





## Assessing the Impact of Severe Economic Recession on the Elderly: Summary of a Workshop


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# ASSESSING THE IMPACT OF SEVERE ECONOMIC RECESSION ON THE ELDERLY

Summary of a Workshop

Malay Majmudar, *Rapporteur*

Steering Committee on the Challenges of Assessing the Impact of  
Severe Economic Recession on the Elderly

Committee on Population

Division of Behavioral and Social Sciences and Education

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## Acknowledgments

Although the effects of a severe economic recession can be felt by many segments of society, some groups are potentially more vulnerable than others. Older Americans represent one such group because they face significant challenges not only in adjusting their labor market participation, but also in their limited ability to alter their consumption or savings patterns.

Given the severe nature of the 2008 economic collapse, particularly in the housing market and the stock market, and given that growing numbers of Americans are nearing retirement age, the National Institute on Aging (NIA) requested the Committee on Population convene a workshop to assess the effects of severe economic recession on the elderly.

This project would not have been possible without the help of a number of people. I would particularly like to acknowledge the role played by the members of the steering committee, particularly the chair, Duncan Thomas. The steering committee played a primary role in organizing the workshop and shaping its intellectual content, although institutional procedures precluded them from participating in the writing of this workshop summary. Special thanks also go to Richard Suzman, director of the Division of Behavioral and Social Research at NIA, for providing essential support and encouragement.

Several staff members at the National Research Council (NRC) made significant contributions to the report: Malay Majmundar helped organize the workshop and served as rapporteur for this workshop summary, Danielle Johnson-Bland provided logistical support, Christine McShane edited the document, and Yvonne Wise managed the production process.



This workshop summary has been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise, in accordance with procedures approved by the Report Review Committee of the NRC. The purpose of this independent review is to provide candid and critical comments that will assist the institution in making its products as sound as possible and to ensure that the report meets institutional standards for objectivity, evidence, and responsiveness to the charge. The review comments and draft manuscript remain confidential to protect the integrity of the process. We thank the following individuals for their review: M. Harvey Brenner, School of Public Health, University of North Texas; Andrew D. Foster, Department of Economics, Brown University; and Brigitte Madrian, John F. Kennedy School of Government, Harvard University.

Although the reviewers listed above provided many constructive comments and suggestions, they were not asked to endorse the content of the report nor did they see the final draft of the report before its release. The review of this report was overseen by David Lam, Department of Economics and Population Studies Center, University of Michigan, Ann Arbor. Appointed by the NRC, he was responsible for making certain that an independent examination of this report was carried out in accordance with institutional procedures and that all review comments were carefully considered. Responsibility for the final content of this report rests entirely with the author and the institution.

Barney Cohen, *Director*  
Committee on Population

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# Assessing the Impact of Severe Economic Recession on the Elderly

## INTRODUCTION

The economic crisis and recession that began in 2008 has had a significant impact on the well-being of certain segments of the population, and its disruptive effects can be expected to last well into the future. The National Institute on Aging (NIA), concerned with this issue as it affects the older population in the United States, asked the National Research Council to review existing and ongoing research and to delineate the nature and dimensions of potential scientific inquiry in this area.

The Committee on Population thus established the Steering Committee on the Challenges of Assessing the Impact of Severe Economic Recession on the Elderly to convene a meeting of experts to discuss these issues. The primary purpose of the workshop, held at the National Academies on June 10-11, 2010, was to help NIA gain insight into the kinds of questions that it should be asking, the research that it should be supporting, and the data that it should be collecting.

Workshop participants considered the impact of the recession on the well-being and behavior of older adults, as well as implications for the rest of the population; potential research questions raised by the current recession and, going forward, recessions more generally; measurement and methodological challenges that confront scientific inquiry in this area; the potential for innovative research design; and future data collection efforts. Attendees included invited experts in the fields of economics, sociology, and epidemiology; staff from NIA and the U.S. Social Security Administration (SSA); and staff from the National Academies.

This report highlights the major issues that were raised in the workshop presentations and discussion. The workshop agenda and roster of participants are included in the Appendix.

It is important to be specific about the nature of this report, which documents the information presented in the workshop presentations and discussions. The report is confined to the material presented by the workshop speakers and participants, and its purpose is to lay out the key ideas that emerged from the workshop. Neither the workshop nor this summary is intended as a comprehensive review of what is known about the topic, although it is a general reflection of the field. The presentations and discussions were limited by the time available for the workshop; a more comprehensive review and synthesis of relevant research knowledge would have to await further development.

This report was prepared by a rapporteur and does not represent findings or recommendations that can be attributed to the steering committee. Rather, the report summarizes views expressed by workshop participants, and the committee is responsible only for its overall quality and accuracy as a record of what transpired at the workshop. Furthermore, the workshop was not designed to generate consensus conclusions or recommendations but focused instead on the identification of ideas, themes, and considerations that contribute to a better understanding of the issues.

### THE ECONOMIC CRISIS NOW AND IN HISTORICAL PERSPECTIVE

Three workshop presentations provided context for the current situation. In the first presentation, Carmen Reinhart observed that the current economic crisis has affected developed economies, including those of the United States, Europe, and Japan, in a way that has not been seen since World War II. International experience indicates that severe financial crises are protracted affairs and that not all markets recover at an equal pace. Historically, declines in housing and equity prices in the aftermath of a financial crisis have been long-lived, lasting on average for 6 years and 3.4 years, respectively. In addition, Reinhart reported that typically it takes, on average, 4 years for per capita income to recover to precrisis levels, whereas unemployment rates typically continue to increase for a period of nearly 5 years. Financial crises are also usually debt crises: they are typically preceded by surges in private debt, and, in the 3 years following a financial crisis, government debt nearly doubles on average as revenues shrink and fiscal finances deteriorate (Reinhart and Rogoff, 2009).

In the next presentation, Susann Rohwedder presented findings from the RAND American Life Panel (ALP), a nationally representative longitudinal survey that is conducted over the Internet and can collect data with

high frequency. High-frequency interviews have the advantage of capturing certain events that are more likely to be missed in low-frequency surveys (e.g., short spells of unemployment, spells without health insurance), and they can also track variation in measures that cannot be easily or reliably elicited by means of recall (e.g., expectations, mood and affect, satisfaction in certain domains). During 2008-2009, ALP surveys were conducted every 3 months in November, February-March, and May. Since then, shorter monthly surveys have supplemented the longer ones conducted every three months.

Rohwedder reported that households surveyed by the ALP were regarded as having experienced “immediate financial distress” if they experienced at least one of the following: being behind on mortgage payments, having negative home equity, having to foreclose on a property, or either the respondent or the spouse being unemployed. A total of 36 percent of households experienced this form of financial distress between November 2008 and April 2010, with younger households and those with lower incomes being more affected.

Losses in retirement savings, predominantly in the stock market, disproportionately affected the older and higher income population. The younger population, however, was more adversely affected by the housing downturn: in April 2010, 15.1 percent of homeowners younger than age 50 had negative home equity, compared with 6.6 percent of those ages 50-64 and 4.0 percent of those ages 65 and older.

Rohwedder indicated that according to data collected between May 2009 and January 2010, the most common way of coping with income loss due to unemployment was through reductions in spending (89 percent of households), followed by reductions in the amount of money put into savings (50 percent of households). The sources that most commonly made up for lost income were unemployment benefits (39 percent of households), money from savings (35 percent of households), financial help from family or friends (28 percent of households), and borrowed money or credit card debt (22 percent of households). Transitioning from employment to unemployment increased the likelihood of dissatisfaction, depressive symptoms, and difficulties in sleeping, while transitioning from unemployment to employment had opposite effects. One important research topic has to do with improving the understanding of the long-term consequences of these events.

The ALP also contains information on people’s expectations about the future. Survey respondents were asked about the subjective probability of a gain in the stock market both a year from now and 10 years from now. From November 2008 through May 2010, there was a modest increase in people’s 1-year expectations of a gain but a decline in their 10-year expectations; 1-year expectations of personal job loss also did not improve over this period. Rohwedder also indicated that households ages 65 and older

were consistently less likely than younger households to anticipate declines in spending.

A participant suggested that Hawthorne effects (i.e., effects that result from a person's being under observation), if present in a high-frequency survey such as the ALP, might mean that persistent questioning could cause people to focus on how miserable they are or to behave differently than they would otherwise. Rohwedder responded that the ALP is careful not to directly mention the financial crisis, and that it situates mood and affect measures at the beginning of the survey rather than after questions about experiences such as job loss. With a larger sample size, it may be possible to gain insight into possible survey effects by randomly assigning some people to be interviewed less frequently.

