

## **PART ONE**

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### **The Economics of Marriage in Perspective**

Most people--including most social scientists--tend to have misconceptions about the economic analysis of marriage. The first two chapters address some of these misconceptions. The first misconception, addressed in Chapter 1, is that the study of marriage does not belong in economics. Chapter 1 compares the contribution of economics to the study of marriage with some of the research on marriage produced by other disciplines, principally sociology and anthropology. A second misconception is that an economic approach to marriage precludes emotions and morality. In addressing this misconception, Chapter 2 compares the economic perspective to other perspectives commonly used by people making decisions about marriage: a romantic perspective and an ethical-religious perspective. Readers who find it natural to apply economic theory to marriage may want to read this part later, or skip it, and move on to Part

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**The Economics of Marriage and  
Other Social Sciences**

The public at large often views economics as belonging to the domain of business and government policy directly related to the functioning of "the economy." Economics, however, can in reality be applied to any decision making process. Economists interpret the term "economics" as a conceptual framework that can be helpful any time a choice is made, be it the choice of a good, a service, an action, or a resource. The application of neo-classical economics to home-related subjects such as marriage, fertility, and consumption is referred to as *New Home Economics*. The New Home Economics approach was developed by Mincer (1962), Becker (1965), and Lancaster (1966), when they all taught at Columbia University. Their models were the first to incorporate household characteristics into formal models of labor force participation, consumption, or transportation. Because of Becker's central contribution and his move to the University of Chicago in the early seventies, the New Home Economics is part of what some people call the Columbia-Chicago School of Economics.

In its more than twenty-five years of existence, the New Home Economics has had a substantial impact on research dealing with areas such as the study of consumption and transportation. In addition, the New Home Economics has had a limited impact on fields previously considered outside of economics. For instance, it has become widely accepted that economics can be applied to the study of fertility. This acceptance explains why economists now present approximately twenty-five percent of all the papers included in the annual meetings of the Population Association of America, and fill key positions in this professional organization. With the exception of the application of game theory (Manser and Brown 1980 and McElroy and Horney 1981) to the study of marriage, there have not been many other economic theories related to the study of marriage since Becker (1973, 1974a) published his first two articles on the economics of marriage. Of the few economists who have written on the economics of marriage, most have moved to other areas of

research or have dropped out of academics altogether. The purpose of this book is to encourage and promote the application of economics to the study of marriage.

The rest of this chapter focuses on previous applications of neo-classical economics to marriage, and on how economics and some of the other disciplines converge and diverge with respect to the study of marriage.

### **Neo-Classical Economic Analysis of Marriage**

Whenever a decision regarding the optimal use of time, energy, or money needs to be made, cost-benefit analysis, one of the basic tools of economics, can be helpful. This applies not only to the firm determining its level of operation, but also to the individual or the family making decisions regarding childbearing, consumption levels, or extent of participation in the labor force. Economics in the sense of a conceptual framework dealing with optimal allocation of resources is in fact applied mathematics.

The neo-classical economic approach assumes rationality. This rational approach to decision-making can be contrasted with other approaches commonly found among intellectuals, such as the Marxist approach which emphasizes material determinism, and the Freudian approach which emphasizes the power of instincts over man's behavior.

The two major tools used in general applications of neo-classical economics are cost-benefit analysis and market analysis:

1. *Cost-Benefit Analysis* divides the elements related to a particular decision into two groups: benefits and costs. The optimum point is reached when marginal benefit equals marginal cost. For instance, a person will spend money on margarine up to the amount at which the benefit derived from a pack of margarine equals its price. In this case the price is the marginal cost. If a good is not sold in the market, but is produced in the home, the marginal benefit needs to equal the marginal cost, which is also determined in the home, e.g., as a function of the value of alternative uses of time and money.

2. *Market Analysis*. If a good or service is not destined solely

to one "consumer," or is not produced solely by one producer, a market exists, whether or not it is physically observable. There are markets for goods, services, and different types of work, such as engineering, teaching, etc.

