiency and redistributive effects of Jewish laws follows the same analytical principles as the analysis of other forms of regulation that are more familiar to economists. In analyzing the effect of various Jewish laws about marriage and divorce using an economic model of a competitive market for wife-services, we start with the law requiring men to promise a fixed sum of money that women will get in case of divorce or death of their husband. This is specified in the ketuba, the written document that is required at a Jewish marriage.

The impact of the quasi severance payment specified in the Ketuba

Legal structures often protect workers, and there is an element of work in marriage.²⁷ Work can either be volunteer work, or it can be compensated (remunerated). Relative to employers, workers are typically in a weak position, to the extent that they invest their time in the acquisition of human capital specific to the firm. In contrast, employers rarely contribute their own specific investments benefiting workers, so in case of separation the employer loses fewer specific investments than the worker. Consequently, a major aspect of labor law is to provide protections for workers who may lose from involuntary dissolution of their employment

In the case of marriage, the workers are the caretakers who invest their time and human capital, often in ways specific to their spouse. Given a traditional division of labor, these are women. The spouses who do little caretaking and instead provide funds to the marriage are like employers. In case of dissolution, the wives may lose some of their income, especially if their human capital was specific to a spouse and especially if they have young children and they are not able to participate much in the marriage market.

The Jewish law that requires men to promise a payment to their wife in case of death or divorce can be viewed as an element boosting the material compensation for wife-services. Such payment is a standard aspect of any Jewish marriage ceremony, and the

²⁷ Some of the points made here were made in Grossbard-Shechtman and Lemennicier (1999).

amount to be paid is specified in a *ketuba*, a marriage contract document that has to be prepared by the husband for the wife.

To analyze the effects of marriage with a *ketuba* on the wellbeing of women and men, I compare two judicial regimes: marriage without a *ketuba* and marriage identical in all aspects except there is a *ketuba* required at marriage. The *ketuba* can then be interpreted as a legislated increase in the material benefits that a woman can obtain in return to her wife-services. If this increase is unaccompanied by compensating reductions in other aspects of the compensation for wife-services, the introduction of such a law can then be conceptualized as a legislated increase in quasi-wage for wife-services. We can analyze the effect of the sum specified in the *ketuba* like the effect of a minimum wage on labor markets. Better benefits are expected to encourage women to supply a larger amount of wife-services (either more hours of work or more women entering marriage).²⁸ At the same time, a law introducing a required *ketuba* is likely to deter some men from marriage in the sense that a higher quasi-wage will lead to a smaller quantity demanded of wife-services. Figure 2 presents a market for wife-service. We start by assuming that y_1 , the equilibrium quasi-wage, is the compensation for wife-services established in this market. If the quasi-wage y is established at a higher level, due to Jewish law specifying benefits at death or marriage as specified in the *ketuba*, one expects a decrease in quantity demanded and an increase in quantity supplied. As men will not be forced to pay for more wife-services than they want at a higher quasi-wage, the dominant effect will be a decrease in quantity demanded and fewer wife-services will be supplied. If women are homogeneous and monogamy is the rule, a smaller quantity of wife-services is likely to translate principally into less hours of work in wife-services by individual women.

Figure 2 presents another situation where the initial quasi-wage is y_2 , which is below the equilibrium quasi-wage y_1 . This could be the case if wives take care of young children, husbands take advantage of their wife being of limited marriageability when children are young, divorcees are limited in their marriage options, and other factors give market advantages to men. Under such circumstances economists would say that husbands have monopsony power, and they can abuse it by paying their wife less than what their market value. This is a scenario explaining why the initial quasi-wage for wife-services is initially set below the equilibrium quasi-wage. This will discourage women from supplying as many wife-services to their husband relative to what they would supply if they got paid equilibrium quasi-wages. Then the imposition of a *ketuba* at marriage amounts to setting a quasi-wage y_3 that exceeds the quasi-wage in a system without *ketubah*. This is expected to encourage household production in marriage and to increase the total surplus derived from wife-services. Total production of wife services will then increase from Q_2 to Q_3 , which amounts to each homogeneous wife supplying more wife-services. In this case the law specifying a *ketuba* leads to an efficiency gain as well as a correction of a social injustice that had resulted from the abuse of monopsony power by men. If this is the correct background for this law, then Jewish law can be viewed as correcting for men's monopsony power in marriage and it can be viewed as a law working to the advantage of women interested in marriage (especially young women expecting to lose marriage market power after childbirth).

²⁸ As long as all women are homogeneous, all women will enter marriage to the same degree, i.e. same hours of wife-services.

