- (i) services received for a family member, as with the case of a parent volunteering at a school or scout camp which thereby has a greater capacity to operate or which provides a "better" service that offers greater utility to users. The parent, in effect "pays" with volunteer hours and receives services for a child.
- (ii) services received as a member of the entire community. For example, an individual who volunteers hours as a firefighter would expect to benefit from enhanced fire protection services and fire safety throughout the community.

The rational consumer will also consider as part of the hours-paid-for-value-received any element of risk involved in the transaction. One aspect of assessing risk in volunteering is having information about the liability exposure.

Thus the total utility gained from volunteering hours, U(H), is derived from sum of the inherent ("feel good") utility gained by consuming volunteer hours, U(V) the utility of future increased earnings, U(E'), as well as the utility of indirect value received as services (e.g., a scouting program for a child) for the volunteering, U(S). An additional component in utility from volunteering is the risk of the volunteering activity, possibly a health risk but also a risk of lawsuits, U(L) — a disutility.

U(H) = U[g(V,E',S,L)]

where

H = g(V,E',S,L).

To measure determinants of the dependent variable, volunteer hours provided (TVOL), we largely follow Menchik and Weisbrod.

Motivating Factors

The utility of volunteering, or U[g(V,E',S,L)], is assumed to be dependent upon:

- (1) the individual's age (using the variables AGE and age squared, AGESQ) -- age may influence volunteering for two reasons, because an individual's available hours for volunteering may vary during the life cycle (e.g., higher available hours when retired) and because investment (future wage earning) motivations would decrease as the amount of future years available to work decrease (i.e., the individual nears retirement age).
- the wage rate of the individual (considered as the after tax wage rate of the individual, NWAGE) -- a higher wage rate represents a higher opportunity cost for volunteering, as an additional hour volunteered represents a higher cost of not working for the person who makes a higher wage.
- (3) <u>full income</u> (wages paid with investment income added using the variables, FULINC, and full income squared FULINCSQ) -- for individuals who "consume" volunteer hours for the ("feel-good") utility gained, a higher total income would be expected to increase consumption. The perceived value of volunteering would be assumed to crowd out labor hours to some extent for the individual who has sufficient income to cover basic expenses.
- (4)the cross price of contributing money rather than contributing volunteer hours, (this variable, PRICE, is either the wage rate, if the individual is not a tax itemizer, or the after tax wage rate if the individual itemizes taxes, to represent the after tax cost of giving money) -- Charitable contributions are deductible for tax itemizers. A person who sees a need help a non-profit cause can help by volunteering or giving money. Menchik and Weisbrod point out that giving money and volunteering complements if the cross price effect is negative. 26 (The wage, full income and cross price variables are closely related but not perfectly correlated.) 27
- (5) <u>Demographic information</u> (dummy variables include gender (FEMALE), being married (MARRIED), having young children (YGCHILD), having older children in the home (OTHCHILD)

²⁶ Menchik and Weisbrod, 162.

²⁷ Ibid., 171.

and, again age) -- the utility of indirect value received for volunteering U(S), is assumed to be dependent upon the whether or not the individual has children, particularly young children. Involvement in a child's upbringing means, in part, involvement in schools, youth programs, and community safety issues such as reducing street violence, illicit drug use and traffic hazards. Thus, factors affecting indirect value received should include: age, where a relatively young adult is most likely to have young children; gender, as females traditionally take on a significant proportion of child-rearing responsibilities; being married, and thus having a greater probability of having children; and having children in the home.