In his presentation, Matthew Shapiro laid out findings from the Cognitive Economic Study, a survey resource whose sample frame mirrors that of the Health and Retirement Study (HRS) but which has more detailed measures of cognition, wealth, and determinants of financial decision making—such as financial sophistication (e.g., knowledge about portfolio diversification), preferences (e.g., risk tolerance), and expectations. Survey rounds were conducted in 2008 and 2009, and there are plans for additional waves in 2011 and 2013.

Preliminary results suggest that there was no panic or systematic dumping of stock among respondents, according to Shapiro, although it is currently unclear whether this should be attributed to farsightedness or to inertia. Using a measure of processing ability known as “fluid intelligence,” researchers found that people in the highest cognition group had significantly more wealth at baseline than those in the lower cognition groups and also experienced greater losses during the crisis. However, those with higher cognition may have been better positioned to make adjustments, which could help explain the absence of a panic response. Shapiro also noted that even those with no financial wealth were greatly affected by the economic crisis in terms of eating less food (both at and away from home) and reducing their purchases of other nondurables; they also said that they were more likely to delay the purchase of a motor vehicle and delay retirement. The mean expected delay in retirement was 5.9 years for those with less than \$10,000 in financial wealth, 4.06 years for those losing less than 10 percent of their wealth, and 3.9 years for those who lost 10 percent or more of their wealth. The relatively large magnitudes of expected delay among those postponing retirement suggest both the severity of the current recession and that economic uncertainty may play an important role.

In the general discussion that followed the presentations, it was noted that most of the subjective probabilities that surveys currently ask about—regarding, for example, work, retirement, and the stock market—were originally developed as part of the HRS in the early 1990s. According to

participants, other types of expectations that could be asked about include expectations of indebtedness, higher taxes, lower public benefits, and lower living standards and lack of prosperity; discrepancies between what people say about retirement and their actual retirement behavior; and the permanency of expectations. One participant indicated that being more leveraged may be tied to expectations of higher volatility in the stock market, since small shocks can have large effects when people are highly leveraged. Another observed that Japan, which has had a severe reduction in expectations about growth even though it has not experienced catastrophic crises, may be a pertinent comparison. It was also suggested that it might be useful to adopt a comparative approach to get a sense of whether people think that they are worse off than, for example, Europeans or the Japanese; at the very least, questions could be broadened to include other individuals as points of comparison.

### MARKETS, EXPECTATIONS, AND PREFERENCES

In the workshop session on markets, expectations, and preferences, Robert Willis spoke about the effects of the stock market decline on the investment expectations of U.S. households. A financial crisis is a natural experiment of rare magnitude, which may affect stock market expectations and could shed light on how people's "mental models" convert public news into personal beliefs. This is especially relevant given the link between expectations and portfolio choice (Kezdi and Willis, 2008). Individual heterogeneity in expectations about asset returns may be important in explaining inequality in wealth (especially among the older population) as well as the portfolio choices and trading behavior of households before and throughout the crisis.

The HRS includes expectation questions about issues such as longevity, inheritance, labor market prospects, retirement, and stock market returns. Respondents to the 2008 wave of the HRS answered the survey during the 12 months from February 2008 to February 2009, a time period that includes the stock market crash in early October. The 2008 wave asked two probability questions about the stock market, which in principle enables researchers to derive both the mean and the uncertainty (variance) of subjective return distributions at the individual level (Hudomiet, Kezdi, and Willis, 2011); it also enables researchers to track their evolution throughout the sample period. In 2009 and 2010, the HRS asked three probability questions of interviewees that allow for more elaborate analysis of expectations. The off-year 2009 survey also contains questions about expectations over a 10-year horizon, which allows long-run effects to be analyzed.

Willis said that expectation questions in the HRS are asked in a subjective probability format and thus include forms of measurement error, such



as excessive rounding and focal answers, and may produce inconsistent answers that contradict the law of probability. Using a structural econometric model to separate out such “noise,” researchers tracked 1-year expectations of stock market returns with data from the 2008 wave of the HRS (Hudomiet, Kezdi, and Willis, 2011). They found that the subjective mean typically moved with stock prices—with the exception of October–November 2008 (around the time of the market crash), when expectations moved in the opposite direction; this means that people expected some sort of recovery in stock prices immediately after the crash but that their expectations became more pessimistic when there was no recovery. According to Willis, people with more financial knowledge generally have more optimistic beliefs and are less uncertain about the future. Although they disagreed little about future returns before October 2008, disagreement among them after the crash increased more than it did among the less knowledgeable.

These results, according to Willis, raise a number of questions. First, average expectations were more pessimistic and more uncertain than historical returns even before the crash—would people have been better off if they had known more about the historical data? Second, why did people draw such different inferences from public data? Third, what are the implications for individual and aggregate behavior?

The presentation by Andrew Caplin focused on a project called the Michigan-NYU-Vanguard Panel (MINYVAn), a survey resource that may eventually provide insight into how retirees perceive their risks. The sampling frame of the planned large-scale survey will be a representative sample of age-eligible (consistent with the HRS) individual Vanguard account holders and 401(k) participants; information from the survey may also ultimately be tied to various kinds of administrative data, such as Social Security. MINYVAn is motivated by a number of theoretical concerns. Caplin indicated that there are gaps in knowledge about people’s “commitment aversion” and their desire to maintain control of their resources; this is why, for example, there is not yet a good explanation for low rates of annuitization. More also needs to be learned about the concept of need as it is perceived, often rudimentarily, by retirees. In contrast to other parts of the life cycle, moreover, retirement is something that may be dominated by events—and shocks—for which people cannot fully adjust. MINYVAn will therefore incorporate systematic event-based factors and the final survey will include structural questions that give respondents choices that could be useful complements to behavioral data. (For example, Ameriks and colleagues (2011) asked survey respondents to divide a prize between two locked boxes—a box for bequests and a box for private long-term care.)

Before it develops a structural life-cycle model to serve as the basis for a large-scale survey instrument, the MINYVAn project will conduct a qualitative survey of the target population—thereby identifying new model

elements and concerns that may be otherwise overlooked. The questions in the qualitative survey will have overarching themes, such as the definition of retirement; anticipated spending in early retirement; perceived risks to retirement financial plans; key risks, such as medical and long-term care expenses, the education of grandchildren, reductions in Social Security benefits, and new life-enhancing technologies; awareness of and interest in retirement financial products, such as annuities, long-term care insurance, and life insurance; and the impact of a financial crisis on trust in financial institutions.

During the general discussion, it was noted that retirement is a dynamic process in which expectations, assets, and health and mental capital change dramatically over time (starting from the moment that people begin to think about retirement), and that it may be useful for MINYVan to do more than just take a snapshot at a given moment in time. The measurement of retirement with such data may also be complicated by the fact that financial firms are not notified when people stop working and that people no longer appear in administrative records after they have moved their money into other accounts; however, some of the issues related to the identification of retirement could be addressed through administrative linkages to SSA data.

Several participants noted that further exploration is needed into how people understand their consumption needs. Consumption patterns tend to get set in mid-adulthood, and although people may indeed be smoothing their consumption over the life cycle, they may not be doing so at the full wealth-consuming level. In the United States, the most common explanation given by people who were eligible for Supplemental Security Income (a means-tested benefit program for the elderly) but did not take up the benefits was that they did not need them. As people reduce spending in response to an economic shock, they may also settle into a new long-term equilibrium because their definition of need has undergone a fundamental shift. More could also be learned about how people create expectations about long-term care needs and whether those expectations are affected by their own experiences with family members.

It was suggested during the discussion that although it may be interesting to ask people about their expectations, there is also reason to believe that the link between what people say they expect to do and what they ultimately do can be tenuous. For example, people tend to retire earlier than they say they will and are more likely to take Social Security benefits at age 62 rather than at age 65 or older. Also, people tend to overestimate their competence and capabilities and may not even know or understand what it is that they are being asked about. Even so, the battery of financial sophistication items in the Cognitive Economic Study, which provides a quasi-objective measure of what people actually know, suggests that they have a fairly good idea of what they do and do not know; most people felt

that they did not know much about the financial measures in the survey and proved themselves correct. The problems faced by survey respondents in articulating subjective probabilities were also raised during the discussion, in response to which one participant referred to an innovative method of visual representation to elicit subjective probabilities from survey respondents (Delavande and Rohwedder, 2008).

