Dimensions of vulnerability

On June 8, 1934, the President sent to Congress a special message giving notice that in January 1935 he would present for its consideration a series of proposals intended to ward off in future years the corroding insecurity which economic collapse had made evident. The time was ripe for more positive and systematic programs for the prevention *of poverty than the American people would have thought necessary five years before.*

J. Douglas Brown[1]

For all the defects of the Act, it still meant a tremendous break with the inhibitions of the past. The Federal government was at last charged with the obligation to provide its citizens a measure of protection from the hazards and vicissitudes of life.

Arthur M. Schlesinger, Jr.[2]

The legislation referred to is, of course, the Social Security Act of 1935, the foundation of our present social welfare system. Extremely controversial at the time, it marked a fundamental change in the relationship between government and the well-being of its citizens, for it permanently committed the federal government to make cash payments to individuals who faced economic adversity.[3] The controversial question addressed by the act was, and remains: Where should the line be drawn between personal and public responsibility for protection against economic uncertainty? A recent policy forum at the Institute took a fresh look at this subject. Its presentations (see box, p. 12) explored areas of vulnerability in our society today, a half century after enactment of this landmark legislation.

In his opening remarks Charles Manski, IRP Director, stated that the objective of the forum was to encourage new thinking on economic insecurity and its consequences. He identified four particular topics that deserve investigation.

- *Multiple risks.* The usual practice is to examine dimensions of vulnerability one by one: health risks, or job insecurity, or precarious financial standing through lack of access to loans. Manski suggested that we move a step further by asking how these dimensions interact within a household and by identifying which people are vulnerable to multiple risks.
- *The effect of uncertainty on behavior.* An individual's sense of well-being and present behavior depend not only on that person's current condition but also on expectations regarding the future. We know little, Manski asserted, about how people cope with insecurity, particularly when social or private insurance is unavailable. Uncertainty can influence important life-course decisions, including educational, occupational, and family choices.
- *The effect of public programs.* We lack understanding of how to evaluate the worth of public programs that seek to reduce insecurity. One cannot measure the value of a program by simply observing who receives benefits, for a social insurance system has value in the potential benefits that it offers to those who never use the system but are protected by it.
- *Measurement.* Although the nation has invested heavily in the regular measurement of current social problems, Manski noted that we do not have in place any system of statistics to monitor the likelihood of future problems. Development of a system of vulnerability statistics could provide "leading indicators" of future problems, much as our current economic indicators inform us as to the health of the nation's economy.

The speakers that followed each touched in varying ways on particular aspects of these topics. Some of the presentations were based on ex post (or after-the-fact) evidence. Greg Duncan, for example, used the record of the past to portray income changes over the life cycle, as did Peter Gottschalk to examine volatility in earnings. Others used ex ante (before-the-fact) evidence to assess the ability of individuals to deal with future misfortune. Karen Holden and Timothy Smeeding, for example, measured the potential of the elderly to cope with unexpected physical and economic setbacks; John Karl Scholz and Nancy Maritato gauged income security among young families; and Barbara Wolfe examined the capacity of single-mother families to cope with health-threatening events.

The forum marked the inauguration of IRP work on the subject of vulnerability. As this project progresses, it will receive further attention in the pages of *Focus*. Meanwhile, to provide a sample of approaches to the topic, two of the presentations, one dealing with ex post evidence and the other with ex ante circumstances, have been selected for description here, along with a discussant's comments that have particular bearing on public policy.

The life-cycle view

Greg Duncan drew on data from the Michigan Panel Study of Income Dynamics, which has since 1968 followed the fortunes of five thousand families representative of the U.S. population. With this information he analyzed the nature of income losses and their relation to various life events experienced by the family members over the decade of the 1970s. A surprising degree of volatility in family incomes was revealed: nearly one-third of the households experienced a 50 percent drop at least once during the decade. Most of these losses were not anticipated, according to respondents' own reports; most were not the results of voluntary events, such as retirement; and more women than men were affected by them.[4]

Duncan also reported on another study, coauthored with Richard Burkhauser, which followed the same lines of inquiry with PSID data for the period 1974–83.[5] The authors first grouped men and women into ten-year age cohorts based on their ages in 1974, and then measured income levels and changes during the ensuing decade. The results are presented in Table 1. The first column shows, as might be expected, that family incomes rose during prime earning years and declined in retirement years. The second column indicates that the ratio of average family income of women to that of men fell substantially over the life cycle, a decline that can be attributed to the increasing proportion of women without spouses who head their own households as they age. Column 3 displays income-to-needs ratios, which take into account family size; they demonstrate that the older