These two tools, cost-benefit analysis and market analysis, can be applied to the study of marriage. According to this economic approach, people marry when a (conscious or unconscious) comparison of costs and benefits makes marriage look profitable. Benefits can be material, social or spiritual. Costs are not simply financial or material. They depend on the value a person

attaches to alternative uses of time, and can include, for instance, the value of the hours a person is unable to devote to studying the Bible because of marriage.

The other tool borrowed from economics is market analysis. Becker and before him sociologists and demographers have used the term "marriage market." According to the version of the economics of marriage presented in this book, marriage markets consist of markets for spousal labor supplied by wives and husbands. Individuals participating in these markets act according to cost-benefit analysis and try to maximize their own utility, which can also include social and spiritual aspirations. Individuals make decisions about their willingness to (1) supply services that can be of use to a spouse, (2) supply labor services in the regular meaning of the term, and (3) acquire goods and services, including services from spouses. More on this theory is found in Part Two.

The nonmonetary essence of marriage makes measurement difficult and leads the economist to focus on less central but measurable aspects of marriage. The first empirical studies of marriage by economists focused on the contemporary United States, looking at the causes for differences in percentage of married women per state, individual age at marriage, and probability of divorce. Examples of early findings are

- (1) *the inverse relation between the percentage of women*

- married and percent Catholic across U.S. states (Freiden 1974). Freiden's explanation relies on the expected costs of divorce: Catholic marriages are less profitable because of higher expected costs of divorce.*
- (2) *positive income effect on marriage in the sense that ceteris paribus higher income was found to be associated with earlier marriage (Keeley 1979).*
- (3) *Becker, Landes, and Michael's (1977) finding of a positive income effect on marriage in the sense that Americans with higher income were found to be less likely to divorce. However, the same study also found that if wealth exceeded the level expected at time of marriage the chances of dissolution were higher than if wealth was as high as expected. This finding was explained in terms of a theory where divorce depends on risk and uncertainty.*

Other topics related to marriage which economists have analyzed more recently, besides the topics covered in this book, include studies of the allocation of time in household activities (e.g., Carlin 1985), of newspaper ads related to marriage (e.g., Lemmenicier 1988), and child support payments (e.g., Beller and Graham 1986).

### **Economics and Sociology**

The rich sociological literature on marriage does not appear to offer a comprehensive theory of marriage, if we accept Homans' definition of theory: "Not until one has properties, and propositions stating the relations between them, and the propositions form a deductive system--not until one has all three does one have a theory" (Homans 1964).

Following this definition of theory, only a small fraction of the sociological literature on the family that claims to be theoretical actually qualifies for that term. While very useful as inspiration and

direction for empirical testing, the various propositional inventories (e.g. Goode 1959, Hill, Katz, and Simpson 1957, or Nye and Berardo 1966), cannot be called theories. As to Parsons' (1942) grand "theory" of society, even within sociology it is considered as a conceptual framework rather than a theory (Hill and Hansen 1960).

Homans' (1961) theory and other versions of social exchange theory have been applied to marriage. Social exchange theory can be viewed as an application of price theory, as it is also based on rational choice and market analysis. Two major pioneers of social exchange theory, Homans and Blau (1964), explicitly acknowledge their debt to economics.

Sociologists and social psychologists have applied social exchange theory to the study of separate aspects of marriage, such as intrafamilial distribution of power, marital stability, and dating, thereby preceding economists in the application of price theory to marriage. One of the earliest sociological studies of marriage based on the concept of bargaining is Waller (1937). Some other early applications include Thibaut and Kelley (1959), Blau (1964), and theories of intrafamilial power by Blood and Wolf (1960) and Heer (1963). Heer's theory is a significant improvement over Blood and Wolf's (1960) theory on that subject, in the sense that Blood and Wolf relied on the concepts of choice and maximization, but did not recognize how market principles affect the relative power of husband and wife. In contrast, Heer recognizes the importance of market factors. Another topic that has been analyzed in terms of social exchange theory is divorce, e.g., in Levinger's (1965) theory of marital stability.