Participants discussed the possibility that people may not know things (e.g., about stock market returns) because they do not need to know them (e.g., because they do not have any money in the stock market). It was pointed out, however, that knowledge can be measured using the HRS by comparing what people say about their pension plans and Social Security benefits with the actual plans and programs. One observer noted the puzzling fact that although numeracy is a very important determinant of wealth, knowledge of pensions and Social Security—which could be taken as a sign of financial sophistication—has almost no relation to total wealth (see Gustman, Steinmeir, and Tabatai, 2010a). Indeed, although people may not know a lot about the specifics of their pension plans, they are still very capable of retiring when they would lose financially by not doing so. A participant also commented that even though many people have suggested that individual retirement accounts (IRAs) should be annuitized because people will otherwise spend their money recklessly, a very large fraction of people do not make withdrawals from their IRAs until they are required to do so by minimum distribution requirements.

One participant said that behavioral economics may also need to do a better job of looking at age differences and connecting with the literature on the psychology of aging. It should not be assumed that different groups of people think in the same way. For example, according to the participant, experiments suggest that older people tend to filter out negative information—not because they are cognitively incapable, but for reasons of salience and affect. Another participant noted that the HRS asks respondents about the probability that they will be able to live independently and the probability that they will be able to think and reason well enough to manage their own affairs, which may be relevant to the potential vulnerability of older people to financial fraud.

## WORK, LABOR MARKETS, AND RETIREMENT

Presenters Courtney Coile and Alan Gustman discussed aspects of work, labor markets, and retirement. According to Coile, since the beginning of the current economic crisis, the media and the public have focused on retirement delays that may result from plunging equity and housing markets. What has been missing, however, is a recognition that weak labor markets may lead to earlier retirement. Recent research (Coile and Levine, 2010) using

30 years of Current Population Survey (CPS) data has found that long-term declines in stock prices (5-10 year returns) lead more educated workers, who are more likely to own stocks, to delay retirement, whereas increases in the unemployment rate lead less educated workers, who are more likely to be affected by labor market shocks, to retire earlier. In general, people really start responding to stock and labor market fluctuations at age 62, suggesting an important role for the Social Security program in influencing how people respond to economic shocks. According to simulations, the net effect of the current crisis will be an increase in retirement, with approximately 250,000 people delaying retirement because of the stock market decline and 375,000 retiring early because of problems finding employment. The authors also found that fluctuations in housing prices do not affect retirement; Coile noted that this is consistent with work showing that households tend not to consume their housing wealth in retirement until they experience a shock, such as the death of a spouse or the entry of a family member into a nursing home (Venti and Wise, 2001).

Recent research using the decennial census and the American Community Survey has also explored the effect of stock and labor market conditions around the time of retirement on retiree income (Coile and Levine, 2010). Poor stock returns reduce investment income for retirees in the top third of the income distribution, whereas a high unemployment rate reduces Social Security income (by an amount roughly corresponding to the earlier claiming of benefits) for retirees in the bottom two-thirds of the income distribution. The latter effects are much larger relative to total income than the former, suggesting that the problems faced by older workers when the labor market is weak merit greater attention from researchers, policy makers, and the public.

In his presentation, Gustman indicated that, according to research using 2006 HRS data, the wealth held by those approaching retirement age is cushioned by Social Security and defined-benefit pensions (which have been in existence longer than defined-contribution plans) and is therefore not very vulnerable to stock market or housing price declines. Projections based on behavior during the dot-com boom and bust also suggest that retirement changes due to the stock market decline are likely to be small (Gustman, Steinmeir, and Tabatai, 2010b). Once layoffs and their effects are allowed for, the result may be earlier rather than later retirements as a result of the recession. For other descriptive studies of outcomes during the recession, see Munnell, Muldoon, and Sass, 2009; Sass, Monk, and Haverstick, 2010.

According to Coile, other work on the effect of economic conditions on labor supply has found that changes in state or industry employment affect the employment rates of older workers (von Wachter, 2007); cities that were more affected by industry shocks had larger drops in labor force participa-

tion (Black and Liang, 2005); job transitions and labor force participation are related to metropolitan statistical area and state unemployment rates (Friedberg, Owyang, and Webb, 2008; Munnell et al., 2008); and early retirement is related to trends in industry-level employment (Hallberg, 2008). Research on the difficulties facing displaced workers has found that older workers are significantly less likely to be in the labor force several years after the displacement than are comparable nondisplaced workers, and that those who do find new jobs have substantially lower earnings than at their previous job (Chan and Stevens, 1999, 2001, 2004; Johnson and Kawachi, 2007; von Wachter, 2007). There is also evidence of age discrimination in hiring for women (Lahey, 2008).

Coile noted that older workers who have been laid off tend to rely on Social Security rather than unemployment benefits for assistance (Coile and Levine, 2007), and record numbers of people have been collecting Social Security during the current downturn (see, e.g., Johnson and Mommaerts, 2010). A participant noted that Disability Insurance (DI) claims also go up when the unemployment rate increases, although it is difficult to take a month or even a year of new awards to estimate the precise effect because of the sizeable number of denied applications that end up in the appeals process (in which many denials are eventually overturned).

Gustman said that although case studies of firms hiring older workers on a part-time basis suggest that they will have greater demand for older workers as the workforce ages, a full demand-side analysis is missing from the literature. At the market level, one would like to know about the vacancies that are suitable for older workers by industry and occupation, but there are no models of demand for continuing workers (including long-term job attachment and retirement) by industry and occupation. Demand-side structural analyses in this area have not been possible because production function analyses have not been able to adequately account for such factors as implicit contracts and specific training. Demand-side analysis could be facilitated by matching firm-based data to the HRS using Employer Identification Numbers (as pioneered by John Abowd and colleagues), although this would be a time-intensive undertaking.

Coile listed a number of questions for the future study of labor supply. Do shocks affect labor force reentry, the use of bridge jobs, or retirement expectations? In the household context, are the effects of shocks muted (e.g., because of an added worker effect) or magnified (since both spouses may be affected)? Do shocks have an effect on the labor supply of workers in their 50s (perhaps related to retirement expectations)? What are the long-term labor market effects of the recession? Do shocks have a differential impact by socioeconomic status? Several participants also raised the issue of labor market expectations and noted that the HRS asks people how difficult it would be, if they were to lose their job, to get a similar one.

Gustman noted that one important challenge is to isolate the effects of the recession from other changes that have occurred over time, such as the rise in labor force participation of women and requirements that defined-benefit pensions credit work after the usual retirement age. Other changes include trends in the incentives from defined-benefit plans, first toward earlier retirement, then the weakening of those plans as a share of pension wealth.

Coile also suggested several questions for the future study of well-being. If market conditions cause workers to retire earlier or later, what are the consequences for retiree well-being—which could be measured in a number of ways (e.g., income, consumption, health/mortality, happiness, living arrangements)? To what extent can government programs mitigate the effects of economic crisis on well-being?

Gustman listed a number of analytical approaches for thinking about recession and retirement: descriptive analysis of dependent variables pertaining to retirement and the labor market; descriptive analysis of retirement intentions; reduced-form analysis with business cycle measures as independent variables and labor market outcomes as dependent variables; supply-side structural analysis that includes reoptimization in the face of recession; demand-side structural analysis, including demand-side responses to recession (which is complicated by long-term job attachment); and market-level analysis that joins supply and demand, determining the work of the older population in the long run and in the face of an economic downturn. Dependent variables of interest in these analyses include labor market outcomes (at each age and into the future) such as full-time work; job tenure; part-time work; full retirement; job search; flows among these states, including leaving the labor market and then coming back; and flows for husbands and wives. (Gustman observed that although structural models can handle the decisions of both husbands and wives, the interdependence of these decisions is also important.)

Coile suggested that the ideal data set would have extensive labor market data (to identify retirements and layoffs), extensive data on income and wealth holdings (e.g., stocks, housing, pensions, Social Security), and data on multiple measures of well-being (e.g., consumption, health, happiness). It would also include a large sample of older workers; follow the same workers over time to examine reentry, the long-term effects of shocks, and so on; and include many cohorts of workers to cover multiple periods of expansion and recession. Although no single data set does all of this in reality, many do meet some of these criteria—for example, the Census/American Community Survey, the Consumer Expenditure Survey, the Current Population Survey, the Displaced Worker Supplement, the General Social Survey, the Health and Retirement Study, the Panel Study of Income Dynamics (PSID),

the Survey of Consumer Finances, and the Survey of Income and Program Participation (SIPP).