- (6) Municipality demographics (using dummy variables for residence in a large city, LCITY, suburban area, SUBCITY, mid-sized city, MCITY, or smaller city, SCITY) -- the size of the community in which one lives is assumed in the model to influence attachment to fellow Residing in a small or suburban community residents. presumably engenders a different level of personal involvement in local volunteer activities than would a large urban setting. Menchik and Weisbrod explain their use of these and other preference vector variables as being useful representatives of differences in personal tastes, to avoid assuming tastes are identical and to reduce the heterogeneity of the sample.²⁸
- (7)Upbringing, religiosity and education (using dummy variables for religiosity, RELIG, education, ED, and the volunteering behavior of one's parents, BACKVOL) Menchik and Weisbrod assume that these characteristics help to differentiate potential volunteers in terms of their desire to help volunteer causes. Presumably, parental beliefs, such as a belief that helping nonprofit causes is important, are passed along to subsequent generations; education can increase understanding of societal needs, and participation in religious activity exposes one to messages about being compassionate for and helping others.
- (8) Local and state government spending (the variable is termed LOCGOV) -- governments may affect the inherent utility of volunteering and the utility of receiving

²⁸ Ibid.

indirect services from volunteering. A high level of government spending in the community (perhaps a higher level than one is likely to see in present times) could crowd out personal volunteering through reducing the need for nonprofit community programs. If, for example, government programs fund food banks, eradicate crime worries, and hire coaches for softball teams, then volunteering may decrease due to reduced societal need (or perceived reduced societal need). Thus government spending could be a substitute for volunteering.

Considering Volunteer Liability

Lawsuit risk for volunteers is assumed to reduce the utility of volunteering.

- (i) From a volunteering as investment perspective, U[g(E')], financial loss from a lawsuit would not necessarily reduce future potential earnings, but the net value of lifetime earnings would be reduced by the financial loss -- creating a disincentive for rational prospective volunteers.
- (ii) This process would be similar for an exchange of services motivation to volunteer, U[g(S)], as the exchange would be less attractive with a potential lawsuit loss being a part of the volunteering side of the equation.
- (iii) The assumed disutility of lawsuit risk for "feel good" volunteering, U[g(V)], is somewhat less clear, but as a utility-bearing consumption good, this motivation to volunteer is assumed to diminish as expected cost rises, and a higher lawsuit probability would be expected to increase the expected cost of volunteering.
- (iv) Incidences of risk-seeking behavior are typically associated with sports and also financial settings where the potential financial payoff is greater with a higher risk investment. Avoiding a lawsuit does not necessarily lead to a higher payoff in a volunteering setting, and rational behavior is assumed in this model.

Calls for greater liability protections for volunteers to nonprofit organizations have been heard in recent years from members of the nonprofit community, among liability reform coalitions, and in the U.S. Congress. After a number of years of legislative efforts by Representative John Porter (R-IL) and others, the Congress passed, and the President signed, the Volunteer Protection Act of 1997 in June 1997. Moreover, the dedication of resources to operate the Nonprofit Risk Management Center in Washington, DC and to analyze and categorize risks to volunteers is a demonstration of some concern about volunteer liability.

In opposition, some consumer groups and plaintiffs' bar spokespersons generally oppose any changes to civil laws that would take away from an individual's right to sue for damages.

With liability protections in general being the province of state courts, the existence of variability among state codes offers the opportunity to seek to measure volunteer response to those differences.

This assessment of the impact of liability concerns upon volunteering assumes that: (i) prospective volunteers in one legal jurisdiction face similar volunteer liability risks, (ii) they are rational in their assessment of liability risks, and (iii) that judges and juries carry out their duties in a rational manner that is consistent with the laws.

Misperception of hazards can alter the individual's behavior. Potential volunteers may be deciding whether or not to volunteer based upon their own perceptions rather than rationally assessing the degree of hazard. For example, the population of a state that has experienced a noteworthy liability lawsuit outcome (such as a lawsuit which led to a large punitive damages assessment against a volunteer), and which was widely publicized in the media, may have greater sensitivity to liability risks, and a reticence about volunteering, than would the population of a state with comparable liability laws but which has experienced no such event.

The rational person would be expected to examine the risk of facing a liability lawsuit based upon the legal climate where he or she resides. Sensational events, such as a highly publicized, high-damage-award lawsuit example, would not be expected to affect the rational individual. Moreover, the rational individual would be expected to be aware of the

liability risks present in his or her environment. Ideally, an empirical analysis would distinguish between those individuals who (i) have an understanding of their legal liability environment, (ii) are not aware of potential liability, and (iii) may be oversensitive to liability concerns due to highly publicized cases.