Table 1

Average Family Income, Income-to-Needs Ratio, and Percentage Experiencing Drops in Income-to-Needs Ratio between 1974 and 1983

	Family Income		Family Income/Needs Ratio		Percentage with Drop in Income/Needs Ratio			
Age in 1974	1974–83 Average (thousands of 1985 $) (1)	Ratio of Women to Men (2)	1974–83 Average (3)	Ratio of Women to Men (4)	Falling by 50% or More at Least Once (5)	Ratio of Women to Men (6)	Falling by 50% or More and to a Level of 1.5 Poverty Line or Less (7)	Ratio of Women to Men (8)
26–35 years old								
Women	39.3	1.03	4.0	0.98	28%	1.27	18%	1.50
Men	38.1		4.1		22		12	
36–45 years old								
Women	43.1	0.91	4.4	0.92	26	1.23	17	1.55
Men	47.2		4.8		21		11	
46–55 years old								
Women	35.6	0.78	4.6	0.88	34	1.36	16	1.33
Men	45.4		5.2		25		12	
56–65 years old								
Women	23.5	0.79	3.6	0.84	31	0.97	17	1.21
Men	29.8		4.3		32		14	
66 or more years old								
Women	15.8	0.72	2.6	0.87	26	0.83	17	0.94
Men	21.9		3.0		31		18	

Source: Richard V. Burkhauser and Greg J. Duncan, "Economic Risks of Gender Roles: Income Loss and Life Events over the Life Course," *Social Science Quarterly*, 70, no. 1 (1989), 3–23. Reprinted with permission from the University of Texas Press. Data from the Panel Study of Income Dynamics.

Note: The sample is restricted to individuals who were present in the sample every year between 1975 and 1984 and is weighted by the 1984 individual weight.

groups were somewhat better off than family income alone would indicate, because as households are emptied of children, who mature and leave, fewer people remain to share the income. Women, however, were still consistently worse off than men (column 4) under this income-to-needs measure.

The rest of the table describes income losses, first estimating the proportion of persons whose income-to-needs ratios dropped by half or more at least once in the ten-year period. A large fraction, over one-quarter of all groups except men aged 26–45, were so affected; for most, the incidence was close to one-third.

To focus on cases in which such drops resulted in privation, column 7 shows the proportion of persons whose income loss brought them to within 150 percent of the poverty line. These experiences were less frequent, but still surprisingly widespread. The gender ratios (columns 6 and 8) underline the fact that at most ages women face higher risks of income loss than men, and that the risk to women of poverty-threatening declines in well-being is fairly constant across their life span, whereas for men it increases with age.

The authors then correlated these sharp declines in incomes with nine types of demographic and labor market events. Table 2 displays these results for the years 1968 through 1983.

The events clearly pose quite different risks of income loss to men and to women over a lifetime. Divorce or separation is prominently associated with economic adversity among

Table 2

Percentage of Various Life Events Associated with Decreases in Income-to-Needs Ratio of 50 Percent or More, 1968–1983

	Family Composition Events				Labor Market/Health Events				
Age in Year Prior to the Event	Divorce/ Separation of Spouse	Death of Spouse	Birth of Child to Head	Departure of Other Family Members	Major Reduction in Work Hours of Head Due to Retirement or Disability	Major Unemployment of Household Head	Major Work Loss Due to Illness of Head	Fall in Work Hours of Wife	Large Decrease in Asset Income
26–35 years old									
Women	23%	12%[a]	4%	5%	28%[b]	11%	7%	5%	2%[b]
Men	4	–	1	6	32[a]	9	7	4	2[b]
36–45 years old									
Women	12	11[a]	6	3	12	7	3	4	2
Men	4	–	3	1	11[b]	8	4	4	1
46–55 years old									
Women	15[b]	14[b]	8[a]	1	12	7	3	5	3
Men	6[b]	0[a]	4[a]	1	16	6	3	4	3
56–65 years old									
Women	–	8	–	7	10	4[b]	4	4	8
Men	–	5[a]	–	2	8	10[b]	3	6	2
66 or more years old									
Women	–	7	–	19[b]	13[b]	–	0[a]	–	13
Men	–	8[b]	–	6[b]	7[b]	–	0[a]	2[b]	10

Source: Richard V. Burkhauser and Greg J. Duncan, "Economic Risks of Gender Roles: Income Loss and Life Events over the Life Course," *Social Science Quarterly*, 70, no. 1 (1989), 3–23. Reprinted with permission from the University of Texas Press. Data from the Panel Study of Income Dynamics.