Depending on the methodology used, different data sets are more or less important. For example, the HRS is useful for structural models, which require detailed data on earnings history, wealth holdings, and so on. Census and CPS data are more appropriate for quasi-experimental methods, which need large sample sizes to identify effects. One of the most pressing data needs, according to Coile, is to add measures of well-being to data sets that have large sample sizes.

Coile observed that both structural and reduced-form models have been extensively used in retirement research, and each approach has strengths and limitations. Although structural models may allow researchers to incorporate more factors (e.g., models of retirement and savings) and recover utility parameters that can be used to make “out of sample” predictions, they also rely on particular functional forms. Reduced-form models, though less ambitious, are more transparent in their identification and can provide evidence that is quite compelling (see, e.g., Autor and Duggan, 2003). Retirement research is strengthened when both models are used, especially when the predictions of structural models are validated by what happens in real-world natural experiments.

According to Gustman, microsimulation models are currently designed to analyze behavior in the near term and are useful for counting the number of people potentially affected by changes. Their core reduced-form equations, however, have great difficulty explaining certain key aspects of behavior (such as the spike in retirement at age 62) and have a number of other limitations: they cannot be used to predict behavioral changes once benefits have become actuarially fair; they do not do a good job of jointly analyzing program participation, claiming behavior, or retirement; and they have limited ability to analyze couples. Although structural models have been difficult to construct, an effort should be made to include their insights (e.g., heterogeneity in responses) in microsimulation models. Short-term models, such as the SSA’s Modeling Income in the Near Term (MINT) model, also need to be augmented with models that are capable of predicting behavioral responses in the long term. Table 1 summarizes some of the major issues related to data needs and availability, as presented by Gustman.

Gustman indicated that the consistency of questions across the HRS and “offspring” surveys, such as the English Longitudinal Study of Ageing (ELSA) and the Survey of Health, Ageing and Retirement in Europe (SHARE), makes the prospect of international comparisons quite promising. He observed that if the recession has affected different countries differently, then a difference-in-difference approach would be promising for analyzing labor market impacts. If the recession has had a similar impact on all countries, then one could potentially learn something about the effects

of differences in their social safety nets on behavior. However, if there are differences in how the recession has affected different countries and if the countries also have very different social insurance systems in place, then each country will have to be analyzed individually.

In discussing these presentations, participants remarked that the current downturn is different from past ones in that it consists of multiple economic shocks—and current models are not designed to detect interactions between, for example, shocks to the equity and the housing markets. To the extent that the current crisis is also a debt crisis, existing models may have to deal with even larger economic shocks in the future. There could be large declines in pension wealth, since many older people are beneficiaries of pension plans that are on shaky ground. Public pension plans at the state and local levels also face challenges in meeting their obligations. This raises questions about the adequacy of structural models in the face of such uncertainty (especially given the gaps between what people say and what they actually do) and whether it might be possible to address some of these issues by better specifying the inputs to the models.

### CONSUMPTION, SAVINGS, PENSIONS, AND WEALTH

The market downturn, according to Brigitte Madrian, is characterized by three important outcomes that have the potential to affect retirement preparedness: (1) a decline in home equity, (2) a decline in other wealth, and (3) an increase in unemployment. The impact of these market outcomes on current retirees, those nearing retirement, and prime-age workers is summarized in Table 2.

Madrian indicated that the nonhousing wealth that individuals use to fund their consumption in retirement has three primary sources: Social Security, defined-benefit pension wealth, and defined-contribution wealth. The consequences of the market downturn for current retirees, those nearing retirement, and prime-age workers are summarized in Table 3. As shown in the table, the behavior of participants in defined-contribution plans can affect the magnitude of wealth declines. Little is known about what has happened to participation in employer-sponsored savings plans during the current recession. Previous research suggests that people tend to chase past returns in their allocations and contribution rates (see, e.g., Choi et al., 2004, 2009). This means that they could be harming themselves by raising their contribution rates when the market does well and reducing them when the market is doing poorly.

Madrian said that older employees have experienced a greater decline in their 401(k) account balances than younger employees because the account balances of the latter were not very large to begin with, and because the incremental contributions of younger employees, unlike those of older



**TABLE 1** Data Needs, Availability, and Related Issues

Variables	Required	Available	Issues
Complex retirement variables documenting retirement outcomes and flows.	Detailed data to date, including panel. Must distinguish flows associated with retirement and returns from retirement and involuntary retirement.	HRS <sup>a</sup> through 2008 is available. HRS 2010 is in the field, available in June/July 2011.	Currently available HRS data precede the recession. Internet data are up to date but have much less detail than HRS. Representativeness of HRS Internet data is an issue.
Wealth measures (jointly determined), reduced by recession.	Full array of assets, share in stock market, housing, related liabilities, pension and Social Security wealth.	HRS assets through 2008 allow analysis of vulnerability before recession. 2010 wave not available for another year. Panel has some data on changes in assets.	Internet data, ALP have no pension detail. HRS pension details can be estimated, but will not be available until mid-2011. SCF is a rich source of information on wealth but has few labor market variables and is not very helpful for retirement analysis.
Firm-induced changes in employment.	Permanent layoff. Temporary layoff. Changes in firm policy for older workers. Job acceptance or rejection. Involuntary reductions in hours.	HRS data on layoffs <sup>b</sup> for 2008. Layoffs, changes in firm policy, hours reductions in HRS 2010. Description of search in HRS 2010. Layoff information from CPS and Displaced Worker Survey supplement to CPS.	Can use difference-in-difference to isolate the effect of the recession, but will confound with trend and other factors. Details in HRS will allow cause to be distinguished.

Firm-induced changes in compensation.	Wage reductions—voluntary associated with partial retirement? Or involuntary changes due to recession? Pension plan changes and losses.	HRS panel <sup>c</sup> will allow one to distinguish.	Panel not available until mid-2011.
Activities in unemployment.	Job search, duration, reservation wage, training.	CPS. Available for HRS panel.	Causation of flows, due to recession or part of retirement, requires panel.
Health and family changes affecting unemployment.	Detailed data on levels and changes in health, family status, other factors. Transfers to children, parents, bequests.	Available on HRS.	Only available with considerable lag. Analysis will take even longer.

NOTES: ALP = American Life Panel; CPS = Current Population Survey; HRS = Health and Retirement Study; SCF = Survey of Consumer Finances.

<sup>a</sup>The HRS interviews both husbands and wives, making it possible to investigate spousal labor markets.

<sup>b</sup>The HRS has information on why the employee had to leave the job, whether the firm was downsizing, what the fellow workers thought, and other aspects of the job environment.

<sup>c</sup>The HRS contains a section on pensions asking whether the plan was frozen and if the plan was replaced by another one.

SOURCE: Gustman (2010).

**TABLE 2 The Market Downturn: Who Is Affected and How**

Effects of the Market Downturn	Affected by Market Downturn		
	Current Retirees	Nearing Retirement	Prime-Age Workers
Decline in home equity	Affected	Affected	Less affected (because less likely to own homes)
Decline in other wealth	Affected	Affected	Less affected (because have less wealth)
Unemployment	Unaffected (because not working in the first place)	Affected	Affected

SOURCE: Madrian (2010).

employees, could make up for a substantial portion of the decline. In periods of recovering account balances, then, the increases due to ongoing contributions by older cohorts are not quite big enough to make up for the losses they experienced (even though the recovery may be substantial).

According to Madrian, the Hewitt Index of 401(k) trading activity from February 2007 to May 2010 (see Hewitt Associates, 2010) suggests that there does not appear to be a massive movement out of equities over time. Moreover, looking at the percentage of eligible 401(k) participants with outstanding 401(k) loans and the value of loans as a percentage of the remaining 401(k) account balance, it does not appear that people are “raiding the piggy bank” more than before the downturn. Ongoing research does suggest, however, that people living in areas with larger declines in home prices were more likely to trade out of equities in their 401(k) plan.

Madrian noted that a number of companies have reduced or suspended employer matching contributions (see, for example, Pension Rights Center, 2010). One participant wondered whether the current economic crisis has changed how workers or firms feel about defined-benefit versus defined-contribution plans. Madrian responded that the problem with replacing defined-contribution with defined-benefit plans is that the latter were as adversely affected as the former—it was just not as obvious. Another participant suggested that new accounting standards and increased demands for transparency also make it more difficult for firms to smooth out their assets and liabilities and therefore make defined-benefit plans that much less attractive.

