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OXFORD UNIVERSITY PRESS

American Association for Public Opinion Research

Perceptions of Economic Insecurity: Evidence From the Survey of Economic Expectations

Author(s): Jeff Dominitz and Charles F. Manski

Source: *The Public Opinion Quarterly*, Vol. 61, No. 2 (Summer, 1997), pp. 261-287

Published by: [Oxford University Press](#) on behalf of the [American Association for Public Opinion Research](#)

Stable URL: <http://www.jstor.org/stable/2749552>

Accessed: 31/10/2010 19:46

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PERCEPTIONS OF ECONOMIC INSECURITY

EVIDENCE FROM THE SURVEY OF ECONOMIC EXPECTATIONS

JEFF DOMINITZ
CHARLES F. MANSKI

Abstract The Survey of Economic Expectations (SEE) is a new national survey initiated in an effort to learn how Americans perceive their near-term futures. This article uses SEE data on more than two thousand labor force participants interviewed in 1994 and 1995 to describe how Americans in the labor force perceive the risk of near-term economic misfortune. We measure economic insecurity through responses to questions eliciting subjective probabilities of three events in the year ahead: absence of health insurance, victimization by burglary, and job loss. Respondents are willing to describe their expectations in probabilistic terms, and they appear to do so in a meaningful way. Using the responses to classify individuals as relatively secure, relatively insecure, and highly insecure, we find that respondents with a high risk of one adverse outcome tend also to perceive high risks of the other outcomes. Males and females have similar risk perceptions, but there is substantial variation in perceptions by schooling and race. In particular, black males and males with no postsecondary schooling tend to perceive much greater insecurity than do others in the labor force. Expectations and realizations of health insurance coverage and of job loss tend to match up closely, but respondents substantially overpredict the risk of burglary.

JEFF DOMINITZ is instructor in the Division of Humanities and Social Sciences at the California Institute of Technology. CHARLES F. MANSKI is professor in the Department of Economics at the University of Wisconsin—Madison. This research is supported by grant SBR-9223220 from the National Science Foundation and by grant 91ASPE236A from the Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. The authors are grateful to Bob Lee and Jim Sweet for enabling collection of the data by the University of Wisconsin Survey Center. They have benefited from the comments of three anonymous referees and from the opportunity to present this work in seminars at the California Institute of Technology, the Federal Reserve Bank of Philadelphia, Harvard University, and the Santa Fe Institute.

I. Introduction

During the first few months of 1996, economic insecurity became a focus of media attention in the United States. *New York Times* (March 3–9) ran a weeklong series on “The Downsizing of America,” *Business Week* (March 11) devoted a cover story to “Economic Anxiety,” and *The Economist* (April 6) offered its own perspective on “Learning to Cope” with economic insecurity. This public discourse coincided with policy proposals intended to reduce insecurity, such as the Kassebaum-Kennedy bill (S.R. 1028) to increase the portability of health insurance and the “American Workers Economic Security Act” to reduce taxes on corporations that “treat workers fairly” and to restrain corporate mergers and acquisitions, among other provisions (Kennedy 1996).

Attention to insecurity is by no means new. Advocating “some safeguards against misfortunes which cannot be wholly eliminated in this man-made world,” Franklin D. Roosevelt appointed a cabinet Committee on Economic Security in 1934 (reprinted in Davis 1986, p. 449). This committee’s recommendations led to passage of the Social Security Act of 1935, creating a system of social insurance to partially insulate the population from the risk of economic hardship. Twenty years later, the Federal Reserve Board’s Consultant Committee on Consumer Survey Statistics recommended that data be collected to monitor “popular feeling of anxiety and security” (reprinted in Tobin 1959, p. 10).

Since then, the federal government has invested substantially in the development of statistics that monitor the current status of the population but not in statistics that monitor how Americans perceive their futures. Major national surveys such as the Current Population Survey, the Survey of Income and Program Participation, and the Panel Study of Income Dynamics describe much about the outcomes that individuals actually experience, but little about the outcomes they expect to experience in the future. A number of private survey organizations do regularly elicit economic expectations and report derived measures of economic insecurity. The University of Michigan Survey Research Center (SRC), for example, elicits expectations in its Survey of Consumer Attitudes and reports a derived Index of Consumer Sentiment (see Curtin 1982).

The Survey of Economic Expectations (SEE) is a new effort to learn how Americans perceive their near-term futures. SEE is administered as a periodic module in WISCON, a national continuous telephone survey conducted by the University of Wisconsin Survey Center (UWSC) at the University of Wisconsin—Madison. In SEE, respondents’ perceptions of near-term economic insecurity are measured through their responses to questions eliciting subjective probabilities of three events, each of which affects economic well-being: (1) Health insurance: “What do you think is the percent chance that you will have health insurance coverage 12 months

from now?" (2) Burglary: "What do you think is the percent chance that someone will break into your home and steal something, during the next 12 months?" (3) Job loss: "What do you think is the percent chance that you will lose your job during the next 12 months?" All respondents are asked the first two questions, and those currently working are asked the third.

As described in Section II, the use of probabilistic questions to elicit expectations distinguishes SEE from other expectations surveys that pose qualitative questions. Probabilistic elicitation has been recommended by Juster (1966), Savage (1971), Manski (1990), and Fischhoff (1994). Probabilistic questions can yield more informative responses than do qualitative questions if respondents are able to formulate and express subjective probabilities with reasonable care.

The empirical analysis begins in Section III, which describes the SEE data. We focus on respondents interviewed in 1994 and 1995 who are labor force participants at the time of the interview. With item response rates exceeding 98 percent, we find that respondents are willing to describe their expectations in probabilistic terms. They appear to do so in a meaningful and informative way.

Section IV presents our findings on perceptions of insecurity in the American labor force. Using the responses to the three expectations questions to classify individuals as relatively secure, relatively insecure, and highly insecure, we find that respondents with a high risk of one adverse outcome tend also to perceive high risks of the other outcomes. We find that males and females have similar distributions of risk perceptions. There is, however, substantial variation in perceptions by schooling and race, especially among males: black males and males with no postsecondary schooling tend to perceive much greater insecurity than do others in the labor force. Section IV also compares our findings on job-loss expectations with ones based on a qualitative expectations question in the General Social Survey.

Having 2 years of data allows us to assess the extent to which the expectations of various groups of Americans accurately predict subsequent realizations. Section V compares expectations in 1994 with realizations in 1995. We find that expectations of health insurance coverage and of job loss tend to match up well with the subsequent realizations. Yet respondents substantially overpredict the risk of burglary. Such comparisons of expectations and realizations are not possible with qualitative expectations data.

Two years of data do not suffice to provide a historical perspective on trends in economic insecurity. With the accumulation of data from subsequent administrations of the SEE, we anticipate that the time-series data will help us to understand how changes in the economy affect individuals' expectations and, conversely, how expectations affect the economy. Section VI discusses this and other subjects for future research.

II. Background

An individual's sense of economic insecurity may be thought to arise from his or her perceptions of the risk of economic misfortune. To monitor economic insecurity, analysts have used a variety of measures derived from responses to survey questions eliciting individual perceptions. In this section, we discuss these efforts.

Some analysts look instead to data on recent realizations. To ascertain the perceived risk of job loss, for example, researchers may use the local unemployment rate as a proxy. The inherently subjective nature of risk perceptions, however, limits the usefulness of measures based only on realizations data (see Dominitz and Manski 1997; Manski 1993).