Sociologists have also preceded economists in the application of market analysis to the study of marriage. Sociologists, as well as demographers, have focused their attention on sex ratios, a particular aspect of marriage markets presented here, before economists dealt with the topic.<sup>1</sup> Demographers have been mostly interested in studying the effects of sex ratios on marriage. For instance, Glick, Beresford, and Heer 1963, Henry 1975, Goldman 1977, Smith 1980, Schoen 1983, and Goldman, Westoff and Hammerslough 1984 have studied the effects of sex ratio on marriage rates. There have also

been numerous sociological and demographic studies of sex ratio effects on intermarriage between various racial, religious or ethnic groups including Heer 1962, Rosenthal 1970, Della Pergola 1976, and Fisher 1980. Less common are sociological studies relating sex ratios to divorce and mating patterns other than intermarriage (e.g. Spanier and Glick 1980, Guttentag and Secord 1983), suicide (Guttentag and Secord 1983, South and Trent 1989), and crime (Guttentag and Secord 1983, Trent and South 1988).

In addition, sociologists have also developed theories of marriage pertaining to timing and selection patterns (e.g., Rockwell 1976, Oppenheimer 1982, Marini 1984, DiMaggio and Mohr 1985, Wilson 1987, Oppenheimer 1988, Bennett, Bloom and Craig 1989, Mare 1991, Kalmijn 1991, and Blackwell 1992).

Most of the sociological literature on marriage applies to separate aspects of marriage or typically considers one causal factor. Where sociologists of marriage are comprehensive they do not really deal with theory. Where they take a theoretical perspective, they do not typically take a comprehensive view. Even in the more comprehensive applications of social exchange theory to marriage, such as Guttentag and Secord's (1983) *Too Many Women - The Sex Ratio Question*--which studies a wide range of socio-economic consequences of sex ratios--the theory is narrow in that it ignores aspects of marriage markets other than sex ratios.<sup>2</sup> In contrast, economic theories tend to be more general in the sense that they encompass a range of applications and a range of causal factors. Another difference is that the sociological theories of marriage which incorporate the operation of marriage markets do not analyze marriage markets in a general equilibrium framework, as is done in Part Two of this book.

The type of empirical research sociologists and economists perform often differs as well. Until recently most economists analyzing marriage empirically have used more sophisticated statistical techniques than sociologists. Many of the sociological theories of intermarriage, intrafamily distribution of power, or divorce were tested using simple techniques such as two-by-two tables. When regression techniques were used, they were generally less

sophisticated than the techniques used by economists testing the economics of marriage.

However, economics and sociology are converging from the perspective of applied research on marriage. Many recent studies of marriage by sociologists have applied statistical tools as sophisticated as those found in similar studies by economists (e.g., Lichter *et al.* 1991, South 1988). One finds more and more economists and sociologists cooperating on joint empirical research. Some sociologists have taken a lead in applying new statistical techniques to the study of marriage. As in other areas of empirical research, academic affiliation is becoming increasingly irrelevant. This book will hopefully also contribute to a convergence of economics and sociology at the level of marriage theories.

### **Economics and Anthropology**

Economics has traditionally explored the more quantifiable sectors of society with increasingly sophisticated theoretical and empirical tools.<sup>3</sup> If we conceive social reality as a series of fields, economists generally worked on the scientifically most reachable ones at the intensive margin. Anthropologists, on the other hand, worked at the extensive margin of social science. Attempting to study entire cultures and venturing into the most remote communities, they have accumulated comprehensive insights. Given the scarcity of academic resources, researchers have had to make trade-offs between an intensive and an extensive emphasis. While economists gave up breadth of knowledge, anthropologists have typically collected their information without much scientific methodology.

Recently, both economics and anthropology are extending their traditional boundaries: anthropology has become more concerned with the quantitative intensive margin, while economists have become more interested in the qualitative extensive margin of inquiry. Since ethnographies have been collected from most existing cultures, anthropologists have become more involved in cultural comparisons and theoretical generalizations. Anthropologist Cohen

(1973), who introduced a major methodological handbook by remarking that "the discipline as a whole does not have a systematic and cumulative tradition of methodological endeavor," expressed a "desire to see anthropology become a progressively more rigorous and scientific branch of the social sciences," "our primary goal...being theory-construction". In the same volume he also proposed a "restructuring of the social sciences [which] calls for methodological openness and a lack of concern for disciplinary boundaries." Along these lines, anthropologist Douglas (1973) specifically proposed that "economic analysis...be established at the center of anthropology itself." She saw "the need for a cost-benefit analysis that would apply across the board to both monetary and non-monetary transactions."