In the next presentation, Michael Hurd laid out findings using survey data from the ALP, which contains information on household spending during the financial crisis. Every month the ALP asks about spending on 25 mostly nondurable items, which make up approximately 70 percent of total spending estimated from the Consumer Expenditure Survey. This is augmented with quarterly surveys asking about these same 25 items and an additional 11 categories, which together make up all of spending. The 13-month change in (seasonally adjusted) spending from April 2009 to April 2010 is summarized in Table 4 (although these data do not account for changes in household composition).

There were significant declines in spending, even at the median; the fact that these surveys missed the largest declines in the stock market and housing prices implies that unemployment could be a continuing force for spending reduction. There were also significant differences by age, with the older age group appearing to be significantly protected. One participant suggested that it is important to account for changes in household composition, since spending by older adults in the ALP may be affected by their children moving in with them.

Changes in out-of-pocket spending on health care also varied signifi-

**TABLE 3 The Market Downturn: Effects on Nonhousing Wealth**

Effects of the Market Downturn	Affected by the Market Downturn		
	Current Retirees	Nearing Retirement	Prime-Age Workers
Social Security	Presumably little impact.	Lower monthly payments for older displaced workers who claim early benefits.	Although earnings may be lower in the Social Security formula, there is likely to be only a small long-term impact due to the nature of the benefits formula (which is progressive and based on average indexed earnings). Impact of employer underfunding of plans and employer decisions about maintaining these plans going forward.
Defined-benefit pension wealth	Presumably little impact (exception—high-income workers in plans taken over by the Pension Benefit Guaranty Corporation).	(1) Retiring workers who have a defined-benefit pension plan that offers a lump-sum option are more likely to take the lump sum when the market is doing well and to annuitize when it is doing poorly; there is not yet a lot of evidence on the longer term consequences of these choices. (2) Defined-benefit formulas are tied to final average earnings, and pay cuts and freezes could have long-run implications on the type of pension plan individuals have going forward. (3) Some companies have tried to use pensions as a mechanism for encouraging earlier retirement.	

Defined-contribution wealth	Declines in wealth; inertia versus active trading and market timing.	Declines in wealth; inertia versus active trading and market timing; impact on employee behavior within the plan (participation, contribution, asset allocation, loans/withdrawals); impact of employer contributions; potential to delay retirement to (partially) offset wealth decline; potential to change savings rate to (partially) offset wealth declines (larger for prime-age workers).	Declines in wealth; inertia versus active trading and market timing; impact on employee behavior within the plan (participation, contribution, asset allocation, loans/withdrawals); impact of employer contributions; potential to delay retirement to (partially) offset wealth decline; potential to change savings rate to (partially) offset wealth declines (larger for prime-age workers).
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SOURCE: Madrian (2010).

TABLE 4 Spending in 25 Categories, April 2009-April 2010

	Cross-Sectional		Panel	
	Mean	Median	Mean	Median
All ages	-14%	-6%	-7%	-3%
< 50	-22%	-9%	-13%	-7%
50-64	-8%	+1%	0%	+1%
65+	+19%	+4%	0%	+8%

SOURCE: Hurd (2010).

cantly by age. Mean health care spending fell by approximately 35 percent among those below age 50, but it fell by less than 5 percent among those ages 50-64 and less than 10 percent among people ages 65 and older. Similarly, median health care spending fell by more than 50 percent among those below age 50, but it fell by less than 15 percent among those ages 50-64 and less than 10 percent among people ages 65 and older.

Hurd went on to report that people who remained employed had a change in mean quarterly spending of about -4 percent and in median quarterly spending of about -1 percent, whereas people who transitioned from employment to unemployment had a change in both mean and median quarterly spending of about -11 percent. Hurd said that these large reductions suggest that, when it comes to maintaining spending, people are not well or perfectly insured against unemployment.

Even before they lost their jobs, the ALP respondents who became unemployed were spending less money than those who did not become unemployed. Similarly, those who eventually became unemployed were less satisfied with their lives even before they became unemployed. Several participants said that this raises the possibility of using questions about expectations and life satisfaction to gain insight into the exogeneity of layoffs, since firms do not choose at random whom to lay off (which is why the effects of layoffs on a variety of outcome measures are therefore almost always overestimated).

During the general discussion, it was suggested that one of the ways in which the current recession is different from previous ones is that consumer credit has become more easily available. The ALP indicates that there was a slight reduction in the number of credit card holders and a slight increase in the number of people who pay off their credit card debt each month—but there was also a very substantial increase in the amount of debt that people carry over and pay interest on. It would be interesting to examine the interaction of this with unemployment, and whether people have debt up to their credit limit could also be an important variable. One participant further noted that early take-up of Social Security could be regarded as a mechanism for making a loan to oneself, to be paid off with interest through lower Social Security benefits in the future—raising the question

of the implicit interest rates that people are charging themselves and what this says about the other options they have for accessing credit.

### HEALTH AND WELL-BEING

The recession provides a natural experiment for understanding more about economic influences on health and health disparities. There is an extensive literature that discusses the impact of economic recession on health, and much of this literature suggests that the effects may be harmful. For example, a macroeconomic study by Brenner (2005) found that, although gross domestic product per capita is occasionally associated with increased mortality rates over the very short term, it is strongly inversely related to mortality rates over the medium to long term. Strully (2009), using data from the PSID, found that respondents who lost jobs but were then reemployed were more likely to develop health conditions. Gallo et al. (2006) found that displaced workers over age 50 were at higher risk for subsequent myocardial infarction and stroke.

The literature on this subject also contains some contrary views. Laporte (2004), for example, found that unemployment was associated with a decline in mortality in the short and long run and suggested that many studies failed to account for certain time-series properties of macro-level data. Tapia Granados (2005) found that economic expansions are associated with higher rates of mortality for all groups and causes of death studied (except for suicide). In Germany, Neumayer (2004) found that recessions lowered mortality rates for some, but not all, causes of death.

In order to determine the effects of recession on health, such factors as time lags, specific causes of death, lifestyle, environmental risks, and health care utilization need to be considered. Longer term trends in the economy, such as globalization, economic restructuring, and income inequality, can also interact in complex ways with economic recession and growth. Some indicators of economic stress, moreover, may be more relevant than others.

Dawn Alley provided an overview of conflicting perspectives on the effects of recession on health. According to Alley, some of the research on business cycles and mortality indicates that the population is healthier when unemployment is higher. One study, for example, found that a variety of physical health measures improve with rising unemployment (Ruhm, 2000): a 1 percent increase in state unemployment was associated with a 0.5 percent decrease in all-cause mortality, a 0.9 percent decrease in hospitalization, a 0.4 percent decrease in doctor visits, a 0.5 percent decrease in heart disease (self-reported), and a 1.9 percent decrease in cancer (self-reported). The fact that the negative association between unemployment and mortality is stronger among older rather than working-age adults tends to rule out causal explanations that are directly related to the labor force (Miller



et al., 2009). Research on the individual-level effects of unemployment, financial strain, and material deficits, however, tends to suggest that people are healthier when incomes are higher (see, e.g., Sullivan and von Wachter, 2007). Alley said that not enough is known about the specific mechanisms through which the economic environment may affect health. As an example of such a pathway, one participant referred to a study that found that babies conceived in times of high unemployment tended to be healthier because of improvements in health behavior during recessions, and also because of changes in the types of mothers (in terms of educational background) who conceived during recessions (Dehejia and Lleras-Muney, 2004).

In response to a question about time lags, Alley noted that most models begin by looking at the contemporaneous effect of changes in the economic environment on health outcomes. Although there has been considerable debate over what constitutes an appropriate lag, there is not strong evidence of lagged effects of recession or of results changing with the use of different lags. She also suggested that further research in this area would be appropriate.

Alley proposed six sets of questions raised by the recession. First, how much of what is reported during economic downturns as better health is due to reporting error? How would results differ if outcomes included measured health or incident health conditions? (Alley indicated that these questions did not pertain to declines in mortality, which could not readily be ascribed to measurement error.) Epidemiologists have suggested that apparent declines in chronic conditions could be due to people not going to their doctors and not knowing—and not reporting—that they have a particular condition. (One participant noted that in many developing countries, people with higher socioeconomic status had worse self-assessed health—because they were able to learn more about their health from their doctor—even though they had higher life expectancy.) Possible data sources to explore these questions include the Medicare Current Beneficiary Survey and the National Health and Nutrition Examination Survey.