A. STANDARD APPROACHES TO MEASURING INSECURITY

We decided to elicit probabilistic expectations after considering and rejecting standard survey measures of subjective economic insecurity. We have three main concerns about these measures, which we discuss here using as examples the questions posed in some national surveys. The areas of concern are: qualitative expectations, loosely defined outcomes, and confounded phenomena.

Qualitative expectations. General Social Survey (GSS): Thinking about the next 12 months, how likely do you think it is that you will lose your job or be laid off: very likely, fairly likely, not too likely, or not at all likely? (Davis and Smith 1994).¹

When asked to consider the prospects for a given economic outcome, such as the loss of one's job, respondents are often asked to report whether they "think," "expect," or "are worried" that the event will occur. Sometimes they are asked to report the strength of this belief or worry by attaching one of a choice of modifiers, such as "very," "fairly," "not too," or "not at all" likely/worried that the event will occur.

Perhaps the most basic problem concerns the interpersonal comparability of responses. Do different respondents interpret these verbal phrases in the same way? Empirical evidence indicates that interpretations of qualitative expectations questions vary substantially between respondents (see Wallsten et al. 1986).

Even if respondents identically interpret the phrases, the qualitative response options limit the information contained in the responses. It is of interest to learn how accurately individuals predict their future job experi-

1. A Gallup survey asks the analogous question about spouses: Thinking about the next 12 months, how likely is it that your [husband/wife] will lose [his/her] job or be laid off—is it very likely, fairly likely, not too likely, or not at all likely? (CNN/USA Today/Gallup Poll, April 1996, wave 1; see also Newport and Saad 1996).

ences. An obvious way to address this question is to compare elicited expectations with subsequent realizations. The responses to the GSS question, however, permit only a coarse ordinal comparison. The most that one can do is to observe whether those who report “very likely” experience a higher frequency of job loss than those who report “fairly likely,” and so on.

Loosely defined outcomes. *New York Times*: All in all, how economically secure do you feel: very insecure, somewhat insecure . . . ? (March 3, 1996). University of Michigan Survey Research Center: Now looking ahead—do you think that a year from now you (and your family living there) will be better off financially, or worse off, or just about the same as now? (Curtin 1982).

Our concern about interpersonal comparability comes into even sharper focus when considering the outcomes about which respondents are asked. What does it mean to be “economically secure,” as the *New York Times* asked early in 1996? How does the respondent reduce the many facets of economic security into one dimension? Do respondents interpret security as an absolute concept or as a relative one? If relative, to whom or to what time period does the respondent compare? Similar concerns about interpersonal comparability apply to SRC’s forward-looking financial well-being question and to its backward-looking counterpart, which asks respondents to compare how well they “are getting along financially these days” to the situation 1 year earlier. These types of questions are asked by SRC (Curtin 1982), the Conference Board (Linden 1982), and the Gallup Organization (Newport and Saad 1996), among others.

Confounded phenomena. Harris: Compared to a year ago, do you feel more afraid and uneasy on the streets today, less uneasy, or not much different than you felt a few years ago? (Erskine 1974).

Numerous surveys ask respondents about their fear of crime (see Warr 1994). Ferraro and LaGrange (1987) argue that such questions generally confound two concepts—the perceived risk of crime and the emotional response to crime—that need not be strongly associated. In fact, they argue that the empirical evidence suggests these two phenomena are not strongly positively related and, for some criminal activities, may be negatively related. Responses to this type of survey question may therefore provide inefficient, if not invalid, indicators of the perceived risk of crime victimization.

B. NEW APPROACHES TO MEASURING INSECURITY

We elicit subjective probabilities of well-defined prospective outcomes and use the responses to construct measures of economic insecurity (see Sec. IV). A number of recent studies have elements in common with our work. Quadrel, Fischhoff, and Davis (1993) elicit from a broad sample

of adults and adolescents their subjective probabilities of experiencing various illnesses and other health risks. Hurd and McGarry (1995) analyze probabilistic expectations of mortality elicited in the national Health and Retirement Study. Guiso, Jappelli, and Terlizzese (1992) analyze subjective probabilities of 1-year-ahead growth rates in labor earnings elicited in the 1989 edition of the Bank of Italy's biennial survey of the Italian population. Similar earnings expectations are elicited in the more recent, continuing VSB-Panel survey conducted by the Center for Economic Research in Tilburg, Netherlands. Dominitz and Manski (1996) have carried out an exploratory study eliciting high school and college students' expectations of the long-term income returns to schooling.

Also relevant is the survey in Italy and Hungary described by Garner and Garner (1991). Respondents were asked to report the likelihood of job loss, crime victimization, moving because of eviction or rent increase, and having a sufficient pension, among other outcomes. Responses were given in the form of verbal quantifiers—very probable, probable, improbable, very improbable. An index of economic security was constructed from these responses.

III. Eliciting Subjective Expectations

A. THE 1994–95 SURVEY OF ECONOMIC EXPECTATIONS

The SEE is a periodic module in WISCON, a continuous national telephone survey conducted by the University of Wisconsin Survey Center.² The WISCON core questions ask respondents about their labor market experiences, demographics, and household income. The WISCON database, including the SEE modules, may be obtained from UWSC. The survey procedures and response rates are described in detail in Winsborough (1987) and other UWSC in-house documents. The main features are summarized here and in Section IIIB.

The WISCON interviewers attempt contact with a sample of telephone numbers purchased by UWSC from Nielsen Media Research. The sample is representative of currently working residential telephone numbers in the continental United States, including both listed and nonlisted numbers.³

2. The first version of SEE, administered during 1993, elicited respondents' 1-year-ahead expectations of income, earnings, and employment (see Dominitz 1994; and Dominitz and Manski 1997). This study served as a proving ground for the series of questions contained in the current, continuing survey. The income and employment questions have been revised and supplemented, and the earnings questions have been replaced by questions on health insurance coverage and crime victimization.

3. Nielsen Media Research begins with a file of all residential telephone numbers listed in published telephone directories. This file is sorted by exchange and number within exchange. Within each exchange the 10,000 potential telephone numbers (XXX-0000 through XXX-9999) are divided into 100 blocks of 100 consecutive numbers. Blocks that have no

Nielsen updates the sample three times a year. It is estimated that approximately 5–7 percent of United States households do not have telephones and so are not represented in the sample.

When a telephone number is called, it is first determined whether or not a working residential telephone number has been reached. Each such number is then screened to verify that it is associated with a household located in the continental United States and containing at least one household resident age 18 or older. If so, the numbers of males and females age 18 and older are ascertained. One person is then selected from among the eligible adult household members. Only the selected person can be interviewed, no substitutions being allowed. Hence the respondent-selection probability varies across households, with adults living in single-adult households being drawn with higher probability than adults living in multiple-adult households.⁴

The WISCON interviewers call about 40 telephone numbers per day and find, on average, that about 20 of these numbers are either not in service or are at business locations. Among the remaining 20 or so numbers, they obtain an interview at slightly over 10 households, on average. Thus the effective response rate (the ratio of interviews to potential residential phone numbers called) is over 50 percent. The nonresponse is fairly evenly divided between refusals to be interviewed and cases in which 10 phone calls made over several weeks find the appropriate respondent to be not at home or otherwise unable to complete the interview.⁵ The characteristics of the responders are described in Section IIIB.