Note: Decreases in income-to-needs ratio of 50 percent or more are restricted to those for which the final level of income-to-needs ratio was 1.5 or less. The sample is restricted to individuals present in sample households during the three-year period over which the life event is measured. The data are weighted by the individual weight in the most recent of the three years. Empty cells (denoted "–") represent categories with fewer than 25 instances of the event.

[a] Estimate is based on 25–49 instances of the event.

[b] Estimate is based on 50–99 instances of the event.

young and middle-aged women. Death of a spouse is a weaker but still distinguishable link to decline in well-being. The birth of a child has less association with income loss—perhaps, the authors suggest, because births are more likely to be planned events, whereas divorce or death of a spouse is much less predictable.

Among labor market changes, disability has the strongest association with income loss among young heads of household, but it is an event much less likely to occur (as the authors found in separate calculations) than the other work-related experiences. Large losses of asset income are more often associated with sharp declines in well-being among the oldest age group.

Duncan underlined the gravity of the fact that, overall, one-quarter of the studied population suffered at least one large income loss in a decade. Moreover, these losses were not often linked with predictable life-course events such as giving birth or retiring from work. His conclusion was that whereas, on average, incomes and living standards rise until retirement and then gradually decline, the average masks severe declines in well-being for a substantial minority of the population at every point in the life cycle, and women run a much higher risk than men of experiencing such declines.

The vulnerability of the elderly

Karen Holden and Timothy Smeeding described the precarious circumstances of particular groups within the elderly population.[6] In place of standard measures of well-being that look mainly at current income and assets, they employed measures of adequacy—ex ante conditions: "The most volatile potential sources of economic insecurity for the elderly concern the adequacy of their health insurance vis-à-vis their health condition and the adequacy of their incomes and assets to meet potential but uninsured exigencies" (pp. 192–193). Five dimensions of vulnerability were defined. Data from the 1984 Panel of the Survey of Income and Program Participation (SIPP) were used to determine the extent of vulnerability among three economic strata within the elderly population: the poor,[7] the lower middle class, and the middle and upper class. The five areas of vulnerability follow.

1. Medicare as the only subsidy for costs of acute health care.

Holden and Smeeding underscored the importance of having resources other than Medicare to pay for health needs by noting that in 1984 Medicare paid less than 44 percent of total health care outlays of the elderly. To fill the gap, Medicaid is available for the very poor, veterans assistance is available to those who qualify, and employer-based health insurance is available for those fortunate enough to have such coverage. The proportion of all elderly persons

IRP Public Policy Forum:
"Dimensions of Vulnerability:
Economic Insecurity within the U.S. Population"

September 21-22, 1990

Welcome and Introduction
Charles F. Manski, Director, IRP

Economic Insecurity over the Life Cycle
Greg Duncan, Institute for Social Research, University of Michigan

Discussant: Robert Haveman, La Follette Institute of Public Affairs, University of Wisconsin-Madison

Wage Inequality and the Vulnerability of Young Workers
Peter Gottschalk, Department of Economics, Boston College

Discussant: Glen Cain, Department of Economics, University of Wisconsin-Madison

Discussion of the repercussions of economic policies in the 1980s and implications for the 1990s
David Obey, U.S. Congress

Economic Insecurity among the Elderly
Timothy Smeeding, Maxwell School of Citizenship and Public Affairs, Syracuse University
and
Karen Holden, School of Family Resources and Consumer Sciences, University of Wisconsin-Madison

Discussant: Michael Hurd, Department of Economics, State University of New York at Stony Brook

Dimensions of Vulnerability: Young Families
John Karl Scholz and Nancy Maritato, Department of Economics, University of Wisconsin-Madison

Discussant: Gary Sandefur, Department of Sociology, University of Wisconsin-Madison

Health Care for the Vulnerable: Rural Residents, the Low-Income Uninsured, and Those Requiring Long-Term Care
Barbara Wolfe, Departments of Economics and Preventive Medicine, University of Wisconsin-Madison
and
David Kindig, Department of Preventive Medicine, University of Wisconsin-Madison

Discussant: Linda Reivitz, Department of Preventive Medicine, University of Wisconsin-Madison who lacked any subsidized health insurance beyond Medicare was 42 percent. Among the elderly poor, 28 percent lacked other resources, as did 51 percent of the near poor and 40 percent of the middle and upper class. Those in the last category may have sufficient funds to pay the extra amount needed for health care expenses, but the near poor seem to be at severe economic risk when they require medical care.