Second, if recessions are in fact associated with better health among older people (see Miller et al., 2009), why is that so? Previous explanations have emphasized unemployment-related factors (such as cutting back on hours and having more time with family), but these are unlikely to account for effects at the oldest ages. Alley also indicated that although researchers have examined how the mortality effects of recession vary across different age groups, more work needs to be done on how nonmortality effects might vary by age.

Several participants noted that the literature finding a positive relationship between recession and health outcomes may be reminiscent of the “ecological fallacy” (see Robinson, 1950), in which the causes of individual outcomes are attributed to characteristics of groups correlated

with geographic areas; the ecological fallacy was especially common in earlier periods when people worked with data from census tracts rather than surveys. The ecological fallacy is an issue when aggregate-level data are being used on both the predictor and outcome ends, and it becomes less of a problem once individual characteristics and the specific risks faced by individuals are incorporated into the analysis.

Participants also suggested that rather than looking at general health measures (and not finding any effects), it might be useful to measure the biological effects of stressful events, looking at such indicators as cortisol levels, blood pressure, and inflammation markers. Men ages 55 to 65 may have become more susceptible to heart attacks because of the recession. Research indicates that self-reported financial strain is related to changes in cortisol levels over time (Step toe, Brydon, and Kunz-Ebrecht, 2005), and it could be useful for studies like the HRS to collect data in ways that allow for such relationships to be explored, especially given technological advances that facilitate the collection of biomarkers. Bringing together different data sources could also be productive. The HRS, for example, does not have detailed diet or physical activity data, whereas some other data sets do have such measures.

Third, do recessions increase health inequality? It is possible that health improvements at the population level mask health declines in population subgroups, leading to increased health disparities. How can this be best measured, and which population subgroups (e.g., those with limited financial assets, existing health conditions, or limited social resources) might be most at risk of health declines? The possibility was mentioned that substantial negative effects on “losers” may be outweighed by smaller positive effects on more numerous “stayers” or even “winners” in a crisis. Alley also suggested that rather than thinking about the protective effects of recessions, it may be useful to frame some of these issues in terms of the potential negative consequences of rapid economic expansion. For example, older people may become more socially isolated or less able to depend on their children for social support.

One participant indicated that it might be helpful to look at the truly “miserable” component of the population that has low levels of support and is initially at risk for some other reason, as much of the recession-related dysphoria may be temporary and have little long-term effect. Another wondered whether the direction in which the unemployment rate is moving might not be more consequential for well-being than the absolute level of unemployment. The probability of experiencing a spell of unemployment, the expected length of an unemployment spell, the extent of underemployment, and abandoning the job search altogether may also have different and distinct effects. It was further suggested that it might be useful to study the factors, both negative and positive, that may affect those who

are still employed. Such people may be subject to higher levels of stress because of greater demands from their employers, longer working hours, and heightened economic insecurity.

Fourth, what are the long-term implications of the negative mental health effects that may be caused by economic downturns? Ruhm (2000) found that a variety of physical health measures improved with unemployment, but that increases in state unemployment were associated with an increase in suicide and mental health disorders. Similarly, pilot data from an Internet consumer panel in Arizona, California, Florida, and Nevada, in summer 2008 suggest that serious psychological distress is more prevalent among those who experience greater strain in their housing situation (Pollack et al., 2010). Contradictory findings for physical and mental health need to be further investigated.

Fifth, not enough is known about the unique effects of different exposures that increase in prevalence during recessions, such as unemployment, reductions in income, reductions in wealth, food insecurity, reduced spending on health care, and unaffordable housing, including mortgage default. Which types of disadvantage are particularly harmful to health? (See Alley et al., 2009, for a discussion of the later life health consequences of material disadvantage in health care, food, and housing.) One promising avenue of research is to find ways of using variation in such factors to determine their effect (distinct from income) on health. For example, state housing laws may be related to foreclosure rates in ways that are not related to income and could serve as good instruments for looking at the potential relationship between foreclosures and health. Other examples may exist for such factors as food insecurity and health care access.

Sixth, how do the health effects of individual-level disadvantage interact with community-level economic factors? Does the health effect of becoming unemployed, for example, depend on whether there is a high level of unemployment in the community? On one hand, if an experience is normative, there may be less stigma and easier access to supportive resources. On the other hand, a recession might have negative effects on the community environment (e.g., with respect to crime) and reduce the local resource base for services.

Looking more specifically at the current recession, David Weir reported that the Gallup Well-Being Index (WBI) registered significant declines in fall 2008 but recovered substantially by May 2009. Changes in the overall WBI during this period were driven by changes in the “life satisfaction” component—that is, “Cantril’s ladder.”<sup>1</sup> The health behavior component

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<sup>1</sup>Cantril’s self-anchoring striving scale consists of two ladders from 0 to 10, in which people put themselves between the worst possible life (0) and best possible life (10) today and in 5 years; the two are then averaged. People who end up at a 3 or below are said to be in “misery.”

(but not the physical or emotional health components) also tracked the overall WBI relatively closely. The movement in the overall WBI during this period, though noticeable, was small relative to the gradient between the top and bottom income quartiles.

Weir went on to explain that core HRS data from 2008, 2010, and beyond will help identify the magnitude of the effects of the downturn on health; international sister studies will permit cross-national comparisons. The HRS also conducted a postcrash Internet survey in May and June 2009 and a mail survey on well-being in November and December 2009, providing further data on the effects of the crisis.

The 2009 HRS Internet survey included information on consumer sentiment; positive and negative affect; satisfaction and control across a variety of domains; assets, ownership, losses, and rebalancing of investment portfolios; mortgage issues for self and family; consumption; employment and retirement expectations; and health behaviors. Comparing the same people across 2008 and 2009, Weir reported several findings: (1) the average reported chances of working full-time past both age 62 and age 65 increased; (2) the percentage of people not satisfied with their financial situation increased, and the percentage very satisfied with their financial situation decreased; (3) the percentage with no depressive symptoms decreased, and the percentage with four or more depressive symptoms increased; and (4) the percentages experiencing both frequent pain and severe pain increased. Although the smoking rate went down, drinking (including binge drinking) and church attendance did not change much.

The 2009 HRS well-being mail survey primarily had to do with hedonic well-being,<sup>2</sup> although it also included several global well-being measures, such as Gallup's Cantril's Ladder, general life satisfaction, and domain satisfaction. All the measures of well-being are characterized by income and wealth gradients. Well-being also tends to increase until people are in their late 60s, after which it plateaus and then, around age 75, begins to decline. Weir suggested that the fact that these different measures of well-being track each other so well raises interesting questions about how people answer the survey questions and what the various measures reflect.

A number of questions are common to the HRS core (2008), Internet (May and June 2009), and mail (November and December 2009) surveys. According to Weir, the mean difficulty of paying monthly bills increased steadily through all three surveys and over the course of the recession. Similarly, the percentage of people having difficulty paying bills increased between the core and Internet surveys and, to a lesser extent, between the

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<sup>2</sup>Hedonic well-being was based on a one-day recall of time spent on eight main activities and the seven affects associated with each of those activities; it was designed to be comparable to the Disability and Use of Time survey being done by PSID as a time diary.

Internet and mail surveys. Conversely, life satisfaction fell considerably between the core and Internet surveys and, to a lesser extent, between the Internet and mail surveys.

### LIVING ARRANGEMENTS AND TRANSFERS

Two presenters spoke about the role of the family in times of recession. Kathleen McGarry suggested that it is useful to think of the family as a potential provider of insurance against financial shocks. The family may be able to insure against some risks more efficiently than the market (e.g., they may have lower monitoring costs and more complete information) and help correct for market failures. Insurance may have important behavioral effects even when a risky event does not occur and a “benefit” is not paid. For example, someone could go to school or take a new job in a higher risk occupation or industry because they know that the family will be there to assist if necessary. It is therefore important to remember that looking at actual transfers in the data misses the (implicit) transfers that would exist if someone were to need them; the insurance role of the family will be underestimated accordingly. One participant commented that family insurance may also be important for mental health, as the “stress buffering hypothesis” in the sociology literature suggests that social support can be effective in buffering the effects of stress on mental health (see, e.g., Wethington and Kessler, 1986). What matters is whether there is someone that people could call on for help, rather than if they actually received help. The importance of family insurance for physical health is less clear.