The SEE module was included during the periods April–July 1994, November 1994–January 1995, May–July 1995, and November 1995–January 1996. The interviewing rate varied somewhat across these periods, the number of completed interviews in the four periods being 971,

listed residential numbers are eliminated and a sample is drawn from the remaining numbers. Thus the sample includes residential telephone numbers that are listed in the published directories and ones that are unlisted. It also includes nonresidential and nonworking numbers that are in the blocks that contain some residential numbers.

4. If there is more than one adult in the household, the selection of an interviewee is as follows: if there is one male and one female, the selection is made with equal probabilities. If there is more than one of either sex, the gender selection probability is adjusted accordingly; the selection within gender is then made by randomly choosing the oldest or the youngest of the selected gender. In same gender multiadult households, there is a random selection of the oldest or youngest member.

5. The repeat calling strategy has these features. Every day a fixed number of new telephone numbers are drawn and called on that day. Consider Mondays. Responses to the first Monday's new calls constitute members of the first tier for the first Monday. Numbers not answering from these new numbers are called again a week later. Those answering the second call form the second tier for the second Monday and are added to that Monday's first tier to make up the day's sample. Those still not answering are called again the following week and, if they answer, their responses form the third tier for the third Monday. This iterative procedure continues for 4 weeks. Cases still unresolved after 4 weeks are made available for calling any day of the week, until resolved, or a tenth call is placed.

480, 774, and 661 respectively. Thus 2,886 SEE interviews were completed during the 2-year interval.

The present analysis focuses on the 2,060 SEE respondents who were in the labor force at the time of the interview and who gave valid responses to the three questions on economic insecurity. Respondents are defined to be in the labor force if they state that, at the time of the interview, they are either working for pay, temporarily absent from a job, or looking for work. We exclude persons not in the labor force because job-loss probabilities are not meaningful for them. Among the respondents who are in the labor force, we elicited job-loss expectations only from those who are currently working. This group constitutes about 90 percent of the labor force participants and it was necessary to impute job-loss expectations to the remaining 10 percent.⁶

In Sections IV and V, where we analyze the risk perceptions of the U.S. labor force, we present weighted estimates that adjust for two features of the sample design described above: the differential respondent-selection probabilities across interviewed households and the varying interview rate across time periods. The weights do not adjust for the existence of multiple telephone lines in a household, as this information is unavailable. Nor do the weights attempt to adjust for possible effects of interview and item nonresponse.⁷

B. RESPONSE RATES

Table 1 reports the demographic and schooling characteristics of the 2,886 WISCON respondents interviewed in those periods of 1994 and 1995 when the SEE module was administered. The first column describes the entire sample of 2,886 individuals, and the second column describes the subsample of 2,060 labor force participants who gave valid responses to all three economic insecurity questions. Weighted fractions are given for each schooling and demographic group in column 4. The weighted fractions are very close to their unweighted counterparts in column 3.

The table indicates that, relative to the U.S. population as a whole, the WISCON respondents overrepresent women, whites, and persons with

6. We assign 1.00 as the subjective probability of job loss to the 88 respondents who were unemployed at the time of the interview; that is, to those who did not have a job and were looking for work. We assign 0.05 as the subjective probability of job loss to the 135 respondents who stated that they were "temporarily absent" from a job at the time of the interview; that is, to those who have jobs but are currently laid off or not working for some other reason. The value 0.05 is the population-wide median job-loss probability of persons who have jobs and are currently working.

7. It is common in survey research to use weights to jointly adjust for the known effects of sampling design features and the unknown effects of nonresponse within a given design. The former application of weights has a more firm statistical foundation than does the latter (see Horowitz and Manski 1997).

Table 1. Characteristics of the Respondents

| | WISCON Sample | SEE Sample | Composition of SEE Sample | |
|--------------------------------|------------------|---------------|------------------------------|----------|
| | | | Unweighted | Weighted |
| Male | 1,293 | 1,045 | .51 | .51 |
| Age: | | | | |
| 18–34 | 429 | 406 | .20 | .20 |
| 35–49 | 460 | 425 | .21 | .20 |
| 50–64 | 233 | 177 | .09 | .09 |
| 65 or more | 160 | 32 | .02 | .01 |
| Education: | | | | |
| No postsecondary | 340 | 239 | .12 | .12 |
| Some postsecondary | 480 | 417 | .20 | .21 |
| Bachelor degree | 463 | 385 | .19 | .18 |
| Race: | | | | |
| White | 1,071 | 856 | .42 | .42 |
| Black | 76 | 62 | .03 | .03 |
| Employed with health insurance | 823 | 811 | .39 | .40 |
| Female | 1,593 | 1,015 | .49 | .49 |
| Age: | | | | |
| 18–34 | 471 | 382 | .19 | .19 |
| 35–49 | 495 | 412 | .20 | .20 |
| 50–64 | 297 | 175 | .08 | .08 |
| 65 or more | 314 | 39 | .02 | .02 |
| Education: | | | | |
| No postsecondary | 492 | 241 | .12 | .12 |
| Some postsecondary | 661 | 454 | .22 | .22 |
| Bachelor degree | 437 | 318 | .15 | .14 |
| Race: | | | | |
| White | 1,328 | 834 | .40 | .40 |
| Black | 123 | 84 | .04 | .04 |
| Employed with health insurance | 801 | 784 | .38 | .39 |
| Total respondents | 2,886 | 2,060 | 1.00 | 1.00 |

NOTE.—The WISCON sample includes all persons interviewed in the relevant time periods. The SEE sample includes those WISCON respondents who are in the labor force and who respond to the three expectations questions. The weighted fractions reflect differential respondent-selection probabilities across households and time periods.

postsecondary schooling. The 2,886 respondents include 2,102 labor force participants, 1,063 men and 1,039 women. The respective male and female labor force participation rates of 82 percent and 65 percent exceed those typically found in recent Current Population Survey data by 5 or 6 percentage points, for both men and women. A reader wanting to use our findings to draw conclusions about the U.S. population as a whole should keep in mind these characteristics of the sample.

Overall, 98 percent of labor force participants (2,060 out of 2,102) gave probability responses to all three economic insecurity questions. Rates of response to these questions vary negligibly across the groups described in table 1. The item response rate is less than 95 percent in only one group, women aged 65 or more, among whom 39 out of 44 responded.

C. ARE THE RESPONSES MEANINGFUL?

The feasibility and utility of eliciting subjective probabilities in household surveys is a subject of some controversy among researchers. While probabilistic questions have the potential to yield more informative responses than do qualitative expectations questions, a diverse literature suggests that respondents may think about uncertain events using less than the full structure of modern probability theory (see Camerer and Webber 1992).

If respondents have difficulty thinking in terms of subjective probabilities, then perhaps they will be unwilling to respond to probabilistic expectations questions. Our very high rates of item response indicate otherwise, as do the high response rates generally obtained in the other studies described in Section IIB. Willingness to respond, however, does not imply that the responses are meaningful. Perhaps responses are simply given in a perfunctory manner.