Fraser notes that worker misperception of job hazards can lead to a misallocation of resources and a welfare loss. Misperceiving hazards could lead workers to miscalculate their utility from working. Moreover, if private and social costs and benefits diverge, the misperception can entail a classic externality. For volunteering, individuals misperceptions of hazards could lead to a greater or smaller allocation of total volunteer labor providing beneficial services for society. The cost of hospital care, for example, could be higher for consumers due to less available volunteer labor.

The individual seeking to rationally assess liability risk depends upon the rational behavior of the individuals assigned to carry out legal statutes. While juries and judges are assumed rationally to interpret and apply the laws, the potential exists for juries and judges to, in effect, change the laws through their rulings. As Donald Wittman states,

"If juries do not act... according to the standards implied by the various liability rules... then the actual allocative effects of a particular liability rule can vary greatly from the theoretical predictions because those who are subject to liability... will face expected losses different from the theoretically determined ones.... One of the basic issues regarding jury decisions is whether their decisions are consistent with the underlying law."

Certainly the legal climate evolves over time through case law, regulation and legislation, but current law would provide

²⁹ Clive D. Fraser, "Misperceived Job Hazards and Welfare," Journal of Public Economics 56 (1995): 97.

³⁰ Ibid., 100.

³¹ Donald Wittman, "The Price of Negligence under Differing Liability Rules," <u>Journal of Law and Economics</u>, XXIX (April 1996), p.151-2.

a reasonable basis for assessing risk in most situations. Thus, the prospective volunteer's assessment of liability risk is presumed to be rational and based upon an evolving, albeit reasonably dependable, legal climate in which judges and juries are acting in a manner consistent with the laws. Some comfort in making this presumption is afforded by Wittman's finding that juries, which he terms the "ultimate arbiters" are "influenced by objective criteria and change in legal rules." 34

Legal experts could argue that every individual's legal risk profile is different arising from many factors, possibly including the individual's types of volunteer activity, degree of wealth, and legal mechanisms to protect wealth (e.g., trusts).

Individuals' information searches are not uniform, and undoubtedly individual choices about volunteering are based in some cases on relative ignorance of risk, in other cases on misperceived risks growing out of limited anecdotal evidence, and in other cases on more complete information. In the case of volunteer liability, the individual conducting a more complete information search still faces some uncertainties.

While acknowledging these concerns, this study assumes that legal risks have commonality and that most individuals face similar liability risks from volunteering.

Volunteer Liability Exposure Measurement Approaches

The possibility of volunteers being negatively affected by lawsuit, or a volunteer liability index, could be approached from several ways as follows:

One might cite the liability climate in Alabama as an exception to this premise. State liability reform laws passed in the late 1980's in Alabama were eviscerated by the Alabama Supreme Court in a relatively short period of time. See, for example, Susan Nelson, "Who Rules the Alabama Supreme Court?" The Civil Litigation Report, September 30, 1995, p. 6.

³³ Wittman, 151.

³⁴ Ibid., 162.

- (i) An index of real legal exposure to volunteers -presumably a panel of legal experts could analyze the laws in each state and rate all states by the relative extent to which the laws of the state, and historical jury behavior trends, expose volunteers to potential economic harm from lawsuits. rating by state laws by legal experts is available in a limited form through the Nonprofit Risk Management Center's grading of states on certain aspects of volunteer liability exposure. 35 Center does not rank jury behavior, and the organization well known for ranking jury behavior by state, LRP Publications' Jury Verdict Research Series, does not rank jury activity on volunteer liability cases.
- (ii) An index of public consumer information about legal exposure for volunteers -- one could analyze the information transmitters of about liability exposure to volunteers, i.e., the media. electronic search for news reports concerning volunteer liability might be conducted, followed by a ranking of the media coverage using the following two factors to gauge the extent to which potential volunteers received the information: (1) number of media "hits" and (2) a weighting of the circulation or gross rating points of the media outlet. Probably there would a low level of media hits on the topic, making a state-by-state comparison in this manner difficult.
- (iii) An index of state litigousness in general -- as a proxy for the extent of liability exposure to volunteers, one could develop an index of litigousness using general statistics on usage of state civil courts. A review of numerous available statistical measures of state legal activity suggests that the statistic, tort caseload in state trial courts for 1992, 36 if standardized as a per