2. Insufficient financial resources to pay for two years (the median length of stay) in a long-term care facility.

Holden and Smeeding identified as "vulnerable" those elderly persons who were at risk of having virtually all of their assets wiped out by a nursing-home stay of two years (the median length of stay). Single persons were considered at risk if all assets (including their home) were insufficient to cover this cost. Married couples were considered at risk if the cost of nursing-home care for one spouse would leave insufficient assets to cover a two-year stay in a nursing home for the other spouse. In this vulnerable category were 26 percent of the elderly poor, 36 percent of the near poor, and 16 percent of the middle and upper class. Overall, 23 percent of the elderly were in this category.

3. Ineligibility for Supplemental Security Income (SSI) even if all income except social security benefits should cease.

Although receipt of social security benefits (Old Age and Survivors Insurance, OASI) would seem to confer a degree of economic security, the authors noted that in some cases beneficiaries have just enough OASI to keep them above eligibility for SSI (which brings with it eligibility for Medicaid), but lack any other resources to draw upon in case of unexpected income needs. The investigators identified those at risk on three counts: social security constituted more than 65 percent of their income; they had no earnings; and they were not eligible for SSI. This group constituted 26 percent of all the elderly, 34 percent of the poor, 54 percent of the near poor, and 10 percent of the remainder.

4. Housing costs as a percentage of income beyond an acceptable maximum.

The elderly facing very high housing costs were defined as those who paid more than 33 percent of income on housing and had little housing equity. Overall, 19 percent of the elderly were in this at-risk population; as were 35 percent of the elderly poor, 24 percent of the near poor, and 13 percent of the remaining income groups.

5. Experiencing one or more physical disabilities that require assistance in daily living activities.

Physical vulnerability, meaning the need for assistance in performing one or more of three daily tasks—getting in and out of bed, preparing meals and doing housework, and taking care of such essential needs as eating, dressing, and performing personal hygiene—constituted the last risk category. Sixteen percent of the elderly had at least one of these conditions; of the poor, 24 percent did so; of the near poor, 20 percent; of the middle and upper class, 13 percent.

Holden and Smeeding then calculated the multiple incidence of these five types of vulnerability. Elderly persons subject to two or more of the five they deemed "insecure"; those facing three or more were considered "extremely insecure." The insecure made up 35 percent—one in three—of all the elderly; 43 percent of the poor; 61 percent—two out of three—of the near poor; and 21 percent of the middle and upper class. Fourteen percent of all the elderly could be classified as extremely insecure: 23 percent of the poor, 28 percent of the near poor, 6 percent of the remainder.

The near poor are more likely than the elderly as a whole to belong in one of the following categories: female, disabled,

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Unsigned articles written by Elizabeth Evanson and E. Uhr. Edited by E. Uhr.

over 75, or unmarried. Because they were clearly so much more vulnerable than the groups above and below them on the income scale, the authors ended by recounting the extent of their insecurity: 75 percent were at risk owing to dependence on social security, 70 percent lacked insurance for acute health care, 57 percent lacked adequate ability to pay for long-term care, 32 percent faced unduly high housing costs, and 24 percent had disabilities requiring high costs of daily living.

The concept of vulnerability and its policy implications

Robert Haveman augmented the discussion of vulnerability by turning attention to considerations beyond income loss alone.[8] Also relevant, he stated, are the different abilities of individuals to adjust to or recover from income shocks and the degree to which the events causing the loss can be anticipated or predicted. For example, although Duncan demonstrated (Table 1, col. 7) that young women face a higher risk of poverty-threatening income losses than all others, with the exception of old men, such women may have advantages—youth, recent labor market experiences, parental resources—permitting them to recover more easily than other groups. And men who experience income losses may suffer to a greater extent than women in nonmonetary terms from loss of status as breadwinners or as parental role models.

Both individuals and government, in Haveman's view, can take action to reduce income variability and to mitigate the loss of well-being from drops in income. Individuals can endeavor to make choices that balance returns and risks; they can acquire information that makes income variability more predictable or less difficult to adjust to; they can make investments to enable smoother adjustment or recovery; and they can purchase insurance to buffer the effects of remaining risks. To the extent that insecurity still persists in our imperfect world, however, a role remains for public policy intervention.