There is no definitive way to assess the seriousness with which respondents answer the questions, but we can look for response patterns that may indicate a lack of care. In particular, we can examine the extent of bunching at round numbers. A fear commonly expressed by researchers skeptical of probability elicitation is that respondents will round their responses to the values (0, 50, 100), and not exploit the refined reporting possibilities permitted by the 0–100 percent chance scale. With this concern in mind, the SEE module of expectations questions is prefaced by a set of instructions meant to familiarize respondents with the percent chance scale:

Now I will ask you some questions about future, uncertain outcomes. In each case, try to think about the whole range of possible outcomes and think about how likely they are to occur during the next 12 months. In some of the questions, I will ask you about the PERCENT CHANCE of something happening. The percent chance must be a number from zero to one hundred. Numbers like 2 or 5 percent may be “almost no chance,” 20 percent or so may mean “not much chance,” a 45 or 55 percent chance may be a “pretty even chance,” 80 percent or so may mean a “very good chance,” and a 95 or 98 percent chance may be “almost certain.” The percent chance can also be thought of as the NUMBER OF CHANCES OUT OF 100.

Table 2 reports the complete frequency distribution of responses given by the 2,060 respondents for each of the three events—no health insurance

Table 2. Frequencies of Expectations Responses, SEE Respondents in Labor Force

| Percent Chance | No Health Insurance | Victim of Burglary | Job Loss |
|-------------------|------------------------|-----------------------|-------------------|
| 0 | 960 | 286 | 648 |
| 1 | 58 | 88 | 92 |
| 2 | 92 | 154 | 124 |
| 3 | 2 | 32 | 17 |
| 4 | 2 | 5 | 1 |
| 5 | 154 | 339 | 373 (135 imputed) |
| 6–9 | 2 | 14 | 5 |
| 10 | 197 | 339 | 197 |
| 11–14 | 1 | 3 | 1 |
| 15 | 23 | 48 | 26 |
| 16–19 | 0 | 1 | 0 |
| 20 | 151 | 228 | 117 |
| 21–24 | 1 | 1 | 0 |
| 25 | 53 | 65 | 32 |
| 26–29 | 0 | 0 | 0 |
| 30 | 25 | 87 | 46 |
| 31–34 | 0 | 1 | 0 |
| 35 | 4 | 8 | 4 |
| 36–39 | 0 | 0 | 0 |
| 40 | 26 | 36 | 20 |
| 41–44 | 0 | 0 | 0 |
| 45 | 5 | 14 | 5 |
| 46–49 | 0 | 0 | 0 |
| 50 | 151 | 221 | 130 |
| 51–54 | 0 | 0 | 0 |
| 55 | 3 | 2 | 2 |
| 56–59 | 0 | 0 | 0 |
| 60 | 15 | 16 | 13 |
| 61–64 | 0 | 0 | 0 |
| 65 | 2 | 3 | 3 |
| 66–69 | 1 | 0 | 0 |
| 70 | 10 | 4 | 11 |
| 71–74 | 1 | 0 | 0 |
| 75 | 8 | 10 | 17 |
| 76–79 | 0 | 0 | 0 |
| 80 | 25 | 20 | 24 |
| 81–84 | 0 | 0 | 0 |
| 85 | 2 | 2 | 5 |
| 86–89 | 0 | 0 | 0 |
| 90 | 18 | 7 | 8 |
| 91–94 | 0 | 1 | 0 |
| 95 | 9 | 2 | 8 |
| 96–99 | 8 | 8 | 6 |
| 100 | 51 | 5 | 125 (88 imputed) |
| All | 2,060 | 2,060 | 2,060 |
| Mean | 15 | 17 | 18 |
| .25 quantile | 0 | 2 | 0 |
| .50 quantile | 2 | 10 | 5 |
| .75 quantile | 20 | 20 | 20 |

coverage, burglary, and job loss.⁸ The table shows that most respondents do not round their responses to the values (0, 50, 100), but rather to the nearest multiple of five. Respondents perceiving very low probabilities of events provide yet more refined responses, with many reporting 1, 2, or 3 percent. It is sometimes said that a 5-point or 10-point scale suffices for respondents to fully express their beliefs. Clearly a 5-point or 10-point scale would substantially coarsen the expectations reports that we receive with the 0–100 scale.

The entries in table 2 indicate that each event tends to be perceived as unlikely to occur, with the overwhelming majority of responses falling in the lower half of the percent-chance scale. Reports of zero percent chance are very common (960 of the health insurance, 286 of the burglary, and 648 of the job-loss responses), but many of these presumably are cases where a respondent perceives less than a 1 percent chance of the event and rounds down. Small amounts of rounding cannot greatly affect our empirical analysis.⁹

The most common positive probability responses are 5 percent and 10 percent, not 50 and 100 percent. We do, however, find more bunching at the value 50 than at other nearby multiples of five. We have investigated the extent of this bunching conditional on various behaviors and attributes of respondents. We find that respondents who report a 50 for one question are more likely to report the same value for another question, but the association is not strong. For example, 11 percent of all respondents report a 50 for the burglary question, whereas 19 percent of those reporting a 50 for the health insurance question also do so for the burglary question.

In personal communications, some researchers have asserted that less educated respondents have the most difficulty with probabilistic questions and so are most likely to round coarsely. We do find that the rate of bunching at 50 decreases with schooling, as shown below, but the main lesson is that the prevalence of such bunching is modest at all levels of schooling.¹⁰

8. Responses to the health insurance question have been subtracted from 100, yielding the percent chance of not being covered rather than of being covered. We make this transformation to focus on the likelihood of adverse outcomes in each of the three cases.

9. Quadrel, Fischhoff, and Davis (1993) are specifically interested in how respondents perceive the chance of rare events and adopt methods designed to induce precise reporting of small probabilities.

10. Fraction of respondents reporting that percent chance is 50:

| Schooling | No Health Insurance | Victim of Burglary | Job Loss |
|--------------------|---------------------|--------------------|----------|
| No postsecondary | .11 | .13 | .08 |
| Some postsecondary | .07 | .11 | .08 |
| Bachelor degree | .05 | .09 | .05 |

Here and elsewhere, respondents with some postsecondary schooling are ones who report having had some coursework or training beyond high school but who do not have a degree

It is reasonable to ask whether the SEE instructions, which cite a sequence of percent values—2, 5, 20, 45, 55, 80, 95, 98—to familiarize respondents with the scale, inordinately encourage respondents to use the cited values in their responses. Table 2 does not indicate that the instructions induce such bunching. Respondents report the uncited value 10 more often than the cited 5 and 20. They report the uncited values 40, 50, and 60 much more often than the cited 45 and 55.

D. THE SAMPLE DISTRIBUTION OF RISK PERCEPTIONS

Table 2 shows that a majority of respondents place zero or small subjective probability on each event, but some respondents report that the event is moderately or even very likely to occur. For example, at least 25 percent of the respondents (the .25-quantile) see themselves as facing zero chance of losing their jobs in the next year. At least 50 percent of the respondents (the .50-quantile or median) see themselves as facing no more than a .05 chance of job loss. But some do not feel so secure. The entry for the .75-quantile shows that at least 25 percent of respondents see themselves as facing a .20 chance or more of job loss in the next year.

IV. Perceptions of Insecurity in the American Labor Force

In Section III we described some basic features of the SEE sample data. From here on, we use those data to draw conclusions about the risk perceptions of Americans in the labor force. To this end, we henceforth weight the sample data to adjust for the known differential respondent-selection probabilities across households and across time periods. The findings are presented in tables 3 and 4, which characterize the distribution of risk perceptions for males and females with varying age, schooling, race, and employment status. Whereas table 3 considers the three events one at a time, table 4 characterizes the concentration of insecurity within groups. Section IVA explains how we measure the concentration of insecurity; Section IVB examines how risk perceptions vary across groups; and Section IVC compares our findings on job-loss expectations with ones based on a qualitative expectations question.