McGarry went on to note that inter vivos transfers (i.e., transfers between living persons) are relatively common, with approximately 30 percent of HRS respondents making a transfer to at least one child in any wave and 15 percent of children receiving a transfer in any wave. Transfers are also relatively large, at approximately \$1,500 per child and \$3,000 per family; these amounts are even larger when summed over many years. Not surprisingly, these transfers are positively related to the income and wealth of the donor and negatively related to the income of the recipient—although parents do not entirely make up for the lost income of their children with these compensatory transfers. According to data from the HRS, financial transfers for college are also common, with approximately 60 percent of parents making such transfers and 40 percent of children receiving them. These transfers are large: the average contribution covered approximately half of total tuition and room and board, with total transfers per child averaging \$11,445.

When making transfers to older parents, according to McGarry, donors in the highest income quartile were more likely to give cash than time (which may be regarded as an in-kind transfer): 6.8 percent in the highest

income quartile gave “only time” to elderly parents, 11.6 percent “only cash,” and 1.3 percent “both.” The opposite was true for donors in the lowest income quartile: 5.9 percent in the lowest income quartile gave “only time” to elderly parents, 4.5 percent “only cash,” and 0.6 percent “both.” The increase in coresidence after welfare benefits were reduced by welfare reform is an example of the role played by in-kind transfers in the lower part of the income distribution.

McGarry indicated that according to data from the PSID, older people who live alone had the highest incomes, followed by those living with children, those living with children who never left home (who may be disabled), and those living with others; concerns about the potential endogeneity of income (in which the level of income is affected by the choice of living arrangement<sup>3</sup>) are alleviated by the fact that similar patterns existed when these same individuals were younger (age 58). Comparing older people’s own incomes with the incomes of the households in which they reside (relative to the poverty line) also suggests that coresidence may reduce poverty among the older population.

According to McGarry, older people who were less affected by the economic crisis might be expected to provide assistance to their adult children, some of whom may have returned home to live with them—that is, “boomerang” children. For other parents, the increased need for cash transfers to their adult children may be a drain on their resources. Those nearing retirement who lost jobs and/or assets may reduce cash transfers, invest less in the schooling of children (which raises the question of whether grandparents make up any of the difference), reduce bequests, or experience an increase in coresidence at later ages. The recession may also have delayed effects: parental support of adult children may affect the availability of resources late in life, bequests may decline, and schooling investments for the next generation may decrease. There could also be delayed positive effects, if boomerang children practice reciprocity or families grow closer. For a comparative perspective on economic shocks on family transfers, one could look at such events as the reunification of Germany (e.g., many experienced huge windfall gains as pension plans in East Germany were made identical to the pension plans in West Germany, whereas younger workers were likely to experience a positive shock in terms of lifetime labor income) and the financial crisis in Indonesia, which resulted in many families moving in together (see Thomas and Frankenberg, 2007).

McGarry observed that the current recession makes it necessary to ana-

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<sup>3</sup>For example, Supplemental Security Income benefits are reduced for those who move in with others, people may stop working early because they know that they can live with their children, and children may give up their jobs and go back to school because they know that they can move in with their parents.

lyze all types of transfers (cash, time, coresidence) and in all directions. One can expect to see differences across the income distribution with, for example, high-income families being more likely to give cash and low-income families being more likely to coreside and make other in-kind transfers. The HRS is a good source of information for cash transfers to family members, although it does not contain information on transfers between siblings. There is also a measurement issue with regard to reciprocity, as more people report making transfers than report receiving them; it would therefore be useful to interview both parents and children.

With regard to coresidence, McGarry thought it desirable to know not only the current situation but also potential alternatives. Who else could people have lived with, and why were those options not chosen? Another question is how resources are shared within the household—who pays for what? As with cash transfers, there are issues related to reciprocity—when people are asked whom the relationship benefits, they tend to report that it benefits the other person. It would therefore be useful to interview both parents and children to get information from both perspectives.

It is also important, McGarry said, to measure the potential for assistance. The HRS has questions about whether someone is available who could be counted on for help. It would also be useful to find out whether children and parents share expectations, whose beliefs “win out,” and whether expectations change over time in response to financial and personal changes. More could also be learned about the preferences of both older people and their children for formal care and whether the care provided by children was a last resort because formal care was not affordable.

The presentation by Linda Waite focused on the resources, demands, and environment associated with the living arrangements of older adults. Homeownership is high among older adults, and one of the obvious responses of younger adults affected by the economic downturn is to move in with them. At the same time, according to Waite, older adults who have been laid off may have a harder time finding work and may move in with their middle-aged children. Adding more people to living arrangements affects crowding, disorder, and the resources available and demands made (in terms of time and money). The National Social Life, Health, and Aging Project (NSLHAP), a nationally representative sample of adults ages 57-85, contains useful information on the living arrangements of older adults; interviews were carried out in 2005 and 2006, and the same respondents reinterviewed in 2010 and 2011.

In the first wave of the NSLHAP, the most common living arrangements among older adults were living with a spouse (47.2 percent) and living alone (28.6 percent). Other living arrangements included living with a spouse and children (8.7 percent); children (4.3 percent); others (3.6 percent); a spouse and others (2.6 percent); a spouse, children, and others (2.6

percent); and children and others (2.5 percent). Perceived social support and demands varied greatly across living arrangements. The worst off (in terms of low perceived support and high perceived demands) were single people living with children and single people living with children and others (most of whom were presumably grandchildren); spouses, in contrast, were a big source of support and did not make many demands. Interviewers also rated the rooms in which the interviews were conducted according to noise, disorder, dirt, smell, clutter, and the repairs that needed to be made. People who lived only with their spouse had the most ordered households, while people who were single and lived with their children and others had the least ordered ones. Household disorder was highly correlated with C-reactive protein levels, so that people in the most disordered households had higher levels of systemic inflammation.

Waite listed a number of questions raised by the economic downturn. How many older adults moved in with others? How many older adults took in others? Did home environments change and how? How many older adults lost family resources? Did relationships deteriorate in families under financial stress? (The NSLHAP also contains information on elder abuse.) Did social networks become smaller or change composition?<sup>4</sup> How many older adults lost jobs, lost homes, or declared bankruptcy? How many older adults had family members who lost jobs, lost homes, or declared bankruptcy? Did financial transfers to and from family members change? What were the characteristics of family members most likely to be affected by these changes?

During the general discussion, it was suggested that kin availability has been changing and is about to change even more rapidly, raising the question of whether people in the future are going to have fewer daughters and daughters-in-law (who are currently the primary caregivers) and whether stepchildren would provide equivalent care. African American men are particularly disadvantaged in kin availability because they are less likely to be married and less likely to have lived with their children. It was also noted that the PSID allows one to infer the amount of time stepchildren spend with their stepparents when growing up.

## HOUSING

It was the increase in the foreclosure rate in the 2006-2007 period that ultimately led to the collapse of the subprime mortgage market and the current economic downturn, and two presentations at the meeting therefore

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<sup>4</sup>One participant noted that the HRS asks respondents whether they have access to the Internet and, if so, what they use it for. Many people say that they use the Internet to communicate with their children and grandchildren.



focused on aspects of housing. John Weicher observed that 2007 was the peak year for housing prices and the most recent year for the two major surveys relevant to this topic: the American Housing Survey and the Survey of Consumer Finances. As of 2007, approximately 80 percent of elderly households were homeowners, and roughly 55 percent owned their homes free and clear. About 25 percent had mortgages or home equity lines of credit, with very few having anything that looked like a subprime mortgage. In general, elderly households with mortgages have held them for a while<sup>5</sup> and do not owe a lot on them.<sup>6</sup>

Home values have fallen by approximately 13 percent since 2007, with larger declines in the “sand states”—Arizona, California, Florida, and Nevada—in which a disproportionately large share of elderly owners live.<sup>7</sup> The S&P 500, by comparison, fell by roughly 25 percent. Although some of the elderly are likely to be in trouble, especially in the sand states, elderly homeowners were on the whole less affected by the recession than other demographic groups.

Weicher indicated that this is fortunate, since home equity is a large share of elderly households’ net worth (as measured in the Survey of Consumer Finances). In 2007, the median home value for the elderly (\$170,000) represented approximately three-quarters of their median household wealth (\$225,000). Retirement accounts, owned by 45 percent of the elderly, are the next most common asset; in 2007, the median value among those with accounts was \$55,000. The typical elderly homeowner, who has a house that is worth more than five times his or her income (\$30,000), is “house poor” compared with the typical younger homeowner, whose home value (\$200,000) is about three times his or her income (\$60,000). This has led to a growth in reverse mortgages, which allow elderly owners to turn home equity into current income.