While more and more anthropologists concentrate less upon field work and more on theory and methods of analysis, economic investigation has expanded into the traditional specialities of other social sciences. For example, economic research has penetrated into the domain of the family (see, for instance, Theodore W. Schultz 1974) and social interactions (see Becker 1974b) and is creating a link with sociobiology (see Hirshleifer 1978, Becker 1976).

While penetrating into new fields of study, most economists have maintained their allegiance to the traditional tools of analysis they have used in their more conventional work: cost-benefit analysis and market analysis. In making implicit or explicit cost-benefit analyses of marriage and divorce, economists realize that individuals are guided by preferences which in turn depend on both culture and nature. They circumvent the questions about these preferences by studying differences among people who live in the same culture and who are assumed to have adopted similar values, i.e. they are viewed as having the same utility functions. However, a social science of marriage needs to know more about the meaning of marital behavior, that is, it needs to explore the content of utility functions. It is not sufficient to recognize that cultural factors such as religion or education have an impact on percentage married or marital dissolution. It is especially important to study cultural factors when making cross-cultural generalizations, and even more so when comparing cultures which are far apart. Such studies of the deeper

reasons for marriage have been a major preoccupation of anthropologists.

In addition to gathering huge numbers of facts about marriage around the world, anthropologists have analyzed marriage theoretically. Two major schools of anthropologists have analyzed reasons for marriage: the functionalists and the structuralists. Rather like sociobiologists, *functionalists* view marriage as a means to satisfy functions like reproduction, socialization, and transmission. Some functionalists stress the function of marriage in meeting the needs of other parts of the social system while others emphasize physical needs like sexual gratification. This predominantly British approach, which leads to institutional determinism and encourages ethnocentrism, reached a peak in popularity before England lost its colonial empire. *Structuralists* disagree with the emphasis on nature and society as determinants of marriage; they think that cultural factors like relative reliance on the capacity to reason generate variations in the meaning (utility) individuals attribute to identical activities. Their analysis draws increasingly on linguistics, since language can be considered as a major expression of collective meaning (see Boon and Schneider 1974). Structuralism shares at least one assumption with economics: the binary oppositions, which according to Levi-Strauss (1969) are built in the structure of the human mind and create universal components of culture, appear consistent with the economist's concept of cost vs. benefit.

Besides these two major schools, there are *evolutionary* theories, *ecological* analyses illustrating the importance of the physical environment on the structure of marriage and descent, and *Marxist* analyses stressing the important effect of means of production. While the theoretical focus of functionalists and structuralists centers on meaning and utility, ecological and Marxist theories emphasize the importance of constraints in the real world affecting individual and community choice and are compatible with economic theory.

Furthermore, some of the concepts found in the economic analysis of marriage have been used in earlier studies by anthropologists. For instance, the concept of marriage market can be

found in the work of e.g., anthropologists Schneider (1964) and Goldschmidt (1974).

### **Towards a General Theory**

Historically, there have been clear lines of demarcation between economics and anthropology. Douglas (1973) asserts that centripetal forces attract resources towards the center of a discipline and discourage turbulence at the boundaries of a subject out of fear of losing autonomy. If she is correct, then the present division of the social sciences may not be more than a historical accident, another instance of institutional self-perpetuation.

These centripetal forces did not discourage Douglas. She communicated her interest in economic analysis of marriage and other human behavior to University of Chicago economist T.W. Schultz, and subsequently to participants in an applied economics seminar at the University of Chicago.<sup>4</sup> These centripetal forces also work very potently within the economics profession.<sup>5</sup>

This book was in part inspired by Douglas' declaration of intellectual turbulence. Building on existing trends to stretch disciplinary boundaries, it proposes that economics and anthropology, together with sociology, work jointly towards a general study of marriage.