Haveman offered guidelines, in the form of questions, to judge when the public sector should play a role. Are the income losses due to involuntary events? Can the losses be anticipated? Is private insurance available to protect against the loss? Does the private market compensate for choices that entail higher probabilities of income losses (e.g., higher wages for physically high-risk occupations)? Does the individual have the resources for self-protection against the income loss? Does the provision of social protection against the loss induce adverse behavioral responses (e.g., family breakup or undue reduction in work effort)? Does the income loss carry with it additional undesirable side effects (loss of self-esteem, reduced parenting abilities)?

The guidelines led Haveman to several policy conclusions. First, considerations of predictability, avoidance, affordability, and insurability all point to a need for social insurance to protect children, who cannot take protective measures unaided. Universal public health insurance for children as well as a universal child support system with an assured benefit would seem to have merit. And for adults, social policies to protect against income loss need not always take the form of insurance. Alternative measures might include providing information (about savings plans for retirement, to take one example) so that individuals can make more informed choices; and subsidizing human capital investment, to increase economic security as well as knowledge. Even though, Haveman noted, one could scarcely imagine a public insurance program to cover divorce or abandonment and thereby protect the group that Duncan found so vulnerable, one could envision social measures to enhance women's income security: encouragement of norms in support of women's market work; more equal division of assets and child care responsibilities in the event of divorce; investment of resources in employment training for women.

Future directions of inquiry

Over the course of the two-day forum the points contained in Charles Manski's introductory remarks were taken up in discussions accompanying each presentation. Two examples follow.

The Effect of Uncertainty on Behavior. This topic received attention in reference to those at either end of the life cycle: the elderly, and children. Timothy Smeeding listed some of the socially undesirable behavior patterns that might result from the vulnerability of the insecure elderly. Asset hiding was one—to gain eligibility to such safety-net programs as Supplemental Security Income. Another was excessive and overlapping purchase of private "Medigap" policies to pay for deductibles and coinsurance. Or, other elderly persons might deliberately choose to live in uncomfortable circumstances, skimping on daily needs to harbor resources in case a costly health disaster might strike. Designers of social policies need firm information on such behavior in order to temper its effects.

Duncan's portrayal of income variability over the life cycle raised the question of its effects on children who grow up in the households afflicted with this form of uncertainty. Does it multiply the risks they face, denying them fair life chances? To what extent does it reduce their educational prospects and hence occupational opportunities? Will it make them less likely to form and maintain the stable personal relationships, including marital ones, that are needed for the well-being of their own children?

Measurement and Social Indicators. Duncan noted that longitudinal data sets are now beginning to provide us with cumulative information on personal experiences over a number of years. These data offer promise of analyses that can disentangle different types of vulnerability—the risks associated, for example, with living in a particular neighborhood or household type as opposed to those associated solely with a particular level of income. A new frontier of empirical analysis may thus be opening up, permitting more accurate identification of the different risks faced by individuals in contemporary society and, perhaps, also facilitating construction of a system of social indicators of problems to be faced in the future.

These, among other comments offered during the forum, indicate that the topic of vulnerability offers a rich agenda for future research. ■

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[1] *An American Philosophy of Social Security* (Princeton: Princeton University Press, 1972), p. 5.

[2] *The Coming of the New Deal* (Boston: Houghton Mifflin, 1958), p. 315.

[3] See, in addition to the works cited above, Arthur J. Altschuler, *The Formative Years of Social Security* (Madison: University of Wisconsin Press, 1966), Chap. 1; Michael E. Schiltz, *Public Attitudes toward Social Security, 1935–1965* (Washington, D.C.: GPO, 1970), pp. 10–14.

[4] Duncan, "The Volatility of Family Income over the Life Course," in *Life-Span Development and Behavior*, Vol. 9, ed. Paul B. Baltes, David L. Featherman, and Richard M. Lerner (Hillsdale, N.J.: Lawrence Erlbaum Associates, 1988).

[5] Duncan and Burkhauser, "Economic Risks of Gender Roles: Income Loss and Life Events over the Life Course," *Social Science Quarterly*, 70 (March 1989), 3–23.

[6] Holden and Smeeding, "The Poor, the Rich, and the Insecure Elderly Caught in Between," *Milbank Quarterly*, 68, no. 2 (1990), 191–219. Also available as IRP Reprint no. 637.

[7] Holden and Smeeding used a "welfare ratio"—i.e., ratio of money income plus food stamps to the official poverty threshold; a ratio of one or less was considered poor; between 1.0 and 2.0, near poor or lower middle class; over 2.0, middle and upper class.

[8] Haveman's remarks were contained in his comment on Greg Duncan's presentation.