A. MEASURING THE CONCENTRATION OF INSECURITY

Considering uncertain events one at a time does not reveal the extent to which insecurity is concentrated within the population. Do most Ameri-

from a 4-year college or university. Respondents with a bachelor degree have a degree from a 4-year college or university.

Table 3. Population Means and Quantiles of the Subjective Probabilities

| | No Health Insurance | | | | Victim of Burglary | | | | Job Loss | | | |
|--------------------------------|---------------------|--------------|--------------|--------------|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Quantile | | | | Quantile | | | | Quantile | | | |
| | Mean | .25 | .50 | .75 | Mean | .25 | .50 | .75 | Mean | .25 | .50 | .75 |
| Male | .14 (.01) | .00 (.00) | .02 (.00) | .20 (.02) | .16 (.01) | .03 (.01) | .10 (.00) | .20 (.01) | .16 (.01) | .00 (.00) | .05 (.00) | .20 (.04) |
| Age: | | | | | | | | | | | | |
| 18–34 | .18 (.02) | .00 (.00) | .05 (.02) | .25 (.05) | .16 (.01) | .02 (.01) | .10 (.02) | .20 (.03) | .17 (.02) | .00 (.00) | .05 (.00) | .20 (.04) |
| 35–49 | .14 (.01) | .00 (.00) | .02 (.01) | .20 (.04) | .16 (.01) | .05 (.01) | .10 (.00) | .20 (.02) | .16 (.02) | .00 (.00) | .05 (.00) | .20 (.02) |
| 50–64 | .10 (.01) | .00 (.00) | .00 (.00) | .10 (.03) | .16 (.02) | .02 (.01) | .10 (.02) | .20 (.02) | .13 (.02) | .00 (.00) | .02 (.01) | .10 (.02) |
| 65 + | .06 (.03) | .00 (.00) | .00 (.01) | .05 (.03) | .12 (.03) | .01 (.02) | .10 (.03) | .15 (.09) | .17 (.05) | .00 (.00) | .00 (.02) | .20 (.19) |
| Education: | | | | | | | | | | | | |
| No postsecondary | .22 (.02) | .00 (.00) | .05 (.03) | .40 (.09) | .20 (.02) | .02 (.01) | .10 (.02) | .30 (.05) | .20 (.02) | .00 (.00) | .05 (.01) | .30 (.10) |
| Some postsecondary | .16 (.01) | .00 (.00) | .05 (.02) | .20 (.02) | .17 (.01) | .05 (.01) | .10 (.01) | .20 (.03) | .15 (.01) | .00 (.00) | .05 (.00) | .20 (.04) |
| Bachelor degree | .08 (.01) | .00 (.00) | .00 (.00) | .05 (.02) | .12 (.01) | .02 (.01) | .05 (.02) | .15 (.04) | .15 (.01) | .00 (.00) | .05 (.00) | .10 (.02) |
| Race: | | | | | | | | | | | | |
| White | .13 (.01) | .00 (.00) | .01 (.01) | .10 (.03) | .14 (.01) | .02 (.01) | .10 (.01) | .20 (.00) | .15 (.01) | .00 (.00) | .05 (.00) | .10 (.03) |
| Black | .25 (.04) | .00 (.02) | .20 (.09) | .50 (.07) | .33 (.04) | .05 (.04) | .30 (.10) | .50 (.05) | .24 (.03) | .01 (.07) | .20 (.05) | .50 (.07) |
| Employed with health insurance | .08 (.01) | .00 (.00) | .00 (.01) | .10 (.00) | .16 (.01) | .03 (.01) | .10 (.00) | .20 (.01) | .14 (.01) | .00 (.00) | .05 (.01) | .15 (.04) |

| | | | | | | | | | | | | |
|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Female | .15 | .00 | .02 | .20 | .18 | .02 | .10 | .25 | .20 | .00 | .05 | .25 |
| | (.01) | (.00) | (.01) | (.01) | (.01) | (.01) | (.00) | (.03) | (.01) | (.00) | (.00) | (.04) |
| Age: | | | | | | | | | | | | |
| 18–34 | .17 | .00 | .05 | .20 | .18 | .05 | .10 | .25 | .24 | .00 | .05 | .50 |
| | (.01) | (.00) | (.02) | (.04) | (.01) | (.01) | (.00) | (.04) | (.02) | (.01) | (.01) | (.10) |
| 35–49 | .15 | .00 | .01 | .20 | .18 | .03 | .10 | .25 | .20 | .00 | .05 | .25 |
| | (.01) | (.00) | (.02) | (.02) | (.01) | (.01) | (.00) | (.03) | (.02) | (.00) | (.00) | (.05) |
| 50–64 | .13 | .00 | .00 | .10 | .18 | .01 | .05 | .30 | .14 | .00 | .02 | .10 |
| | (.02) | (.00) | (.00) | (.02) | (.02) | (.01) | (.02) | (.07) | (.02) | (.00) | (.01) | (.04) |
| 65 + | .09 | .00 | .00 | .10 | .15 | .00 | .05 | .25 | .20 | .00 | .01 | .50 |
| | (.03) | (.00) | (.02) | (.05) | (.03) | (.02) | (.03) | (.10) | (.06) | (.00) | (.05) | (.22) |
| Education: | | | | | | | | | | | | |
| No postsecondary | .18 | .00 | .05 | .20 | .18 | .02 | .10 | .25 | .23 | .00 | .05 | .30 |
| | (.02) | (.00) | (.02) | (.10) | (.02) | (.01) | (.02) | (.07) | (.03) | (.00) | (.01) | (.11) |
| Some postsecondary | .16 | .00 | .02 | .20 | .19 | .05 | .10 | .30 | .20 | .00 | .05 | .20 |
| | (.01) | (.00) | (.01) | (.02) | (.01) | (.01) | (.00) | (.03) | (.02) | (.00) | (.00) | (.06) |
| Bachelor degree | .11 | .00 | .00 | .10 | .16 | .03 | .10 | .20 | .18 | .00 | .05 | .20 |
| | (.01) | (.00) | (.00) | (.03) | (.01) | (.01) | (.02) | (.03) | (.02) | (.00) | (.00) | (.06) |
| Race: | | | | | | | | | | | | |
| White | .15 | .00 | .02 | .20 | .18 | .02 | .10 | .25 | .19 | .00 | .05 | .20 |
| | (.01) | (.00) | (.01) | (.02) | (.01) | (.01) | (.00) | (.02) | (.01) | (.00) | (.00) | (.02) |
| Black | .19 | .00 | .02 | .30 | .20 | .05 | .10 | .40 | .25 | .02 | .10 | .50 |
| | (.03) | (.00) | (.03) | (.13) | (.03) | (.03) | (.04) | (.12) | (.03) | (.01) | (.05) | (.08) |
| Employed with health insurance | .10 | .00 | .00 | .10 | .18 | .03 | .10 | .25 | .15 | .00 | .05 | .20 |
| | (.01) | (.00) | (.00) | (.01) | (.01) | (.01) | (.00) | (.02) | (.01) | (.00) | (.01) | (.02) |

NOTE.—The estimates are based on the 2,060 SEE respondents in the labor force. See table 1 for the size of each demographic or schooling group. Standard errors are in parentheses.