Economics can provide an umbrella theory compatible with the anthropology or sociology of marriage. An important message from economics is that the content of utility functions often does not matter in comparisons of culturally homogeneous units. This could help integrate fascinating ethnographic material in cases where there are differences of opinion between anthropologists interpreting the same findings according to diverging insights into entire societies. Pragmatically, one could accept parts of an anthropologist's empirical findings and generalizations, while disagreeing about other parts of the analysis.

An important contribution by anthropologists and sociologists is their expert knowledge of into the cultural, legal, and political constraints that bind individual choices. For instance, they

can point out the extent to which a marriage market model is possibly applicable in a particular case.<sup>6</sup> Jointly, anthropologists and

economists could

- (1) focus their talents on the most difficult questions (understanding the meaning of utility, for instance), by taking advantage of their respective skills,
- (2) give new significance to previous ethnographic findings, and
- (3) collect better data. Cooperation between economists and anthropologists can lead to new conclusions regarding the type of data which should be gathered. For instance, in my attempt to explain the number of wives present in Maiduguri households, I found that traditional Muslim education--i.e., Koranic education--had an impact on the number of wives in a household. More precisely, male Koranic education tended to increase the number of wives, while the same Koranic education obtained by females reduced the number of co-wives in a household. This statistical finding, based on data collected in the Nigerian city of Maiduguri, is consistent with an economic theory of polygyny (see Chapter 11). When this finding was shown to anthropologist Cohen, who had spent many years doing field work in Maiduguri, it led him to regret not having included religious schooling in his own questionnaire.<sup>7</sup>

The present state of the general theory of marriage is definitely unsatisfactory. Most economists who promote it have been limited to the American experience. Economists have not sufficiently questioned the rationale behind institutional constraints. Economists can learn from anthropologists when studying factors which lead to the existence of institutions like polygamy, the levirate, patrilineality, and dowry. They also have much to learn from sociologists who have addressed many comparable questions such as the roles of men and women within the legal, social and political

contexts of modern societies.

Marriage can serve as a good illustration of what social science stands to gain if the various disciplines join forces. All disciplines can be viewed as potential partners in a marriage market, a market for marriage among the disciplines. If it is true that a combination of extensive and intensive perspectives enriches social science, disciplines with the largest variation in intensive vs. extensive productivity have the most to gain from an interdisciplinary marriage. Since anthropology and economics lie respectively at the extensive and intensive ends of the spectrum, their gains from such marriage are particularly high.

The creation of a common language and method between disciplines is necessary to extend the intensive and intensify the extensive, thus building a science that combines the robustness of theories and empirical work with broad cultural perspectives.

This unified view on marriage represents only one possible direction of such an interdisciplinary marriage. It is a good starting point, not only for its symbolism, but also because cooperation between economics and anthropology has long been hindered by the lack of applicability of economics to small scale traditional societies or the perception of this lack of applicability. Economics is now changing by involving itself with marriage and other more human and less monetary transactions. This book is an illustration of what a general approach to marriage, based on economic analysis can accomplish.

### **Notes**

1. Part of my inspiration for writing a general theory of marriage came from my exposure to sociological studies of the impact of sex ratios while working at the Population Research Laboratory at USC in 1978-1980. In particular, a seminar presented by the late William Hodge led me to delve more deeply into the study of sex ratio effects.

2. When writing the early versions of my theory of marriage I was completely unaware of the work by Guttentag and

Secord. It was first called to my attention by Noreen Goldman in Stanford in 1981.

3. Adapted from Grossbard (1978a).

4. T.W. Schultz, for whom I worked as a research assistant at that time (1973-1974) encouraged me to attend Douglas' seminar, even though I was only in my second year of studies and did not regularly attend seminars at that time. Douglas was a tremendous source of inspiration.

5. The cost of engaging in interdisciplinary research is very high in economics, based on my own experience and that of other economists who have dared to enter an area of study not typically considered as part of economics. While I was still in graduate school some of my professors warned me of the price I will have to pay in terms of foregone job opportunities.

6. For instance, the assumption of substitutability may be untenable in a society with prescribed marriages.

7. Related in a personal communication.