In his presentation, Joseph Tracy described the Federal Reserve Bank of New York (FRBNY) Credit Panel, a data set that can provide real-time information on the housing sector. The FRBNY recently entered into a partnership with the credit agency Equifax, in which Equifax draws

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<sup>5</sup>In 2007, the median origination year for mortgages held by elderly households was 2001 (with 17 median years remaining on the mortgage). Weicher indicated that although this may seem fairly recent—and in a normal cycle it might be—the first 6 years of this decade were years with very large volumes of mortgages and very large volumes of home purchases. For younger households, the median origination year was 2003 (with 23 median years remaining on the mortgage); prices appreciated substantially in nearly all markets between 2001 and 2003.

<sup>6</sup>According to Weicher, the median loan-to-value ratio for the elderly is 32 percent, and the median outstanding balance is \$59,000—about half of what these figures are for younger households.

<sup>7</sup>Since 2007, house prices were down 50 percent in Nevada, 40 percent in Arizona, 40 percent in Florida, and 35 percent in California.

a 5 percent random sample of households, pulls together all of their credit files, and updates the information on a quarterly basis. This allows households to be tracked through time and across geographic locations (something that is not possible with mortgage data); the data set will be refreshed so that it remains a random sample. Equifax also created 10 years of history that allow the events leading up to the current crisis to be tracked by the FRBNY Credit Panel.

One of the challenges of establishing loan-to-value ratios for housing has been knowing the combined loan-to-value ratio for people who have multiple liens on a home; the FRBNY Credit Panel allows these to be linked up and therefore provides a more complete picture than typical data sets on housing. The FRBNY is also attempting to integrate information about valuation because it has information on the debts on homes but not on the value of the house itself; it is working with First American and also using its other loan-level data in order to do so.

FRBNY Credit Panel data indicate that there is a sizeable gap between rates of official and effective homeownership after subtracting negative equity. Although mortgage debt was less of an issue for older people, those who did have mortgages experienced similar increases in 90-day delinquency rates. The FRBNY Credit Panel does not contain demographic information other than age; Home Mortgage Disclosure Act data, if they could be merged with the Equifax data, would broaden the demographic information available.

Several participants suggested that the age profile of bankruptcies could be interesting to look at. On one hand, older people may have more resources on which to draw; on the other hand, if they have already bought their homes, they may be less worried about how they would appear to future creditors if they were to default. A graph of credit ratings by age before and after the economic crisis might also be informative.

It was also suggested during the general discussion that the median U.S. household has held onto its housing and equity assets throughout the market boom and bust period and therefore suffered minimal losses in well-being; a small number of households even came out ahead because they sold their assets at the right time. The core of the problem consists of the losses experienced by the small number of households that bought and sold their assets at precisely the wrong time. There were probably not many older homeowners in that negative tail, although older people who do want to sell their homes (and move into a retirement home) may now find it difficult to do so at a preferred price. Older people also do not have the luxury of adjusting their retirement date and will not be able to make up their losses in housing wealth to the same extent as younger people. Moreover, given the role of the family as a potential provider of insurance

against financial shocks, older people could be indirectly affected by the housing losses of their children.

### GENERAL DISCUSSION: PRIORITIES FOR DATA COLLECTION

In the general discussion on priorities for data collection, one topic that emerged had to do with the frequency with which surveys should be carried out. Given the impracticalities of having high-frequency surveys in the field on a continuous basis, several participants suggested that it might be useful to target a subsample of a major survey (such as the HRS) for more frequent interviews, perhaps identifying vulnerable populations that were experiencing or were at risk of experiencing certain events and then following up with them at short notice for more detailed interviews. The success of such an effort would hinge on the ability to establish protocols and procedures for going into the field at precisely the right time.

One participant suggested that the experience of the ALP, which came about as part of the project on Internet interviewing and the HRS, may be instructive. One of the purposes of the project was to make the HRS instrument suitable for Internet interviewing, and all HRS modules are now being administered to ALP respondents. Roughly two surveys are administered per month, and they are often fairly short (around 20 minutes) and do not seem to be onerous; response rates are around 80 percent. The ambition is to expand the size of the sample (currently around 2,500), which will make it easier to experiment and do other things with the survey.

The importance of communication and collaboration among different surveys, as well as the need for flexibility and innovation (without necessarily having such experimentation being tied to particular projects), was also noted. For example, something like the MINYVan survey could be used as a test bed for questions that ultimately end up in a special module of the HRS. Or there could be an ongoing test base study that receives input from multiple contributors, encourages collaboration and experimentation, and contains ample room for error.

One participant commented that time-use data are fairly sensitive measures of what happens during a recession (whether people spend more time watching television, looking for a job, etc.) and could be useful if they were reported frequently enough. Participants also discussed the potential for merging data sets with proprietary information such as mortgage and credit records. Informed consent was mentioned as a serious issue, as people could provide approval but then forget that they did so; very general consents also might not hold up for more specific purposes. Scandal in one data set can very easily spread to others, causing response rates to plummet. It was suggested that these issues might best be approached through pilot surveys that are separate and distinct from other ongoing surveys. Two other issues

that were raised relating to merging data sets with proprietary information were the operational risks of data getting lost or misplaced during transfers and the problematic nature of geography as a potential identifier.

One participant brought attention to two data systems that were not mentioned during the workshop sessions. First, the 2007 wave of the Survey of Consumer Finances has been made into a panel, with reinterview information collected in 2009; the panel data will be made publicly available in early 2011. Second, the 2008 panel of SIPP began in fall 2008 to collect detailed information from the previous 4 months. Because of supplemental funding from SSA, SIPP administered topical modules on pension coverage and retirement accounts in summer 2009 and assets and liabilities in fall 2009.



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# Appendix

## Workshop Agenda and Participants

### AGENDA

The Implications of the Recent Economic Downturn for the Elderly  
Committee on Population Workshop  
June 10-11, 2010

*Thursday, June 10, 2010*

- |              |  |
|--------------|--|
| 8:30-8:45 am | <b>Introduction</b><br>Duncan Thomas, <i>Steering Committee Chair</i>  |
| 8:45-9:00    | <b>Overview of NIH Research Portfolio and Goals</b><br>Richard Suzman, <i>National Institute on Aging</i>  |
| 9:00-10:30   | <b>The Economic Crisis Now and in Historical Perspective</b><br>Moderator: Duncan Thomas, <i>Duke University</i><br>Presenters: Carmen Reinhart, <i>University of Maryland</i><br>Matthew Shapiro, <i>University of Michigan</i><br>Michael Hurd/Susann Rohwedder, <i>RAND</i> |

- 10:30-10:45      **Break**
- 10:45 am-  
12:15 pm      **Markets, Expectations, and Preferences**  
Moderator: Jonathan Skinner, *Dartmouth College*  
Presenters: Andrew Caplin, *New York University*  
Robert Willis, *University of Michigan*
- 12:15-1:00      **Lunch**
- 1:00-2:30      **Work, Labor Markets, and Retirement**  
Moderator: Olivia Mitchell, *University of Pennsylvania*  
Presenters: Courtney Coile, *Wellesley College*  
Alan Gustman, *Dartmouth College*
- 2:30-2:45      **Break**
- 2:45-4:15      **Consumption, Savings, Pensions, and Wealth**  
Moderator: Robert Hauser, *National Research Council and University of Wisconsin, Madison*  
Presenters: Brigitte Madrian, *Harvard University*  
Michael Hurd/Susann Rohwedder, *RAND*
- 4:15-4:30      **Break**
- 4:30-6:00      **Health and Well-Being**  
Moderator: David Wise, *Harvard University*  
Presenters: Dawn Alley, *University of Maryland*  
David Weir, *University of Michigan*
- 6:00              **Adjourn**

*Friday, June 11, 2010*

- 9:00-10:30 am      **Living Arrangements and Transfers**  
Moderator: Robert Willis, *University of Michigan*  
Presenters: Kathleen McGarry, *University of California, Los Angeles*  
Linda Waite, *University of Chicago*
- 10:30-10:45      **Break**

10:45 am- 12:15 pm	<b>Housing</b> Moderator: Richard Johnson, <i>Urban Institute</i> Presenters: Joseph Tracy, <i>Federal Reserve Bank of New York</i> John Weicher, <i>Hudson Institute</i>
12:15-1:00	<b>Lunch</b>
1:00-2:30	<b>General Discussion: Priorities for Research and Data Collection</b> Moderator: Arie Kapteyn, <i>RAND</i>
2:30	<b>Adjourn</b>

## PARTICIPANTS

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