Table 4. Concentration of Insecurity

| | Relatively Secure | Intermediate | Relatively Insecure | Highly Insecure |
|--------------------------------|----------------------|--------------|------------------------|--------------------|
| Male | .16 (.01) | .70 (.01) | .14 (.01) | .04 (.01) |
| Age: | | | | |
| 18–34 | .16 (.02) | .70 (.02) | .14 (.02) | .05 (.01) |
| 35–49 | .15 (.02) | .69 (.02) | .16 (.02) | .04 (.01) |
| 50–64 | .20 (.03) | .71 (.03) | .09 (.02) | .02 (.01) |
| 65+ | .28 (.08) | .56 (.09) | .16 (.07) | .00 (.00) |
| Education: | | | | |
| No postsecondary | .16 (.02) | .65 (.03) | .19 (.03) | .07 (.02) |
| Some postsecondary | .15 (.02) | .68 (.02) | .17 (.02) | .04 (.02) |
| Bachelor degree | .18 (.02) | .75 (.02) | .07 (.01) | .02 (.01) |
| Race: | | | | |
| White | .17 (.01) | .71 (.02) | .12 (.01) | .02 (.00) |
| Black | .08 (.03) | .56 (.06) | .36 (.06) | .18 (.05) |
| Employed with health insurance | .19 (.01) | .68 (.02) | .13 (.01) | .03 (.01) |
| Female | .16 (.01) | .71 (.01) | .13 (.01) | .03 (.01) |
| Age: | | | | |
| 18–34 | .13 (.02) | .74 (.02) | .14 (.02) | .04 (.01) |
| 35–49 | .14 (.02) | .72 (.02) | .14 (.02) | .03 (.01) |
| 50–64 | .27 (.03) | .64 (.04) | .09 (.02) | .02 (.01) |
| 65+ | .28 (.07) | .60 (.08) | .12 (.05) | .03 (.03) |
| Education: | | | | |
| No postsecondary | .20 (.03) | .64 (.03) | .16 (.02) | .05 (.01) |
| Some postsecondary | .13 (.02) | .74 (.02) | .13 (.02) | .03 (.01) |
| Bachelor degree | .18 (.02) | .72 (.03) | .10 (.02) | .02 (.01) |
| Race: | | | | |
| White | .16 (.01) | .71 (.02) | .12 (.01) | .03 (.01) |
| Black | .20 (.04) | .62 (.05) | .18 (.04) | .06 (.03) |
| Employed with health insurance | .18 (.01) | .71 (.02) | .11 (.01) | .02 (.01) |

NOTE.—The estimates are based on the 2,060 SEE respondents in the labor force. See table 1 for the size of each demographic or schooling group. Standard errors are in parentheses.

cans in the labor force perceive a high risk of at least one adverse outcome or, rather, do some perceive high risks of multiple events while others perceive themselves to be relatively immune?

Let (p_1, p_2, p_3) denote a person's subjective probabilities of the three events—no health insurance, burglary, and job loss. We find that the correlations among pairs of reported probabilities are all positive. Among men the correlations are $\text{Corr}(p_1, p_2)$.12, $\text{Corr}(p_1, p_3)$.20, and $\text{Corr}(p_2, p_3)$.16. Among women the correlations are $\text{Corr}(p_1, p_2)$.10, $\text{Corr}(p_1, p_3)$.21, and $\text{Corr}(p_2, p_3)$.17.

To measure more directly the concentration of insecurity within various groups, we report in table 4 the fraction of group members whose subjective probabilities all lie below the respective population medians. We refer to these persons as relatively secure. We report the fraction of group members whose subjective probabilities all exceed the population medians. We refer to these persons as relatively insecure. We also compute the fraction of group members whose subjective probabilities all exceed the population .75-quantiles. We refer to these persons as highly insecure.

As reported in the top row of table 4, we estimate that 16 percent of men are relatively secure and 14 percent are relatively insecure, according to these definitions, leaving 70 percent in the intermediate group who are neither secure nor insecure. Highly insecure individuals constitute 4 percent of the male labor force. Similarly, among women, 16 percent are relatively secure, 13 percent are relatively insecure, and 3 percent are highly insecure.

These results, as well as the correlations given above, indicate that persons with a high subjective probability of one event tend also to have high subjective probabilities of the other events. If p_1 , p_2 , and p_3 were statistically independent of one another, 10 (9) percent of men (women) would be relatively secure, 7 (7) percent would be relatively insecure, and 1 (2) percent would be highly insecure.¹¹ Instead, we find these percentages to be (16, 14, 4) among men and (16, 13, 3) among women. These substantially larger values indicate that the subjective probabilities p_1 , p_2 , and p_3 are not statistically independent but, rather, are positively associated within the labor force.

In Section II, we identified weaknesses in previous attempts to measure economic insecurity. We recognize that table 4 also has its limitations. Perhaps most significantly, we may have ignored important dimensions

11. Let $j = 1, 2, 3$. If the empirical distribution of p_j were continuous, half of all respondents would have p_j less than the empirical median and half would have p_j greater than the empirical median. A quarter would have p_j greater than the empirical .75-quantile. Hence, under the statistical independence assumption, the fractions *relatively secure* and *relatively insecure* would each be $(.5)^3 = .125$, and the fraction *highly insecure* would be $(.25)^3 = .016$. Because the empirical distributions are discrete with some mass at their medians and .75-quantiles, these fractions turn out to have the values .097, .066, .009 among men, and the values .092, .073, and .015 among women.

of insecurity. We do not incorporate perceived risks to retirement savings or to home ownership, for example. While we do include the risk of job loss, we do not include perceptions of the loss of income associated with job loss. An advantage of our approach is the natural way in which such additional dimensions may be included. If the probabilities of other adverse outcomes are elicited, the classifications may be redefined to incorporate the additional dimensions.

B. VARIATION IN RISK PERCEPTIONS ACROSS GROUPS

How do risk perceptions vary across subpopulations of the labor force? Let us begin by comparing males and females. We find that, in most respects, males and females in the labor force have very similar distributions of risk perceptions. Tables 3 and 4 show that males and females have identical .25-quantile and median subjective probabilities of each of the three events. They have essentially identical concentrations of insecurity. The risk perceptions of males and females differ only in the right tails of the distributions for burglary and job loss. Females have somewhat larger .75-quantile subjective probabilities of burglary and job loss than do males and thus have somewhat larger means.

Whereas the risk perceptions of males and females are broadly similar, we observe substantial variation by schooling and race, especially among males. Tables 3 and 4 show that males with a bachelor's degree tend to perceive much lower chances of having no health insurance and of being burglarized than do those with no postsecondary schooling. Their job-loss probabilities also tend to be somewhat lower. Among males with a bachelor's degree, .07 are relatively insecure and .02 are highly insecure. Among those with no postsecondary schooling, .19 are relatively insecure and .07 are highly insecure.

The differences in the risk perceptions of white and black males are even more striking. Whereas the median probabilities of no health insurance, burglary, and job loss are .01, .10, .05 for white males, they are .20, .30, .20 for black males. Whereas the fraction of highly insecure white males is .02, the fraction of highly insecure black males is .18. These are enormous differences in risk perceptions.