Marriage as Private Contract

In the West marriage tends to be declared by government or state. According to Jewish law, marriage is an individual contract between two people. Heavily regulated by laws and customs, Jewish marriage contracts offer limited options as far as work arrangements and property arrangements between wife and husband are concerned. Most Jews who marry today are totally unaware of the contractual options open to them within the format of a traditional ketuba.²⁹ Let us contrast this system to the prevailing regimes in the West.

In the U.S. most states offer one law only. For instance, as far as property division at divorce is concerned, some states have community property regimes and others assume that each spouse keeps his and her own assets. If a couple marries in a particular state, they have to follow that state's law, unless they can successfully convince a judge in their state of residence that the divorce should rather follow another state's laws. People can write pre-nuptial agreements, but their validity is never guaranteed: common law grants considerable discretion to individual judges. European countries other than the U.K. do not follow common law and have statutes that are less discretionary. Most countries offer a choice of two marital regimes: default laws (i.e. the laws that apply if no other arrangements were made) and what is typically called marriage by contract. For instance in France, the default system specifies that in case of divorce the property should be divided according to the principle of community property, which includes property acquired after marriage. Couples can opt for marriage with a marriage contract, which allows each spouse to keep control of their own assets.³⁰ Even though most Jews do not take advantage of the options offered by Jewish law, it can be said that relative to Western law, Jewish law offers more options for individual arrangements in marriage regarding division of labor and property arrangements. Generally, the more freedom of contract people have, the more they will be willing to enter a transaction (see Grossbard-Shechtman and Lemennicier 1999). This also applies to marriage. The willingness to supply and to demand wife-services and husband-services will be higher and total surplus created by marriage will be higher if there is more freedom of contract. If the state just provides one or even two options according to which couples can enter marriage, this is bound to leave many people in a range that makes marriage undesirable.

Imposing Punishments for Adultery

To the extent that Jewish law imposes punishments for adultery (such as a lower expected settlement at divorce), and so do many countries' laws, in part due to the influence of Christianity and Islam. This was true in the U.S. before the advent of no-fault divorce, and is still true to some degree when judges rule on property division at divorce. Laws prohibiting adultery or punishing it will increase the desire of women and men to engage in sexual relations within marriage. This creates more demand and more supply of both husband-services and wife-services. In the market for wife-services there will be an increase in both demand and supply. Parallely, one can draw a market for husband-services, and there too there will be increases in both demand and supply. The

²⁹ I thank Rabbi Moshe Meiselman for this insight.

³⁰ For more on European laws on marriage and divorce, see Grossbard-Shechtman, Ekert-Jaffe and Lemennicier (2002).

net result is an increase in the surplus from marriage, more marriage, and more welfare gains produced in each marriage. Within a strict welfare economics point of view, whether aggregate wellbeing in society will increase depends on a comparison of these gains with the losses of those who would possibly otherwise engage in adultery. However, one can possibly argue that there are positive externalities to be derived if a society punishes adultery, for instance in terms of children's benefits from being more with both parents.

The Commandment for Men to Marry

In Jewish law, it is a positive commandment (an obligation) for men to get married and to have children (at least one boy and one girl). In contrast, there is no positive commandment on women to marry or give birth. According to one contemporary expert on the Jewish laws of marriage, Moshe Meiselman (1978), the logic behind this gender asymmetry includes the fundamental gender asymmetry in the costs involved with having children, a major motivation for marriage. If women were commanded to marry, such commandment would be considerably more costly for them than it is for men, since they would spend more time and effort in this enterprise.

The gender asymmetry in this positive commandment works in favor of women who prefer to marry and have children. (According to the latest surveys, in the U.S. a majority of women and men want to marry.) Consider a comparison between a state of the world with this commandment for men (and no parallel commandment for women) and a state where no one is commanded to marry. Men's obligation to marry increases their demand for wife-services, but women's supply does not move. Accordingly, one expects an increase in the equilibrium compensation for wife-services in a competitive market for wife-services. This implies a redistributive effect: men are worse off and women better off. It also implies an increase in the total amount of wife-services supplied. If all women are homogeneous, this will be expressed in a higher amount of wife-services supplied by each woman. There could also be an increase in the percentage who marries. If heterogeneity and market segmentation is introduced, then this commandment will most likely affect women's chances to enter marriage, more so among women in market segments that are considered less desirable.

While this leads women to gain producer (suppliers') surplus, it will lead men to lose consumer surplus and losses will also be experienced by those who supply services that are possible substitutes for those of wives, including lovers, household workers, concierges, and prostitutes.