³⁵ State Liability Laws for Charitable Organizations and Volunteers, (Washington: Nonprofit Risk Management Center, 1995)

Gourt Statistics Project, State Court Caseload Statistics, 1994, (National Center for State Courts, 1995),

capita measure, could represent state litigousness in the context of lawsuits arising from people's actions.³⁷

The Volunteer Liability Variable

While the above three types of state litigousness indexes for the effects of liability exposure on volunteers may each have merits, the first and third approaches were selected for testing for this paper. (The data development for a variable based upon the second approach is expected to be much more complicated, albeit a worthwhile future endeavor if sufficient data is available.) The following two variables were added to the Menchik and Weisbrod model separately (i.e., the regressions were run twice with a single liability variable included each time):

(9) Volunteer liability (a legal provision variable, STLIAB, and a "litigousness index" variable, TBYPOP, are used) - a reduction in overall utility of volunteering through risk is measured in two ways: using a count of state legal provisions affecting volunteer liability and based upon a proxy value, or litigousness index, based upon per capita tort filings.

To summarize, volunteer hours supplied (TVOL) is the dependent variable, assumed to be influenced by full income (FULINC), full income squared (FULINCSQ), wage (NWAGE), the cross price for giving money (PRICE), local government spending (LOCGOV), type of municipality (LCITY, SUBCITY, MCITY, or SCITY), parental volunteering (BACKVOL), religiosity (RELIG), education level (ED), young children in the house (YGCHILD), older children in the house (OTHCHILD), if the respondent is married (MARRIED), gender (FEMALE), age, (AGE), age squared (AGESQ), and liability risk (STLIAB and TBYPOP) as well as a disturbance term.

The regression models (tobit) used in this analysis, then, are:

^{198-200.}

Tort cases include those relating to wrongful acts, damage or injury done willfully or negligently, excluding breach of contract situations.

Model I

TVOL $i = a + b \times FULINC_i + c \times FULINCSQ_i + d \times NWAGE_i + e \times PRICE_i + f \times LOCGOV_i + g \times LCITY_i + h \times SUBCITY_i + i \times MCITY_i + j \times SCITY_i + k \times BACKVOL_i + l \times RELIG_i + m \times ED_i + n \times YGCHILD_i + o \times OTHCHILD_i + p \times MARRIED_i + q \times FEMALE_i + r \times AGE_i + s \times AGESQ_i + t \times STLIAB_i + O_i$

and,

Model II

TVOL $_i$ = a + b X FULINC $_i$ + c X FULINCSQ $_i$ + d X NWAGE $_i$ +e X PRICE $_i$ + f X LOCGOV $_i$ + g X LCITY $_i$ + h X SUBCITY $_i$ + i X MCITY $_i$ +j X SCITY $_i$ +k X BACKVOL $_i$ +l X RELIG $_i$ + m X ED $_i$ + n X YGCHILD $_i$ + o X OTHCHILD $_i$ + p X MARRIED $_i$ + q X FEMALE $_i$ + r X AGE $_i$ + s X AGESQ $_i$ + t X TBYPOP $_i$ + μ_j

The null hypothesis, for both versions of the regression analysis, is that each coefficient is not statistically different from zero. Also, my regression analyses are used to compare results with those of Menchik and Weisbrod, which were developed based upon a different time period. Moreover, the regression analysis is used to seek to determine whether volunteer liability risk is a inhibiting factor in volunteering.

While the factors affecting volunteer labor supply have been discussed in a general way in this section, the actual data used is discussed below.