Further inspection of tables 3 and 4 reveals other findings of interest. The risk perceptions of females in the labor force vary much less with schooling and race than do those of males. White females and ones with bachelor's degrees tend to perceive themselves as somewhat more secure than do black females or ones with no postsecondary schooling. The magnitudes of the differences, however, are much smaller than those observed for males.

We find that risk perceptions vary somewhat with age. For both males and females, the subjective probabilities of the three events tend to de-

crease with age. The fraction of relatively secure persons tends to increase with age.

Tables 3 and 4 also describe the risk perceptions of persons who currently are both employed and covered by health insurance. This group, which constitutes an estimated 79 percent of the labor force, may be thought of as the relatively well-off core of the labor force in terms of current economic status. Being well-off at a point in time does not, however, imply that one is secure. Among males, for example, .13 of the group are relatively insecure.

C. PROBABILISTIC AND QUALITATIVE EXPECTATIONS OF JOB LOSS

In Section II we stated that probabilistic expectations questions have the potential to yield more informative responses than do qualitative questions. One reason is that probabilistic responses, unlike qualitative ones, may be readily compared with subsequent realizations, thus enabling researchers to assess the accuracy with which individuals' predict their futures. This will be demonstrated in Section V. Another reason is that the refined responses permitted by the 0–100 percent chance scale enable a sharper examination of variation in risk perceptions across groups than is possible using the coarse responses to qualitative questions. We illustrate this here by comparing the responses to our probabilistic job-loss question with those to the qualitative job-loss question in the 1994 administration of the General Social Survey.

Table 5 reports the responses to the 1994 GSS job-loss question by employed respondents. When comparing the GSS responses with the SEE responses in table 3, it should be kept in mind that the two surveys do not ask about exactly the same event. Whereas the GSS asks about job loss or layoff, the SEE asks about job loss without mentioning layoff. The dates of the two surveys overlap but are not identical. Whereas the latest GSS data available are for 1994, the SEE data cover 1994 and 1995. Nevertheless, the two surveys are sufficiently comparable to make a comparison of findings interesting.

In qualitative terms, the two sets of responses show similar variation in risk perceptions across groups. Male and female respondents to the GSS have almost identical distributions of responses, just as we found in SEE. The GSS respondents who have no postsecondary schooling or are black tend to view job loss as more likely than do those who have a bachelor's degree or are white, as in SEE. The qualitative similarity of the GSS and SEE findings is reassuring. It suggests that individuals can respond in a coherent manner to both probabilistic and qualitative modes of questioning.

The problem with the GSS responses is that they do not enable more than a coarse ordinal analysis of risk perceptions. How differently do

Table 5. Responses to the 1994 General Social Survey
Job-Loss Question

| | Number of Respondents | Not at All Likely | Not Too Likely | Fairly Likely | Very Likely |
|--------------------|--------------------------|----------------------|-------------------|------------------|----------------|
| Male | 586 | .64 | .27 | .03 | .06 |
| Age: | | | | | |
| 18–34 | 224 | .64 | .26 | .03 | .08 |
| 35–49 | 222 | .63 | .28 | .04 | .05 |
| 50–64 | 116 | .63 | .29 | .03 | .04 |
| 65+ | 23 | .74 | .22 | .00 | .04 |
| Education: | | | | | |
| No postsecondary | 246 | .63 | .25 | .04 | .08 |
| Some postsecondary | 154 | .60 | .30 | .04 | .06 |
| Bachelor degree | 184 | .68 | .27 | .01 | .03 |
| Race: | | | | | |
| White | 497 | .67 | .26 | .02 | .05 |
| Black | 63 | .41 | .38 | .13 | .08 |
| Female | 698 | .62 | .27 | .06 | .05 |
| Age: | | | | | |
| 18–34 | 239 | .65 | .25 | .05 | .05 |
| 35–49 | 283 | .61 | .27 | .05 | .07 |
| 50–64 | 154 | .58 | .31 | .08 | .02 |
| 65+ | 19 | .74 | .16 | .05 | .05 |
| Education: | | | | | |
| No postsecondary | 282 | .61 | .25 | .07 | .07 |
| Some postsecondary | 202 | .63 | .25 | .08 | .04 |
| Bachelor degree | 213 | .62 | .32 | .02 | .04 |
| Race: | | | | | |
| White | 564 | .64 | .28 | .04 | .04 |
| Black | 102 | .55 | .20 | .14 | .12 |

black and white males perceive the risk of job loss? How much does the perceived risk of job loss vary with schooling? There is no obvious way to use the GSS responses to give meaningful answers to these questions of magnitude. In Section IVB, however, we were readily able to answer these and like questions using the SEE responses.

V. The Objective Accuracy of Elicited Risk Perceptions

In two distinct senses, we would like to determine the accuracy of the risk perceptions that we elicit from respondents. First, we would like to know how well the elicited subjective probabilities measure what persons really think about their risks of health insurance coverage, burglary, and

job loss in the next year. Second, we would like to know how objectively accurate are the reported risk perceptions.

We cannot offer any fully satisfying way to assess accuracy in the first sense. Every effort to interpret responses to subjective questions runs up against the generic problem that a researcher cannot directly observe a respondent's thinking. We do judge the pattern of responses to be reasonable. The findings presented in Section III indicate that respondents are willing to answer the questions and do so in more than a perfunctory manner. The findings in Section IV make sense to us—the positive intra-person association among the subjective probabilities of the three events, the close correspondence of the risk perceptions of males and females, the decline in insecurity with schooling, the substantial difference in the risk perceptions of white and black males, and the qualitative similarity of the SEE and GSS job-loss findings.

Perhaps the cleanest way to assess the objective accuracy of elicited expectations is to reinterview respondents a year later, learn about their experiences during the year, and compare the realized events with the expectations elicited a year earlier. Such comparisons are straightforward if one is willing to assume that realized events are statistically independent across respondents. In this vein, Dominitz (1997) uses a 1-year follow-up to the 1993 version of SEE to assess the objective accuracy of respondents' earnings expectations.

Respondents to the 1994 and 1995 version of SEE have not been re-contacted, and so we cannot use this approach to assess the objective accuracy of their elicited risk perceptions. We can, however, assess objective accuracy by comparing the expectations elicited in 1994 to the realizations reported by members of the same group in 1995.

All SEE respondents were asked these three questions: (1) realized health insurance: do you have any health insurance coverage? (2) realized burglary: during the past 12 months, did anyone break into or somehow illegally get into your home and steal something? (3) realized job loss: have there been any times during the past 12 months when you did not have a job and were looking for work? The first two questions elicit realizations of the same events about which the expectations questions ask. The job-loss question, which is in the WISCON core, does not correspond quite as well to the expectations question.¹²

Suppose that the realizations of health insurance, burglary, and job loss are statistically independent across respondents. Subject to this assump-

12. The comparison is appropriate under the following two conditions: (1) all unemployed job seekers over the past 12 months have lost a job rather than left one voluntarily or recently entered the labor force and (2) all job losers over the past 12 months have spent some time as unemployed job seekers and did not exit the labor force. Should condition (1) fail to hold, then we would overstate the fraction of the labor force with realized job losses. Should condition (2) fail to hold, then we would understate the fraction with realized job losses.

tion, we can assess the objective accuracy of elicited risk perceptions by comparing population mean subjective probabilities reported in 1994 with corresponding realized rates of occurrence reported in 1995. Table 6 presents this comparison using data from the 1,036 labor force participants in 1994 and the 1,024 labor force participants in 1995.¹³

We find that expectations and realizations of health insurance match up quite closely in most respects. Among men, the mean subjective probability of having no health insurance in 1995 is .15 and the realized fraction without insurance in 1995 is identically .15. Among women, the mean subjective probability is .16 and the realized fraction is .13. The close correspondence between expectations and realizations largely persists when the labor force is disaggregated into more refined subpopulations. Discrepancies that are both sizeable and statistically significant are found only for persons age 50–64. Both males and females in this age group tend to overpredict the event of having no health insurance next year.