Conclusions

This paper first shows how Jewish law can help us accept the assumptions behind a model of competitive markets for wife services. Most of these assumptions are easier to accept if one approaches marriage from the perspective of Jewish law--more generally a perspective based on Jewish values (hashkafa)—than from the perspective of a Western mindset. Assumptions that can be supported by Jewish sources include assumptions about women's role as household producers, men's contributions as providers of material and psychic benefits, divisibility of women's time and women's control over their time in household production, rights to own income, exchanges of work for money in marriage,

homogeneity of men and of women, easy entry and exit into marriage markets, and existence of an informal price mechanism.

Second, the paper presented a graphic model of demand and supply of wife-services based on these and other assumptions.

Third, the paper showed how a number of Jewish laws can be analyzed with the help of a demand and supply model of wife-services. It is shown that a regulation forcing men to pay a particular form of material benefit to their wives—a promise to pay a particular sum in case of divorce, as formalized in the ketuba—may be welfare-improving if the alternative is a situation where husbands exert monopsony power in marriage. It is also shown that a prohibition on adultery and an obligation for men to marry may possibly be beneficial (the latter is particularly advantageous for women interested in marriage).

It is hoped that this paper will inspire more research on the possible compatibility between an economic approach to marriage and a perspective on marriage based on Jewish law. The perspective of Jewish law can reinforce an economic approach, and economic models can help us obtain a better understanding of the effects of Jewish laws on marriage and divorce. Many more examples could be developed and the examples presented here could benefit from a more rigorous and systematic analysis. It would also be of great value to test some of the predictions that come out of this analysis using comparisons between various countries and comparing Jews at different levels of observance of Jewish law. However, data for such studies will not be easy to obtain.

Finally, those interested in following Jewish law can draw policy implications from economic analyses. At the present time, people are more aware of the bitterness surrounding some Jewish laws about divorce such as the laws of the aguna than of the unique advantages of related features of Jewish laws about marriage and divorce. In modern society plagued by rampant divorce rates, the aguna problem is a serious problem. However, as was shown here, there are other Jewish laws about marriage and divorce that benefit women. Furthermore, economics helps us obtain a better understanding of all laws, including Jewish laws regarding marriage and divorce. Armed with increased understanding of what laws can accomplish, contemporary Jews can possibly help Jewish marriage law adapt to new circumstances such as the prevalence of high education and attractive options outside Jewish marriage (including women's new income opportunities from work other than wife-services).

Jewish law in Hebrew is called Halacha, which comes from the Hebrew root “walking”. Jewish laws follow Jews and adapt to their needs. The better we understand the laws, the more it is likely that Halacha experts will find ways to make Jewish laws of marriage and divorce help us live better and happier lives.

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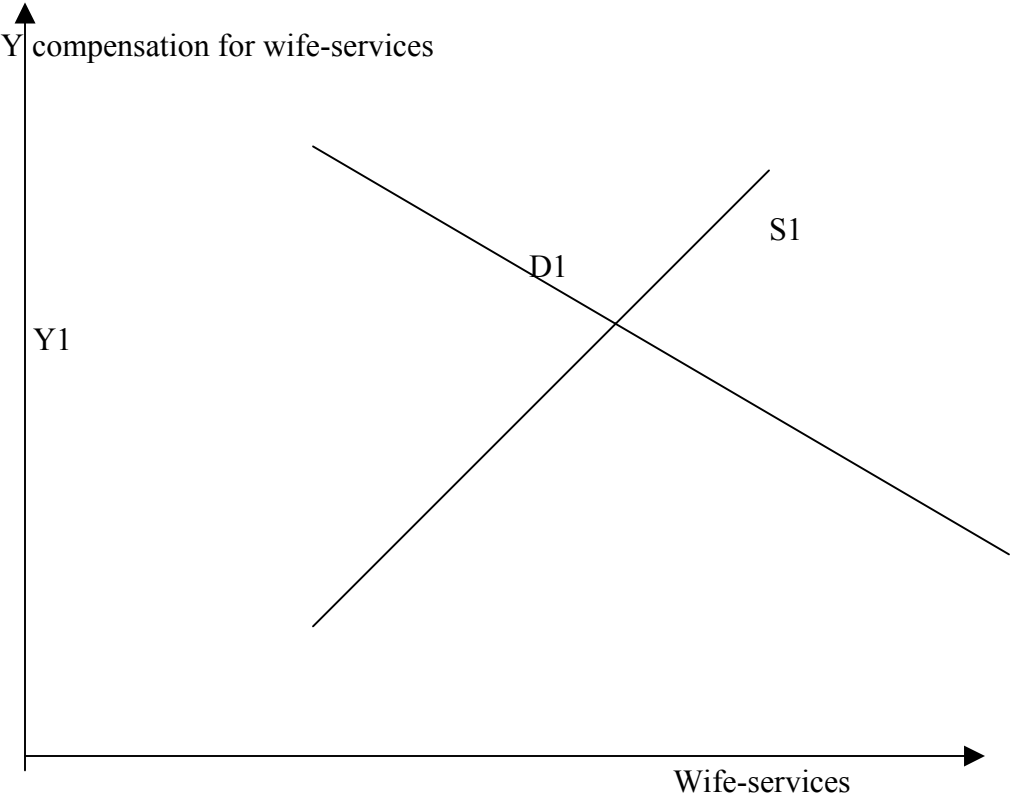
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Table 1
Some of the Assumptions behind Two Competitive Marriage
Market Models