Expectations and realizations of job loss also match up closely in most respects, notwithstanding that the expected and realized job-loss questions differ somewhat in the event of interest. Among men, the mean subjective probability of job loss is .15 and the realized fraction losing jobs is .18. Among women, the mean subjective probability is .21 and the realized fraction is .18. Disaggregation of the labor force by schooling and race does not yield any sizeable, statistically significant discrepancies between expectations and realizations. Disaggregation by age, however, reveals an intriguing deviation between expectations and realizations common to both males and females: mean subjective probabilities of job loss do not vary systematically by age, but the realized fraction of persons losing jobs declines substantially with age.

The picture is quite different with respect to crime victimization. Whereas the main sense of the health insurance and job-loss findings is that expectations and realizations match closely (with the exception of the age pattern for job loss), there is a pervasive tendency of respondents to overpredict the risk of burglary. Among men, the mean subjective probability of burglary is .16 and the realized fraction of burglary victims is .05. Among women, the mean subjective probability is .17 and the realized fraction is .03. Discrepancies of this order of magnitude show up across the board, in every age, schooling, and racial group, among both males and females.

Our striking findings on crime victimization corroborate the conven-

13. The 1994 and 1995 samples have similar demographic and schooling compositions. The main differences are that the 1995 sample has a somewhat higher fraction of males with bachelor's degrees (.20 vs. .16), a higher fraction of white males (.43 vs. .40), and a smaller fraction of females age 18–34 (.17 vs. .21).

tional wisdom that Americans perceive crime to be far more prevalent than it actually is (see Bursik and Grasmick 1993, chap. 4). We cannot, however, offer any compelling rationale for the phenomenon. It has often been suggested that media reporting of crime distorts perceptions of the risk of victimization, but Warr (1980) concludes that empirical evidence of this is lacking. In personal communications, some researchers have suggested that persons tend to be pessimistic about the likelihood of traumatic events. Yet we find no tendency towards pessimism with regard to other adverse events—job loss and lack of health insurance—that arguably are as traumatic as burglary.

As we see it, explanation of the associations between expectations and realizations that we find in the SEE data requires serious efforts to understand the process by which persons form expectations about various events. The SEE data reveal only what expectations people have, not how they form those expectations. There is a need to join data of the type collected in SEE with data revealing the information sources people utilize and how they transform the available information into expectations.

VI. Conclusion

This study has presented evidence on American perceptions of personal, near-term economic insecurity during 1994 and 1995. Our method of measuring insecurity differs substantially from standard survey methods, but it does have elements in common with a series of recent studies in the United States and in Europe. Our empirical findings encourage us to think that elicitation of subjective probabilities of well-defined adverse outcomes offers a very promising approach for monitoring the risk perceptions of the population. We do not, however, assert that the specific procedures used in SEE are the best possible. The elicitation method, choice of outcomes, and measurement of concentration of insecurity are three subjects deserving further consideration.

We would also like to assess the effects of insecurity on behavior. Economic theory suggests that income risk induces individuals to increase savings, thereby decreasing consumption. Perceived risks of crime victimization may cause individuals to take precautions in their daily activities. Risks to health insurance coverage may keep workers from switching jobs, yielding the phenomenon of “job lock.” Economic insecurity may also adversely affect an individual’s mental or physical health (see Catalano 1991). To understand how insecurity affects behavior, it will be necessary to join data on risk perceptions with data on the risk-related choices that people make.

Table 6. Expectations in 1994 and Realizations in 1995

| | No Health Insurance | | Victim of Burglary | | Job Loss | |
|--------------------|---------------------|--------------|--------------------|--------------|--------------|--------------|
| | Expected | Realized | Expected | Realized | Expected | Realized |
| Male | .15 (.01) | .15 (.02) | .16 (.01) | .05 (.01) | .15 (.01) | .18 (.02) |
| Age: | | | | | | |
| 18–34 | .18 (.02) | .23 (.03) | .16 (.01) | .09 (.02) | .15 (.02) | .29 (.03) |
| 35–49 | .14 (.02) | .14 (.02) | .16 (.01) | .03 (.01) | .15 (.02) | .14 (.02) |
| 50–64 | .10 (.02) | .03 (.02) | .16 (.03) | .02 (.02) | .12 (.03) | .07 (.03) |
| 65 + | .09 (.07) | .00 (.00) | .14 (.05) | .03 (.04) | .14 (.07) | .09 (.07) |
| Education: | | | | | | |
| No postsecondary | .20 (.03) | .30 (.04) | .23 (.02) | .06 (.02) | .18 (.02) | .25 (.04) |
| Some postsecondary | .16 (.02) | .16 (.03) | .16 (.01) | .08 (.02) | .14 (.02) | .17 (.03) |
| Bachelor degree | .09 (.02) | .06 (.02) | .10 (.01) | .03 (.01) | .13 (.02) | .16 (.03) |
| Race: | | | | | | |
| White | .14 (.01) | .13 (.02) | .14 (.01) | .04 (.01) | .14 (.01) | .17 (.02) |
| Black | .28 (.05) | .15 (.07) | .37 (.05) | .14 (.06) | .24 (.05) | .24 (.08) |

| | | | | | | |
|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Female | .16 (.01) | .13 (.02) | .17 (.01) | .03 (.01) | .21 (.01) | .18 (.02) |
| Age: | | | | | | |
| 18-34 | .17 (.02) | .21 (.03) | .17 (.01) | .04 (.02) | .25 (.02) | .27 (.03) |
| 35-49 | .16 (.02) | .09 (.02) | .16 (.01) | .03 (.01) | .18 (.02) | .17 (.03) |
| 50-64 | .14 (.03) | .05 (.02) | .15 (.02) | .02 (.02) | .17 (.03) | .06 (.03) |
| 65 + | .02 (.01) | .05 (.05) | .19 (.05) | .00 (.00) | .24 (.08) | .06 (.05) |
| Education: | | | | | | |
| No postsecondary | .17 (.02) | .17 (.04) | .15 (.02) | .04 (.02) | .23 (.03) | .21 (.04) |
| Some postsecondary | .17 (.02) | .16 (.02) | .18 (.01) | .02 (.01) | .21 (.02) | .20 (.03) |
| Bachelor degree | .12 (.02) | .05 (.02) | .16 (.01) | .03 (.01) | .19 (.02) | .13 (.03) |
| Race: | | | | | | |
| White | .15 (.01) | .12 (.02) | .16 (.01) | .03 (.01) | .20 (.02) | .16 (.02) |
| Black | .15 (.03) | .16 (.06) | .22 (.03) | .07 (.04) | .21 (.04) | .33 (.08) |

NOTE.—The estimates for 1994 and 1995 are based on the 1,036 and 1,024 SEE respondents in the labor force in those years. Standard errors are in parentheses.

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