Assumptions	Becker 1973	Grossbard 1976
1. Most household prodn by women	yes	yes
2. Men as providers	yes	yes
3. Divisible time and some time remains under individual control	No	Yes
4. Divisible income and some income remains under individual control	yes	Yes
5. Intra-Marriage Transfer	Yes, called “Portion of gain from marriage”	Yes, called “Compensation for wife-services”
6. Homogeneous Women and homogeneous Men with Portable Skills Usable in Marital Household Production	Yes	Yes
7. Easy Entry and Exit in Competitive Market	Yes	Yes
8. Market mechanism		Informal prices: quasi-wages for wife-services
Explicit analogy with labor market	No	Yes

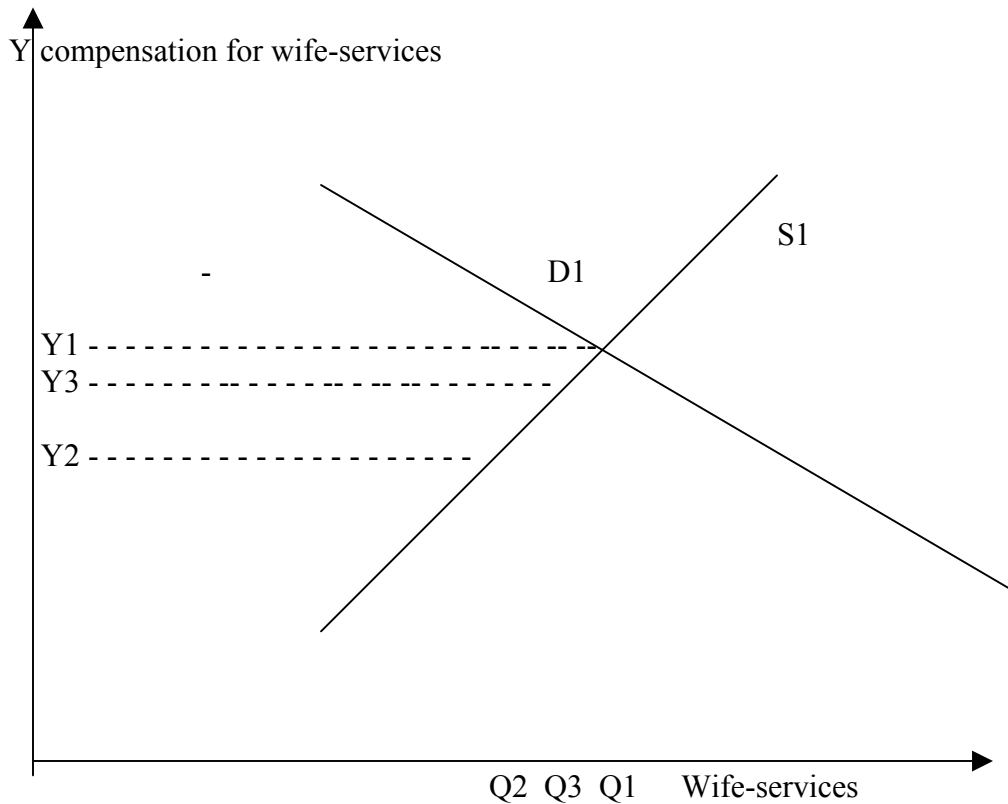
Figure 1. Market for Wife-Services



S1, supply by women

D1 demand by men

Figure 2. Effect of a Payment Specified in the Ketuba



S1, supply by women

D1 demand by men

Y1 market clearing quasi-wage

Y2 quasi-wage in absence of ketuba

Y3 quasi-wage with ketuba

$Q3 > Q2$: as a result of ketuba specifications (included in Y3), women supply more wife-services than if quasi-wage is Y2. If women are homogeneous and monogamy prevails, this amounts to each woman supplying more wife services to her husband.